CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, SEPTEMBER 23, 1905 NO. 38

ANVILS BITS
HENRY BOKER
MANUFACTURER
OF
ARROW BRAND
REGISTERED TRADE MARK
HARDWARE
SPECIALITIES OF ALL DESCRIPTIONS
Pliers Vices
For Sale by Leading Wholesale Hardware Houses

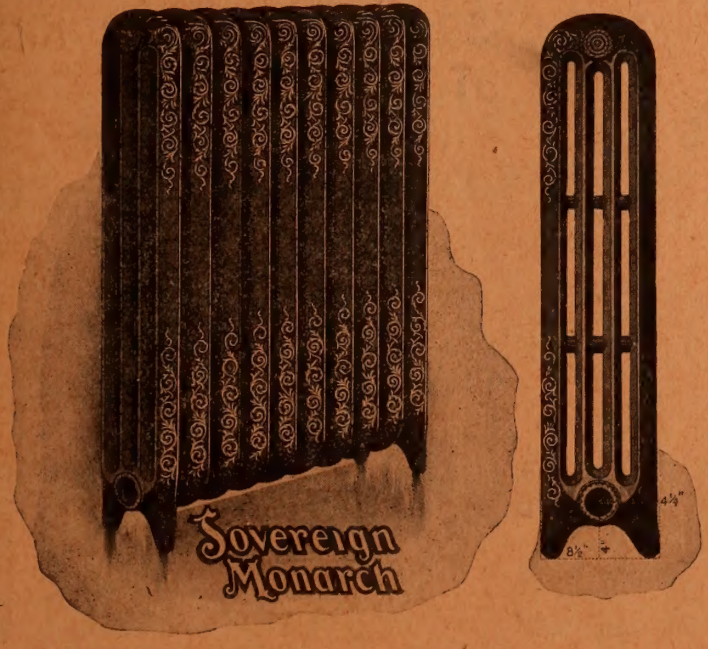
FLEUR DE LIS"

FLEUR DE LIS

Iron is "Queen's Head" quality, without the **extra heavy** galvanizing. Same guarantee.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL
Managers Canadian Branch

Canada's Most Expert Radiator Manufacturers.



HOW ? ? ?

A question "between you and yourself" but there are others that can be answered by the experienced steam-fitter, among them that old, but still new one—Where can I get a Radiator absolutely perfect in every detail?—Only one answer:

"SOVEREIGN"

No Sand Holes. No Leaks. Screwed Nipples.

Taylor-Forbes Company, LIMITED.

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Head Office and Works :
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MONTREAL
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BLACK IRON AND GALVANIZED PIPE

Get our new prices on Steam Pipe and fittings, including Globe Valves, Check Valves, Elbows, Tees, Unions, Couplings, Bushings, Plugs, Gate Valves, Stop Cocks, etc.

PLUMBERS' TOOLS AND SUPPLIES

OF ALL KINDS, INCLUDING

PIPE

VISES
TONGS
WRENCHES
CUTTERS

GASOLINE BLOW TORCHES
STOCKS AND DIES
PIPE TAPS
PIPE REAMERS, Etc.

Write for Prices

RICE LEWIS & SON

LIMITED

TORONTO.

ALWAYS READY FOR USE



Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2.50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

No Smarting after Shaving. With ordinary careful use will

KEEP AN EDGE FOR YEARS WITHOUT HONING.

Booklet coming—if you will ask for a copy, with trade discount.

FOR SALE BY LEADING JOBBERS.

FIRM OF
A. L. SILBERSTEIN, MAKERS OF "Griffon" Cutlery

459-461 BROADWAY, NEW YORK.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

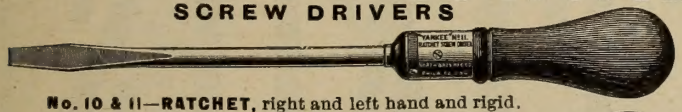
IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.

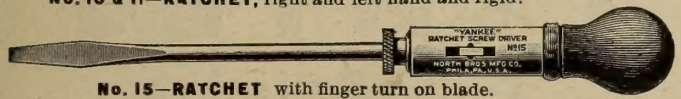
Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



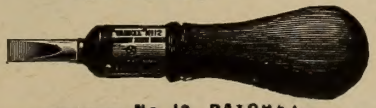
No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET—right and left hand and rigid.
No. 31— " " (heavy pattern)
No. 20— " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.



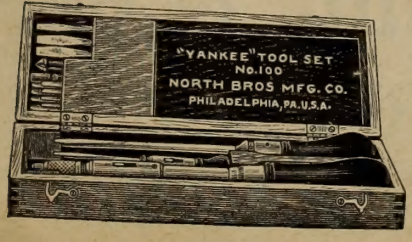
No. 12—RATCHET, with stub blad .



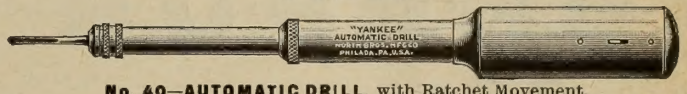
No. 60—POCKET SCREW DRIVER.



Countersink, for spiral ratchet screw driver.



DRILLS



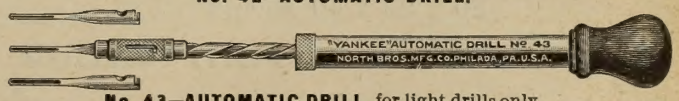
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



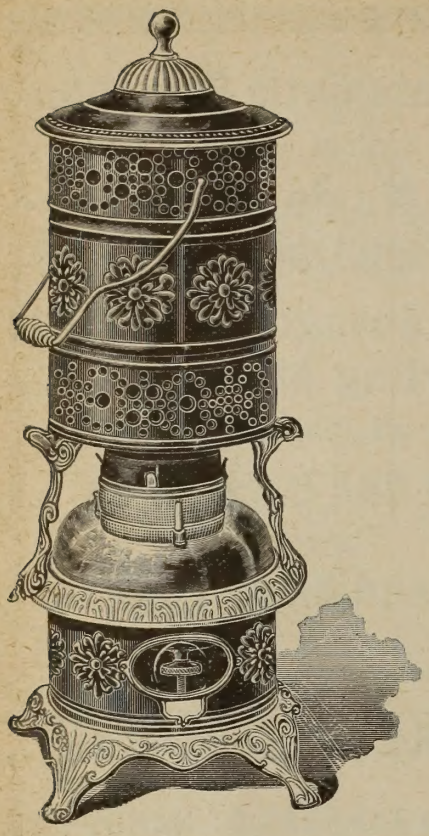
No 50—RECIPROCATING DRILL, for wood or metals.

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.



No. 10—**"New Process."** Design attractive. Construction first-c ass.

No. 21—**"Standard."** Cheaper in quality, but well proportioned and handsome in appearance, and a strictly up-to-date heater.

New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

Write for Prices.

The Thos. Davidson Mfg. Co., Limited

MONTREAL.

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18 x 21 x 60 sheets
18 x 24 x 52 sheets
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18 x 24 x 75 sheets
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All Bright

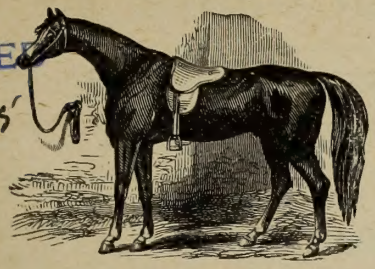
18 x 21 x 60 sheets
18 x 24 x 52 sheets

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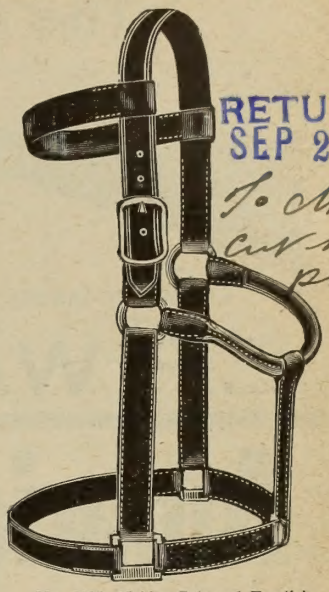
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We carry in stock, a complete line of

HORSE BLANKETS,
CURRY COMBS,
SWEAT PADS,
HALTERS,
WHIPS,
SURCINGLES, ETC.



No. 4485—1¼ in. Selected English Russet Leather, strong and well sewed, 5 ring without shank.

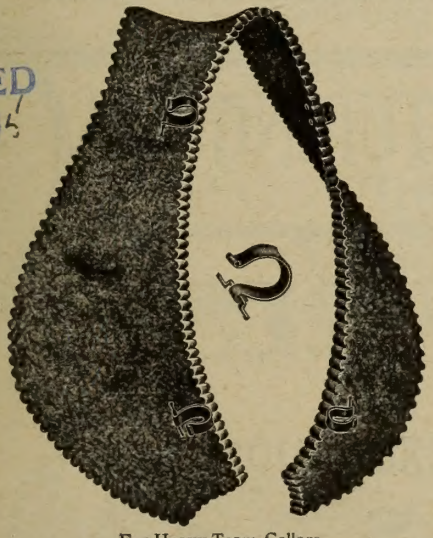
Horse Blankets

No. 1 A.	⅔ Lined,	Striped Jute,	70	inches	long
" 3	Unlined	"	" 70	"	"
" 3 B.	Full Lined	"	" 70	"	"
" 5	Unlined	"	" 70	"	"
" 5 A.	⅔ Lined	"	" 70	"	"
" 12	Unlined	"	" 70	"	"
" 22	Plain Kersey		62x70	"	Bound
" 66	" "		62x70	"	"
" 75	" "		64x70	"	"

No. 250	Dutch Kersey Stripe,		64x70	in.,	Bound
" 80	" "	"	62x70	"	"
" 20	Super Dutch "	Striped,	70x72	"	"
" 30	" "	" Fancy Plaid	70x72	"	"
" 50	" "	" "	70x72	"	"Heavy

" A40 Lumberman's Checked Jute, 41.-in. Lining, 80x72, in shaped or square pattern.
" A40B Same as A 40, except for 60-in. Lining.
" 501 All-Wool, Checked, 70x70 in., assorted colors.

Manitoba Check, Full Saxony Wool Lining, 64x72 inches



For Heavy Team Collars
Best Quality Felt.

Burlington Stayon Blankets.

PACIFIC	42-inch Lining,	Striped Jute,	64x72 in.,	shaped to fit horse.
MONTREAL	Unlined Dutch Kersey,		64x72 in.,	" "
GREENLAND	60-inch Lining,	Checked Jute,	64x72 in.,	" "

Sweat Pads

No. 10 FELTLESS { Old Gold Drill, Pink-felt Edges, Composite Stuffing, five rows of Quilting, Four Hooks, Average Width 10 in., Length, in. 19, 20, 21, 22, 23, 24.

No. 160N. White Duck, Composite Stuffing, Four Rows of Quilting, 3 Hooks, 9 inches wide.
No. 162N. Brown and White Duck, Composite Stuffing, Four Rows of Quilting, 3 Hooks, 10 inches wide.
No. 160N. White Duck, Composite Stuffiing, Four Rows of Quilting, 2 Straps, 9 inches wide.
No. 162N. " " " " " " " " 2 Straps, 12 " "

IF YOU WANT ANYTHING IN A HURRY WRITE US.
WE SHIP MAIL ORDERS SAME DAY AS RECEIVED.
DO NOT TAKE OUR WORD FOR IT—TRY US.
ORDER PADS AND PRINTED ENVELOPES FOR THE ASKING.

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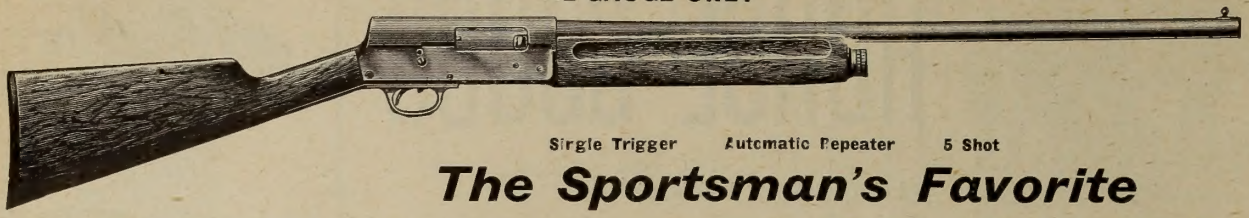
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Sirgle Trigger Automatic Repeater 5 Shot

The Sportsman's Favorite

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FLAT HEAD ROUND and OVAL HEAD **SCREWS** BRIGHT—BRASS BRIGHT and BRASS

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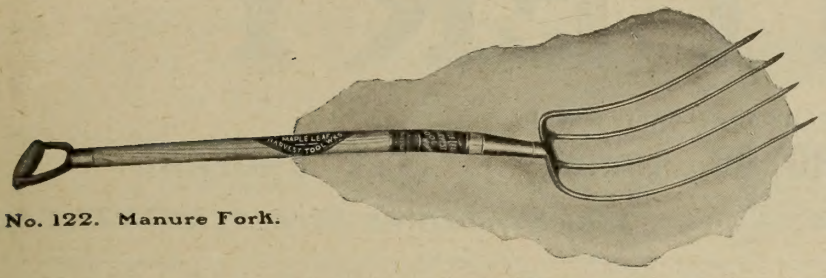
STEEL WIRE HOOP

COPPER WIRE—ALL—BRASS WIRE

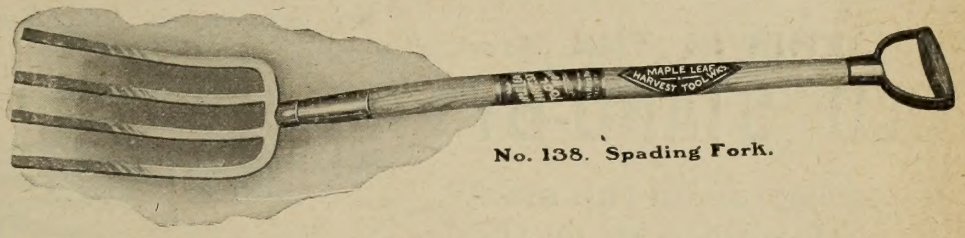
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Have You Seen Them?

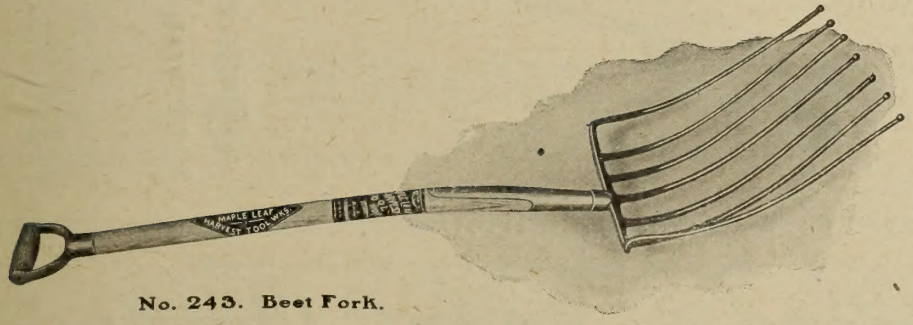
For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



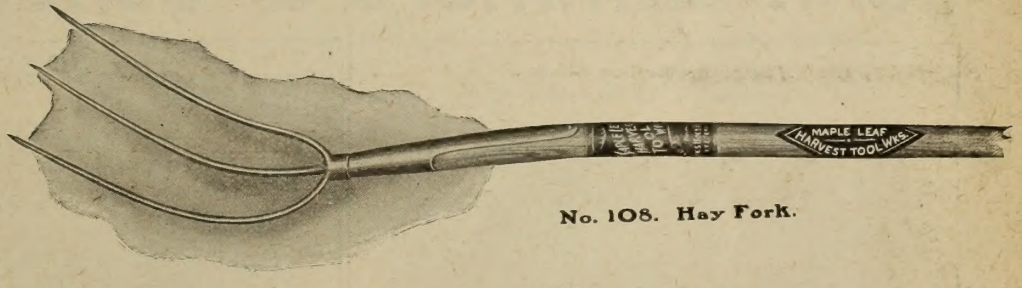
No. 122. Manure Fork.



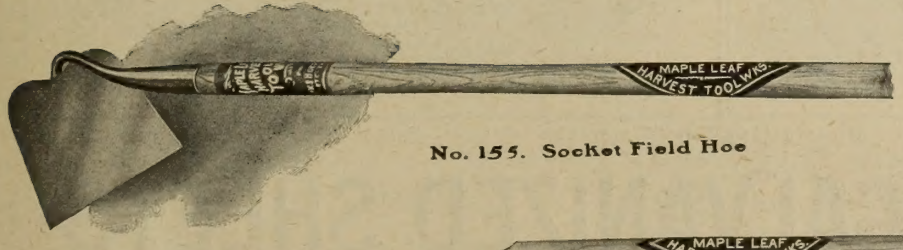
No. 138. Spading Fork.



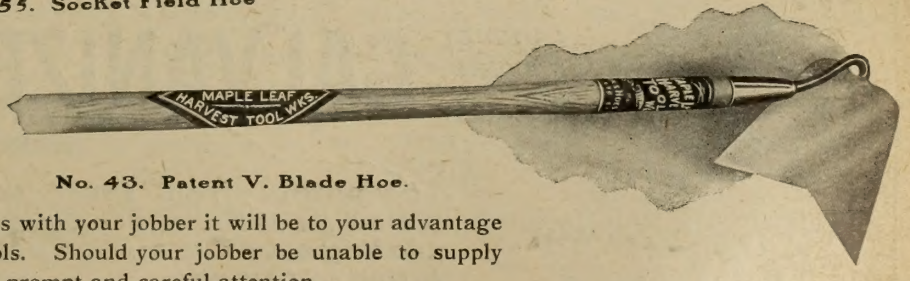
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

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When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.

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MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

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R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

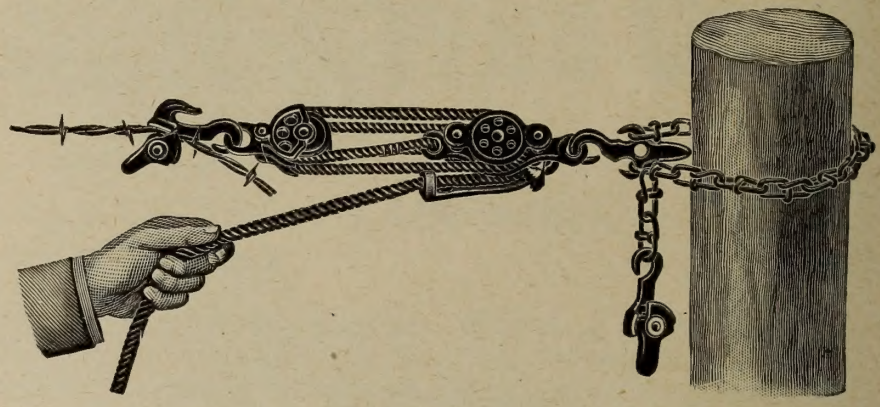
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OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

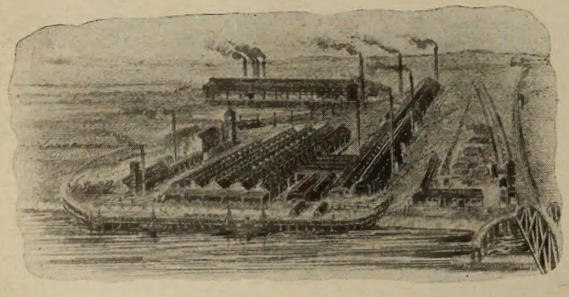
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



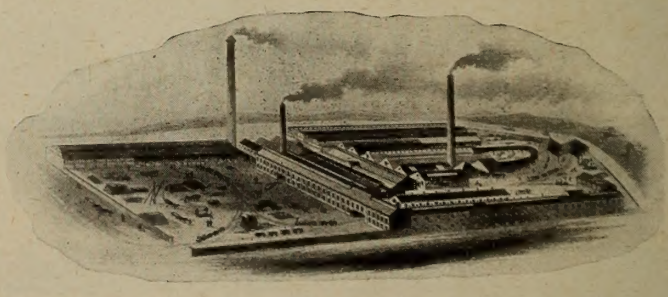
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



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GALVANIZED SHEETS

IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

Agent: F. Hankin, Montreal

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RETURNED
SEP 23 19

with very attractive features was brought out this summer by the Winchester Repeating Arms Co. too late to show in our Sporting Goods Catalogue.



RETURNE
SEP 23 190
T. Monture
Cut Book
page 67

It is a self-loading, hammerless, take-down in .32 and .35 calibres.

It is known as the Self-loading model 1905.

The rifle holds 5 cartridges in the magazine and one in the barrel.

The cartridges are loaded with smokeless powder and are made with full metal patched or soft point bullets.

The rifle is suitable for target or sporting purposes.

Prices and full descriptive circulars for the asking.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants, - Montreal, Canada

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GOLDSMITHS and SILVERSMITHS
Contractors to
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ESTABLISHED 1847

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ELECTRO PLATE ON NICKEL
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Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts



31197.—E.P.N.S. CAKE BASKET

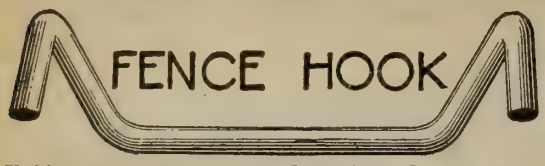
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WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

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ARMSTRONG BROS. TOOL CO.

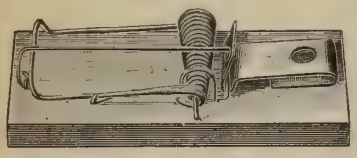
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Manufacturers of Armstrong Patent Lathe and Planer Tools and other machine shop specialties.

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When you answer an advertisement mention this paper.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

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J. M. MAST MANUFACTURING CO.

LITITZ, PA.

CARRIAGE SPRINGS & AXLES

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GLAZIERS' DIAMONDS

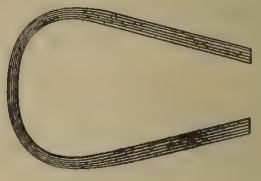


Ahead of all others in **quality** and **workmanship**. If **sparks** of **fine quality**, **set by experts**, are what you require, buy Diamonds of **A. Shaw & Son's** make.

Canadian Agent

GODFREY S. PELTON

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STITCHED COTTON DUCK

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HAMILTON CANADA

SEYMOUR SHEARS

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

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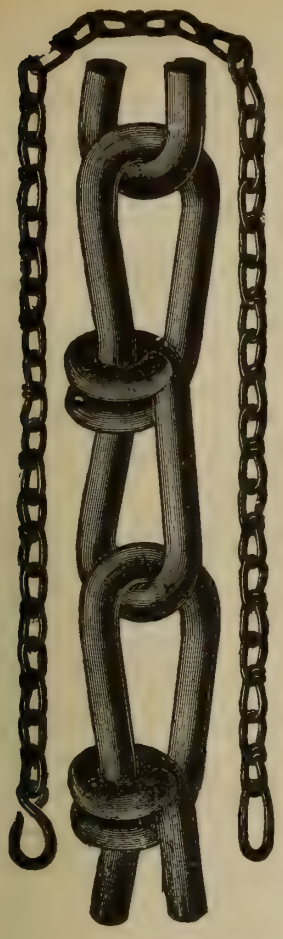


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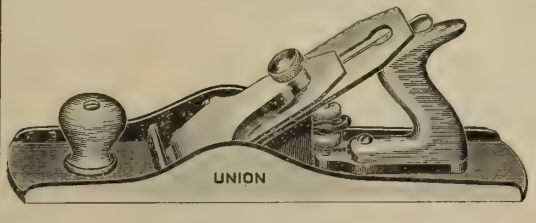
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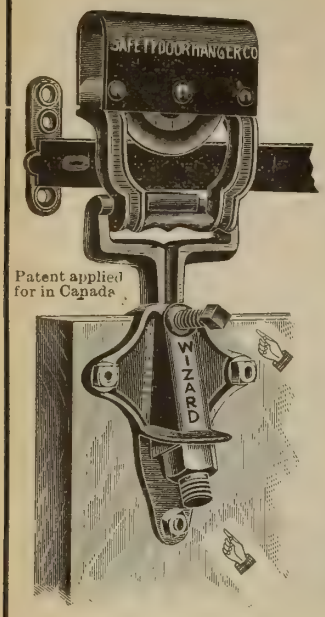
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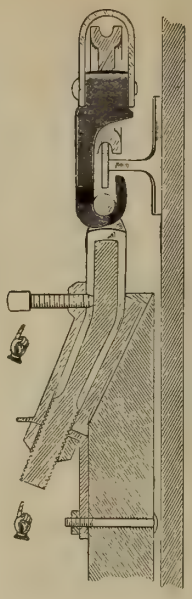


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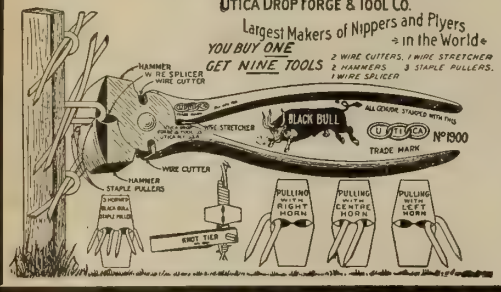
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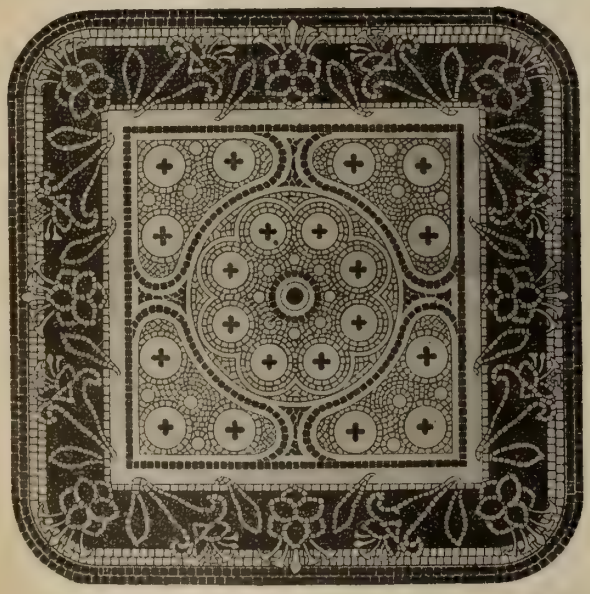
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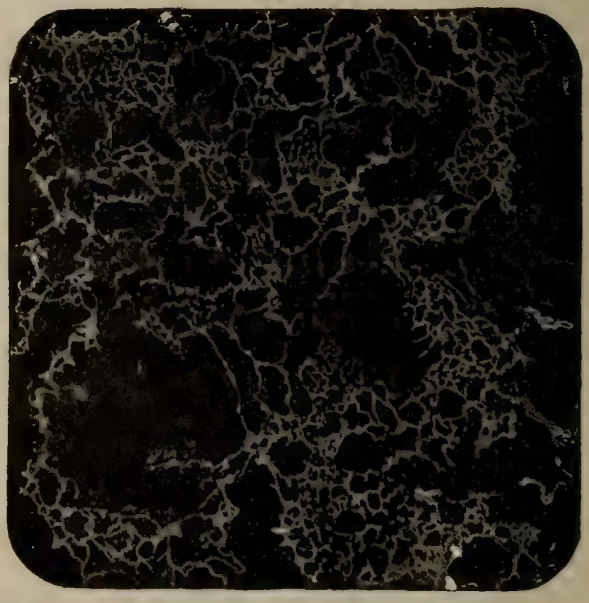
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CANADIAN MANUFACTURERS IN ENGLAND

By W. L. E.

WHILE it is, perhaps, impossible to completely diagnose public opinion on political questions, there is nothing to prevent one doing his best in that direction. One could not, during a two months' stay there, examine the public conditions in every nook and corner of Great Britain, but if he employed his time assiduously he could learn a great deal.

* * *

I tried to learn a great deal in regard to the fiscal situation in Great Britain, conversed as opportunity afforded with all sorts and conditions of men, and my conclusions, therefore, whether right or wrong, have not been reached without perseverance.

* * *

With a great many people in Great Britain free trade is still almost a religious belief. Some people say they are short-sighted; other people use stronger language. But even those of us who, after careful study, are of the opinion that Great Britain might, with profit to herself, amend her fiscal policy, should not be too dogmatic in our conclusions. Since the advent of free trade Great Britain has undoubtedly prospered, and that greatly. This you will be told on every hand when you begin to suggest. Even those whose faith in the present policy is becoming shaken will tell you this.



Messrs. Callahan of Hamilton, and Dennis Murphy of Ottawa, Discussing things on Deck.

* * *

It does not follow that because a certain bridge has for years carried one over in safety it will always do so. One thing is certain, it must be repaired occasionally if it is to do so. But because it has heretofore carried one over in safety, one has naturally a reverence for it, and naturally hesitates to make a change for that which may be of doubtful expediency. This, to my mind, about illustrates the fiscal situation in the Mother Country.

* * *

One thing, however, is certain: the public mind is undergoing a change in regard to the fiscal policy. It is in a transitionary state. Whether it will produce radical effects remains to be seen. But it is significant that there is any change at all. A few years ago it would have been an unpardonable sin politically to publicly advocate the doctrine of protection. To-day he is no longer a great sinner. He is at the worst a misguided man, while the number who positively think him right are a great deal more numerous. One cannot say positively what will happen, and the remembrance of the circumstances under which the legislation giving existence to free trade was enacted leaves one still in the dark.

* * *

Opinion in Great Britain in regard to the tariff question is diversified. There is one class who are avowed protectionists. They are in a minority, I should say a small minority. But they are growing in numbers, although at present one cannot say rapidly. In fact I should think scarcely as rapidly as during the year following Mr. Chamberlain's retirement from the Government. The trade returns have been persistently antagonistic to Mr. Chamberlain's propaganda, while the bye-elections have been discouraging to him, and the Balfour Administration has shown the white feather. Like the Laodicians, the Government is neither hot nor cold in Mr. Chamberlain's interest, although he was zealous enough on behalf of his party's welfare when he retired from the Colonial Office to preach the new crusade of protection and Imperialism.

* * *

Another class, and by no means a small one, is composed of those who are in a skeptical frame of mind. Their faith in free trade, with competing nations high protectionists, has received a serious wrench. As one manufacturer said to me, "We feel that something should be done in the way of tariff reform, but just what should be done is another question." Said another manufacturer to me, "The question is an important one. I do not think we should be in a hurry to make a change. We do not want to jump from the frying pan into the fire. Before a change is made there should be a thorough investigation by the Government. It is better to take our time than to act too quickly."

* * *

But the great mass of the people—the merchants and the working classes—are apparently yet unmoved by the fiscal policy. It is rarely that one ever hears them mention it. It does not appear to be a sufficiently live question for consideration. The only question that concerns them is the educational question. In regard to that they are by no means passive. It overshadows all others. They are "Agin the Government," and are calmly waiting for the next general election to express their opinion through the ballot. As an issue, therefore, the fiscal question has no chance of being fairly tested. Judging from public opinion, the Government will be routed, and their speeches indicate that they expect it. One cannot but regret that public opinion will not have an opportunity of showing at the next general election where it really stands in regard to the

* * *

One of the undoubted drawbacks to the advancement of Mr. Chamberlain's protectionist platform is the tax on food plank. No matter how one may argue to the effect that a small duty on wheat would not materially effect the price of the loaf the idea is pooh-poohed. It is decidedly unpopular, and Mr. Chamberlain has a great deal more educational work to do in regard to the food plank of his platform than any other. And without a tax on food there can scarcely be a preferential trade arrangement with Canada and the other food producing colonies.



Three Montrealers—Messrs. Gravel, Horsfall and Robertson.

* * *

While Mr. Chamberlain's policy is not very much alive at present, it is by no means dead. Those who are its propagandists are too energetic to allow it to die. But at present it seems a long way from realization. And in no particular

as much so as in its preferential trade proposals.

* * *

A few days before we left Canada a friend of mine, who takes a pessimistic view of both industrial and military conditions in Great Britain, remarked to me: "England is one of the decaying nations." While none of us had imbibed such ultra pessimism as this, most of us had become possessed of the idea that she was lagging behind some of the nations in the industrial arts. I have not been authorized to speak for our party, but I have no hesitation in saying that, from what I have gathered from personal conversation with a great many of them, our preconceived opinions had very few facts upon which to rest.

* * *

Great Britain is by no means a decaying nation. She is the mother of manufacturing industries, as well as of parliaments. As such she is getting old; in fact, is old. And just the same as it is with individuals who are getting up in years, she is somewhat set in her ways. She is conservative. But in nations age is not always accompanied by decay. Where the nation is composed of the right kind of people the concomitant of age is maturity. Great Britain is maturing rather than decaying. In some respects industrially Great Britain is rather out of date, but in others she is in advance of her competitors. And what was most obvious to us was the fact that Great Britain is certainly becoming wide-awake in regard to those things in which she was supposed to be somewhat drowsy. We saw signs of this everywhere we went. The manufacturers are not only anxious to do business, but they are equally anxious to do it on the most approved methods, and to manufacture their goods not only with the best and most improved machinery, but to make them of the best quality. They desire quality in what they sell just as they demand quality in what they buy.

* * *

Speaking of imperial matters, I am reminded of an error in a London paper's report of one of President George's speeches, which, although confined to one word, completely misrepresents his views. A Montreal paper, not knowing of the error, was thereby led to rather severely criticize Mr. George. The error was in making Mr. George say that the manufacturers of Canada did not want a "protective" tariff against the Mother Country. What he said was that they did not want a "prohibitive" tariff against the Mother Country—quite a different thing.

CLOSING THE YEAR.

EACH year should, as far as possible, stand on its merits, i.e., transactions for the period should all be put through within the period. If this is impossible, as is very often the case, these items should be looked after very carefully on what might be termed an "outstanding list," which may be compiled as the various items come up in the ordinary course of business. These items may represent amounts due (liabilities); unearned, or, to use a different term, prepaid amounts; (assets), which would be brought down in the respective accounts on the debit or credit side, as the case may be.

This subject may properly be divided into four headings necessary to the preparation of an annual statement, as follows: 1, stock taking; 2, purchases; 3, sales; 4, outstandings.

1, Stock Taking.—Inventory sheets should be prepared from the catalogue and typewritten, together with the prices of the various lines entered at cost, or if the advance on cost is uniform the list prices may be entered and the cost discount deducted from the total. So as not to interfere with the current shipments of goods, the different lines on the shelves should be labeled as to brand and quality, and when orders are filled deductions made from the different labels. A day or two will usually suffice to call in the stock and enter on the sheets already prepared. At the same time stock of catalogues, price lists, advertising matter and stationery should be taken carefully so as to insure the correct amount being brought forward as an asset in the accounts, most of which in these cases are "expense accounts." The stock sheets should be extended and the extensions checked to insure correctness.

2, Purchases.—It is very important that all purchase invoices should be put through the "purchase journal" for goods actually taken into stock. A record of purchase invoices should be kept as received by either numbering and recording in a book for this purpose, or by using a yearly record book in which are entered the names of the different concerns from which goods are purchased, opposite each being the columns for the months of the year. By referring to this book it can be ascertained at once whether any goods have been purchased in a certain month, and a statement may then be procured which will give full particulars as to dates and amounts; when these statements have all been received the amounts should be checked off with the invoices entered in the "purchase journal," and a list of all unpassed invoices handed to the different departments with the request that full particulars be given as to whether the goods represented by such invoices were taken into stock or not. By using this method and by a thorough scanning of the receiving books for goods not invoiced, it is almost certain that all purchase invoices have been credited.

3, Sales.—Special care should be exercised to see that all goods shipped, which were not taken into stock, were charged through the "sales;" also that all rebates, allowances, etc., are credited through the "sales." If this should be impossible at the time, provision may be made in the "sales" account when closing the books. All goods returned by customers should be taken into stock and credits put through "sales" for same before closing the books. Output shipments from factories, even if received after stock at the warehouse has been called in, should be added to the inventory.

4, Outstandings.—Insurance should be calculated as to the amount of unearned premiums, and the amounts brought down in the respective accounts as an asset. Provision should be made for magazine, sign and permanent advertisements from which no direct benefit would have been derived in the current year. An amount should be set aside as an asset for the approximate value of the catalogues, price lists, etc., on hand when the books are closed. The actual stock of stationery should be taken, priced at cost, and the value brought down as an asset in the "stationery" or "expense" account. Provision should be made in the "purchase" and "sales" accounts for rebates, allowances, etc., due customers on sales or due from creditors on purchases. Amounts should be brought down in the expense accounts as an asset or liability, as the case may be, for taxes, rents, water, fuel, light, telephones. Freights on goods shipped and charged in the fiscal year and not yet paid, should be provided for. Also freight on goods held on consignment at some distant point should be taken into account as the value of such goods has been enhanced by being laid down at a distance. Salaries of officers and foremen should be apportioned over the different departments, also salaries or wages of all unproductive labor. Interest on notes due, discount on bills discounted, sales discount and purchase discounts should be provided for if thought advisable.

ELECTRIC SMELTING AT "SOO."

"IN ten years Canada will have become a great metallurgical country. You will see an iron industry in this Dominion larger than in any other country in the world. Canada will yet furnish to the world its iron supply. It will be just the same with iron as with wheat. A decade from now Canada will outstrip all other countries in wheat-growing. The production of iron at a cheaper rate than it can be made elsewhere will cause Canada to take a similar position as far as iron is concerned."

The foregoing prophecy was made, not by a Canadian, but by a visitor from France, Dr. P. L. T. Heroult, technical director of the French Electro-Metallurgical Society, who have immense works at La Praz, France, where aluminum and steel are produced.

Dr. Heroult is perhaps the best living authority on smelting of iron ores and the manufacture of steel by the electric method. He has invented the process which is named after him. Two great plants for the refining of steel by the Heroult process are in course of construction, one in Germany, and the other at Syracuse, N.Y. By the expenditure of about one dollar per ton steel worth $20 a ton will be converted into a product worth $200 a ton. Dr. Heroult has smelted magnetite by electricity, and it

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is a success. He is reasonably certain we can produce pig iron and a high-grade steel here. But to make certain beyond all peradventure, and to ascertain all the facts that can be learned in connection with electric smelting, experiments for six months will be conducted at the "Soo" in a plant of special design and construction. Dr. Heroult thinks that under favorable conditions pig iron can be made for $10 per ton, while steel will cost only $4 per ton more to produce. This means a saving of several dollars as compared with the cost of producing pig iron and steel elsewhere. But even if the cost were the same as in other countries it would mean great things for Canada.

When asked what the successful smelting of iron ores would mean to Canada, Dr. Heroult said: "Pig iron is the basis for structural and other steels. At present Canada expends fifty and sixty millions of dollars in buying steel abroad. The idea ought to be to make that steel in this country out of Canadian material by the aid of Canadian water power and Canadian labor. Even if the cost of making iron and steel here should only equal the cost elsewhere you would keep in Canada the money you now send abroad. But we expect the cost of manufacture will be less here. Think of what it means. The retention in Canada of sixty millions of dollars now yearly spent abroad, the supplying of the new demand for steel rails, structural steel, and other classes of the product which has arisen in consequence of the country's development, the profitable sale of your surplus product in foreign markets, and the creation in this country of numerous other industries more or less dependent upon iron and steel. As to the iron resources of this country, from all that I can learn they are vast indeed. In Sweden the quantity of ore in sight is sufficient to supply the markets of the world for one hundred years. If we were to compare the quantity in Canada with that in Sweden, I should say Canada has three times as much."

Dr. Heroult has undertaken to repay the Canadian Government for the $15,000 voted for experiments at the Soo out of the proceeds of sale of licenses in Canada for the use of his process.



A SUGGESTED BRITISH TARIFF.

THE British Tariff Commission, working in co-operation with the Right Honorable Joseph Chamberlain, has issued a circular of much interest dealing with the tariff systems of Europe and America. It is pointed out that the tariff systems of Europe and America in operation at the present time are exceedingly diverse in character, no two countries having identically the same system. The differences which exist arise from the fact that the structure and organization of industry of one country differs from that of another, and that the tariff systems adopted have been gradually worked out, not with a view to satisfying any theoretical criteria, but in order to secure certain objects of public policy. Moreover, the actual system of tariffs adopted by any one country can rarely be understood without reference to other parts of their public policy, such as their transport system, navigation laws, (such as exist in France, and were recommended by the shipping commission, which recently reported in the United States), methods of regulating labor, and generally the relations between the Government and industry and commerce. Notwithstanding, however, this diversity of practice in the various countries of Europe and America, their tariff system at the present time falls into certain broad divisions.

The system of tariff proposed by the tariff commission differs from all those adopted abroad. That system is as follows:

(a) A general tariff, consisting of a low scale of duties for foreign countries which admit British wares on fair terms.

(b) A preferential tariff, lower than the general tariff, for those of our colonies which give adequate preference to British manufactures, and framed with a view to securing freer trade within the British Empire;

(c) A maximum tariff, consisting of comparatively higher duties, but subject to reduction by negotiation to the level of the general tariff.

The duties recommended are, at the present stage of the inquiry, stated as ad valorem rates, but this is without prejudice to the question whether the duties ultimately recommended should be ad valorem or specific. That part of the general tariff which has so far formed the subject of recommendation, namely, that which has to do with the iron and steel and the cotton industry, provides for the free admission of iron ore, raw cotton and yarns of all descriptions, and for graduated duties, in no case exceeding 10 per cent. ad valorem on the various manufactured products.

The sporting goods department should be given a lot of attention during the next few months. Every man who goes on a shooting trip should be a buyer of guns and ammunition, as well as camping supplies and fishing tackle. Show these lines in your windows and advertise them.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

A NEW price list has just been received from the Billings & Spencer Co., Hartford, Conn., quoting new figures on their drop forged machine wrenches. The list is published in a 40-page booklet of neat pocket size, which is profusely illustrated. Some 500 models are made by this firm, and dealers ordering their goods should be sure to order by number, only. All their wrenches from number 200 up are furnished in any of the following conditions: Milled, semi-finished, or finished. Copies of this price list are to be obtained on request. Please mention Hardware and Metal in writing.

Colonial Ranges.

Percival Plow and Stove Co., Merrickville, have issued a neat illustrated catalogue on coated paper enclosed in a handsome cover, the book comprising 32 pages and cover. Attention is called to the Colonial range as a modern, up-to-date and artistic range, the Imperial line of cook stoves for wood, and the new Imperial oak heaters, an entirely new line of the very latest design. Many illustrations are given showing the beauty of these lines while interesting reading matter accompanies the cuts, outlining the utility and special features of the stoves and ranges pictured. The good qualities of the Argand furnace are also dwelt upon. Dealers who mention Hardware and Metal can secure a copy on request.

Kennedy's First Catalogue.

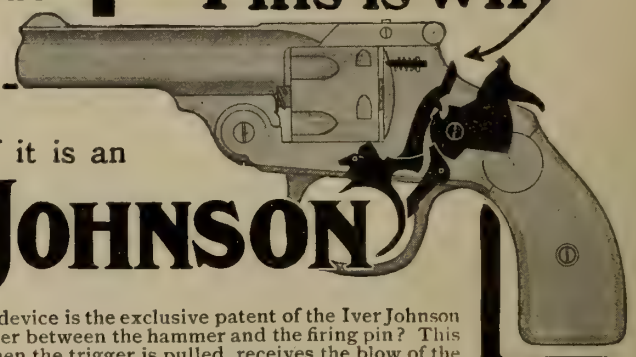
Guns, rifles, ammunition, skates, etc., are the subjects of many splendid illustrations of the up-to-date lines of sporting goods handled by the Kennedy Hardware Co., Limited, Toronto, wholesale jobbers of shelf and heavy hardware. For a 20 page and cover book (8 x 11 inches) it contains an exceptionally comprehensive array of illustrations while the reading matter is plain and simple enough to give the necessary information at a glance. The catalogue is timely growing young house, whose motto is "We ship quick." The cover is in green while the paper contained in the body of the book is of a yellowish color, the intention of the company being to follow this style in their succeeding publications. Readers who have not secured a copy as yet should send for one, mentioning the name of this paper.

Pflueger's Fishing Goods.

Pflueger's celebrated line of sporting goods is fully described and illustrated in Catalogue No. F 23, published by the Enterprise Mfg. Co., of Akron, Ohio. The catalogue contains over 150 pages, with innumerable illustrations and with prices and sizes clearly annotated. The line includes a large variety of fish hooks, leaders, artificial flies, body flies, phantom minnows, luminous baits, rubber baits, rubber insects, spinners, frogs, fluted spoons, kidney baits, egg shape baits, ball baits, beaded baits, muscallonge spoons, fish and frog spears, fish scalers, fish clamps, line spreaders, sinkers, angler's wax, hook extractors, rod cement fish stringers, and Pflueger's trolling, casting and still fishing outfits. The catalogue also includes some interesting pages devoted to a thorough treatment of Pflueger's floats and reels. One of these catalogues will be sent to dealers upon application if the name of Hardware and Metal is mentioned in your letter.

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True only if it is an

IVER JOHNSON

The positive safety device is the exclusive patent of the Iver Johnson Revolver. See the lever between the hammer and the firing pin? This lever is raised only when the trigger is pulled, receives the blow of the hammer and transmits it to the firing pin. **That's why** you can throw a loaded Iver Johnson against a stone wall without fear—no discharge can possibly follow, as the hammer **never** touches the firing pin. An Iver Johnson never fails when you **pull the trigger** and never "goes off" when you don't.

Iver Johnson Safety Automatic

Price: Hammer, $5.00; Hammerless, $6.00

Iver Johnsons are sold by dealers the world over, or direct from us if your dealer won't supply

Please send for descriptive catalogue, free upon request. It tells all about it.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

U. M. C. Ammunition.

Union Metallic Cartridge Co., Bridgeport, Conn., has just issued its first illustrated catalogue of ammunition, showing actual size engravings of everything it makes in metallic cartridges, empty and loaded paper shells, brass shot shells, primers, gun wads, percussion caps and ammunition for rapid fire guns. The book contains 166 pages, each 5 1-2 x 8 1-4 inches, and the company believes is the first complete book of this character published. Some of the features of the book are code words for every item to be used in wiring orders and fac-simile signed gurantees of different manufacturers of firearms in connection with the cartridges made for each maker's particular arm of varying calibres. An indication of the growth of this business is afforded by the fact that the sizes of cartridges made by the Union Metallic Cartridge Co. in 1875 numbered 24 rim fire and 5 central fire cartridges. Now there are about 500 different sizes and kinds of rifle and pistol cartridges for sporting and military uses. In December 1888, the company began loading shotgun shells when they had two gauges only, Nos. 12 and 10, each gauge having a total of four combinations of load. Now in this line there are nine different gauges and four different qualities, covering not less than 200 different combinations of load. There is also a pocket edition of the catalogue which gives all the ammunition the company make, but without the illustrations of pistol and rifle cartridges, code, etc. Mention this paper when writing to the company.

TENDERS FOR RAILWAYS ASKED.

The Quebec Southern Railway, comprising the South Shore, the United Counties and East Richelieu Valley Railways, with rolling stock and equipment, will be sold. Sealed tenders are asked for and they will be received by the registrar of the Exchequer Court up to 12 o'clock noon on November 2nd.

SECURING BUSINESS IN AFRICA.

The South African republics are apparently beginning to open out and Canada is beginning to reap the benefit of the South African war by the way of trade extension. The Ontario Wind Engine & Pump Co., Limited, Toronto, have just received an order from Pretoria for three complete outfits of the well known Canadian Airmotor. There is a great field in South Africa for Canadian enterprise and it is pleasing to see that the above firm are pushing their goods into all parts of the world. Trade certainly follows the flag to a great extent.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

Powder can be shipped Tuesday only.

POWDERS.

Orders should reach us Monday.

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Metal Kegs, **25** lbs. each.

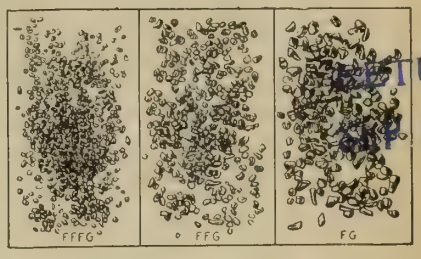
"DEAD SHOT"

Best and Cleanest Black Powder Made.

Sizes FG., FFG., FFFG., in 25 lb. Kegs.

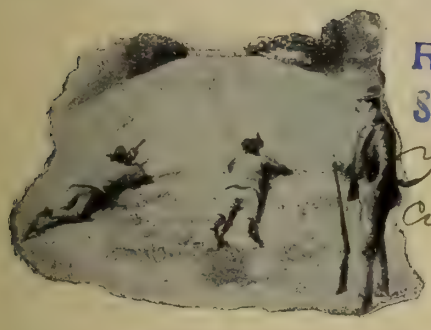
1 lb. Tins FFG.

A most remarkably and universally popular Brand for General Field and Trap Shooting, unsurpassed by similar grades of any other manufacture.



RETURN
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AMERICAN RIFLE CARTRIDGE POWDER



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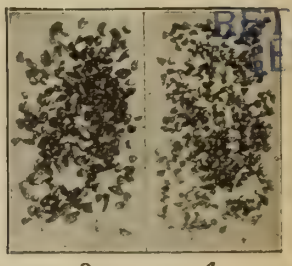
6¼ lb. Kegs.

Size 3, Size 4.

25 lb. Kegs.

Size 4.

A Perfect Powder for Loading Rifle Cartridges, dense and withstands compression in loading; absolutely even and free from liability to cake behind the bullet; uniform in velocity and pressure, and moist burning. Thoroughly endorsed by the Winchester Repeating Arms Company.



RETURN
SEP 23

GENUINE "SCHULTZE" SMOKELESS POWDER.

RETURNED SEP 23 190

Best English Hard Grain White Powder Made.



Oldest Established, Best Known, Most Reliable. Safer than Black Powder.

Absence of Blowback, Reduced Recoil, No Smoke.

No. 1 Tin, Equal in Measurement to 1 lb. of Black Powder
No 10 Tin, " " 10 " " "
No. 50 Drum, " " 50 " " "

No. 1 Tin contains ½ lb. actual weight.
10 " " 5 " "
50 Drum " 25 " "

"DU PONT" SMOKELESS SHOTGUN POWDER.

RETURNED SEP 23 190

Hard Grain, Quick Ignition, Rapid Combustion, Slight Residuum.



Safe, Reliable, High Velocity, Even Pattern, Great Penetration.

Absolutely Smokeless.

Kegs, Equal in bulk to 25 lbs. Black Powder
Drums, " " 50 " "

CAUTION.—Do not use Shotgun Smokeless Powder in Rifles. or Smokeless Rifle Powder in Shotguns.

For Canadian Powders see our Hardware Catalogue.

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto Ontario.

Our prices are right.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

TO keep up with the demand on railway construction and renewal account will severely tax the capacity of Canada's two rail mills. Already it appears orders are being sent to outside mills, because of the impossibility to get them filled in time at either Sault Ste. Marie or Sydney. The Grand Trunk Pacific Railway Company recently gave a contract for 5,000 tons to the United States Steel Corporation. Two other lots, of 5,000 tons and 8,000 tons respectively, have been purchased in the United Kingdom, and a press agency reports Canadian inquiries in Scotland for quotations on a 30,000-ton order. On the C.P.R. system track-laying is going on. The portion of the main line between Winnipeg and Fort William is being double-tracked, though for the completion of that work three years will be required. On the company's branch line from near Kleinburg to Sudbury construction is being pushed rapidly along. At the recent annual meeting a resolution was passed providing for the building of 127 miles of branch line from Wolseley to Reston. On the Canadian Northern a great tonnage of rails has been laid in the last twelvemonth, and the work of extending the system is being hurried forward. On the western division of the Grand Trunk Pacific the contract for building 275 miles of track from Portage la Prairie onward has been let. Rails for the company's Lake Superior branch must be obtained in Canada and, if possible, in Ontario. If they are obtained elsewhere the Ontario subsidy of $2,000 cash and 6,000 acres of land per mile will be forfeited. As the branch is 200 miles long, it will take sixty days' output of a 500-ton mill, working to its full capacity, to supply the rails. Companies that are free to buy outside find it increasingly difficult to get rails there. In the United States the mills have their output sold months ahead, as the great prosperity not only enables, but forces, the railways to make improvements in their roadways. British makers are beginning to share in the benefits of the revival, though for a time they found trade dull. The state of trade at the rail mills is a pretty fair gauge of the condition of general business. If the rail mills are crowded with orders it is because the railways need the steel and can afford to buy it. Their need for it would not impel them to overwhelm rail manufacturers with orders if the pressure of traffic were not irresistible. And, of course, the traffic is the consequence of large production and active trade.

The Western Milling Co. is erecting a brick mill at Calgary with a capacity of 500 barrels daily.

The Toronto Gasoline Engine Co. intend removing their plant from Toronto Junction to Toronto.

The town of Chatham is considering the spending of $35,000 on the enlargement of its electric light plant.

A by-law has been carried by the town of Harriston to loan the sum of $10,000 to the Canada Stove Works.

The building occupied by the St. Lawrence Iron Works, Montreal, was destroyed by fire last week, entailing a loss of $6,000, partly covered by insurance.

Woodstock, Ont., has passed a by-law voting $50,000 improvements for water works plant. A large reservoir will be built.

Negotiations are on for the taking over of the buildings at Port Hope recently occupied by the Canada Radiator Co. by a new industry which will employ a large staff of men.

Port Elgin has carried a by-law to raise $40,000 to build a square line of railway connecting the Grand Trunk with the harbor, and also for the establishment of a sawmill.

The Dominion Natural Gas Company by an agreement signed and delivered will come into control of the Galt Gaslight Company's plant on October 1. The Dominion people have leased the Galt plant, and so soon as the mains are laid to the town, about November 1, will supply consumers in Galt at 35 cents per thousand.

The report of lake commerce through canals at Sault Ste. Marie for the month of August as compiled by the engineers' corps, U.S.A., gives the total freight passing through the United States and Canadian canals as 6,327,595 net tons. Three thousand and eighty-eight vessels passed through having a registered tonnage of 5,038,651.

The construction of the power plant at Kaministiquia Falls near Fort William by the company organized by Messrs. C. R. Hosmer, H. S. Holt and F. W. Thompson will now be rushed as rapidly as possible. The company has let contracts to the Canadian General Electric Company for the generators, exciters, switchboards, etc., the total cost being, it is understood, in the neighborhood of $200,000.

Contracts have been let for the erection of the new factories at Welland for the Plymouth Cordage Co. The buildings will be of brick with concrete foundations, and the company's entire frontage along the Welland Canal will be used for wharves on which large warehouses will be erected. A large number of dwellings will also be built for the use of employes, of whom there will be about four hundred.

There are now fourteen iron and steel-making companies with which ledger accounts are kept by the Department of Trade and Commerce at Ottawa. The names of these companies with the total amount which each has received in bounties during the last seven years—1898-1905—are as follows: N. S. Steel Company, $276,278; N. S. S. and C. Co., Limited, $596,693; Mineral P. Co., Pictou, N.S., $7,378; Dominion I. and S. Co., Limited, $2,252,455; Canada Iron Fur. Company, $447,657; Ontario Rolling Mills Co., $18,712; Hamilton Blast Furnace Co., $203,080; Hamilton S. and I. Co., Limited, $846,144; Deseronto Iron Co., $133,134; John McDougall & Co., $26,264; Electric Reduction Co., $2,222; Algoma Steel Co., Limited, $328,740; Londonderry I. & M. Co., $64,493; Montreal Roller Mills, $1,545; total, $5,204,755.

It is announced that the B.J.E.R. Co. will still further increase the capacity of its plant at Lake Beautiful by the addition of another unit to the plant at that place, involving an expenditure of $100,000. At the Vancouver power house a converter and two transformers will be put in. At present the power generated at Lake Beautiful is equivalent to 9,000 horse-power and these improvements will raise the supply to 12,000 horse-power. The additions are being made because of the increased demands upon the company.

A Detroit manufactucer of machine specialties proposes to build a modern branch factory at Walkerville. Three hundred hands will be employed. In an interview he said: "Canadians owe it to themselves to adopt the most economic methods in producing power. The development of the waterpowers will be worth millions to the country, for every horse-power developed is equivalent to five pounds of coal per hour. With the capital turned into local channels which now goes to the United States for coal, the country will profit inestimably."

The Dominion Copper Co., successors to the Montreal & Boston Co., have resumed operations in the Boundary district, under the management of Samuel Newhouse. The principal work at the present time will be in the line of development to permit of the shipment of 1,000 tons of ore per day to the company's smelter. This smelter will resume operations within a few weeks in order to determine the best method of treating the ores. The management have practically decided to build a new smelter, as the old one, which is said to have cost about $200,000, is inadequate, and is not adapted to economical operation. Indeed, the records show that the smelting operations of the old Montreal & Boston Co. were not profitably conducted. The new smelter will be built either at Great Falls, where the Granby smelter is situated, or at Midway.

Companies Incorporated.

The Mouterde's Electric Accumulator Co., Limited, of Montreal, have been incorporated with a capital stock of $250,000, for the purpose of manufacturing and dealing in electric machinery, etc.

The North River Power Company, Limited, of Montreal, have been incorporated with a total capital stock of $90,000 for the purpose of dealing in electrical machinery, construction work, etc.

Coleman Cobalt Company, Limited, of Toronto, have been incorporated with a share capital of $250,000 for the purpose of carrying on in all their branches the operations of mining and milling. The directors are Albert Robert Moore, Hamilton Bender Wills and John Jennings, all of the city of Toronto.

The Canadian Tool Company, Limited, of Woodstock, Ont., have been incorporated with a share capital of $200,000 with the right to manufacture, buy, sell and deal in tools, machinery, engines, and other articles made from iron, steel and other metals. Directors are to be: Edwin George Law and Joseph Stickney, both of Toronto, Arthur James Downing, James Jackson Terry and Theophilus Leroy Wilson of Woodstock.

NEWS OF THE TRADE.

The Fraser Hardware Company has opened a store at Preston under the management of Mr. N. Kreig.

Harry Cockshutt, of the Cockshutt Plow Company, Brantford, has returned from an extended business trip to Australia.

Capt. Thos. Douglas, lately of Douglas, Prowse & Co., Halifax, has joined the board of directors of Wm. Stairs, Son & Morrow, Ltd.

George Bray, of Bagby Works, Leeds, England, the well-known inventor of a patent gas-burner, died at his residence in that city August 22nd, aged 60 years.

J. A. Chambers, who has retired from the managership of the Vancouver branch of the Canadian Rubber Company, Limited, was presented with a fine office desk and chair by his employes on leaving.

W. B. Arthur, formerly of W. B. Arthur & Co., wholesale hardware merchants, of Halifax, N.S., will in future represent Caverhill, Learmont & Co., in Nova Scotia, with headquarters at Halifax.

W. H. Prowse, of the late firm of Douglas, Prowse & Co., has opened up a general brokerage and commission business in the Furness Building, head of Furness Wharf, Halifax. Mr. Prowse also imports heavy hardware and makes a specialty of lobster packers' supplies.

T. J. Agnew, Prince Albert, Sask., announces the reformation of his hardware business under the name of the Agnew Bros. Hardware Company, Limited. He has admitted his brother, Andrew, into partnership. The new firm came into existence on the first of the present month.

One of Gananoque's leading citizens, William Bulloch, president of the Bulloch Co., manufacturers of rivets and wire nails, died a few days ago in his 73rd year. He was one of the first wire nail manufacturers in Canada, and for years was the sole manufacturer of tubular rivets in Canada, from which he made his fortune.

The Sibley Scythe Co., of Newport, N.H., have appointed Messrs. Geo. E. Smith & Co., the wholesale hardware dealers, of Halifax, as their sole agents in Nova Scotia and Cape Breton, for their famous grass scythes. Messrs. Smith & Co. have been very fortunate in securing good agencies. They also represent Messrs. Nobles & Hoares, of London, Eng., manufacturers of high grade carriage varnishes, and of the Never-Slip Manufacturing Co., of New Brunswick, N.J., manufacturers of the "Never-Slip Horse Shoe" and rubber horse pads.

Mr. Alexander Macpherson, of the Gutta Percha and Rubber Manufacturing Co. of Toronto, Limited, Toronto, Canada, is at present on a business visit to Australia. He has appointed Brown & Dureau, of Melbourne and Freemantle, and Mr. J. T. Brown, of Sydney, as his firm's Australian representatives. The agents are showing a full range of the various lines, which comprise the well-known "Maltese Cross" and "Lion" brands rubber footwear and sand shoes, a complete line of hose and belting, interlocking rubber flooring, packings, "Fisk" tires, Canadian "Haskell" balls, etc. Mr. Macpherson expects to return to Canada via Europe in about a month. —Australasian Hardware.



No. 22. OSHAWA, ONT. SEPT. 23, 1905

AN INCIDENT.

A few days ago one of our managers met a representative of a firm who make metal lathing. After extending fraternal greetings the conversation drifted into "business," as it invariably does. Our opposition (a fine fellow) was questioning the wisdom of Pedlar's selling lath at 10c. per yard when he could as easily get 20c. (that proves its merits) and so make a great deal of money.

We met this argument with what we think is a better one : That we would not sell one-tenth the quantity ; that we did not make it to look at, that we made it to **sell, and were selling it,** every hour in the day, every day in the business week ; that we were selling probably 5,000 yards per day for **private dwellings.** We asked our friend if he ever sold any lath for a private dwelling. He answered, "No ; not often." "If you sold it at 10c., would you ?" "Yes !"

Now, there is the point. Pedlar's Perfect Expanded Steel Lath is made by us and sold by us at a price that admits it into any structure. **It's as cheap as wood.** We had not left our opposition friend three minuies when our postman handed us this letter :

GRAND MERE, 15/8/05.

THE PEDLAR PEOPLE,
Montreal.

DEAR SIRS,

Please send at once, by Great Northern Railway, 555 square yards "Perfect" Lath. Send from Montreal and inside of one week, or cancel order and advise. As I am introducing your lath here I will ask your best discount.

Yours truly,
J. O. H. RICARD.

Now, this order is from the backwoods of Quebec, in the Laurentian Mountains, where there is enough timber to rebuild all Canada, and yet these people **want a fire-proof material.**

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

EVERY BUILDER

SHOULD USE OUR ROOFING MATERIALS

YOU WILL KNOW THEM BY THE TRADE MARK

"DOMINION BRAND"

LOCKERBY & McCOMB, 65 Shannon St., Montreal

ATKINS HIGH-GRADE, CROSS-CUT SAWS ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



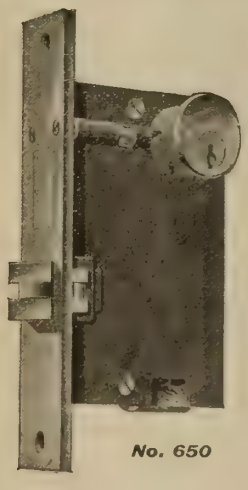
E. C. ATKINS & CO., INCORPORATED

Factories and Home Office: INDIANAPOLIS, IND., U.S.A.

LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

Write for Catalogue and Prices.

CANADIAN BRANCH: 56 King St. E., Toronto, Canada.



No. 650



GURNEY CYLINDER LOCKS



No. 1400

WILL you believe us when we tell you that these locks of ours are the equal, if not the superior, of any high-grade imported locks? They are unquestionably the best locks made in Canada, and their price is decidedly in their favor. Have you our Catalogue? If not, send for it—free.

THE GURNEY, TILDEN CO., Limited

HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

MONTREAL STRIKE AT AN END.

THE strike of the carpenters and joiners of Montreal which was declared on June 27th last, has at last come to an end, and there are no more idle strikers in the city.

As will be recalled by readers of Hardware and Metal the strike arose from the demand of the carpenters and joiners for an increase of pay from 22½ to 30 cents per hour. This the master carpenters refused, and some of the firms affected have persisted in the refusal, and are still regarded as "unfair" by the unions.

Both sides claim a victory in the struggle. The officials of the United Brotherhood of Carpenters and Joiners assert that the strike has resulted in raising the wages to 30 cents an hour, and in strengthening the union, while the Builders' Exchange has issued a statement that the men now employed are paid simply on their merits, without reference to any artificial schedule of wages. The master carpenters, say the directors of the Builders' Exchange, are now paying from 22½ to 27½ cents per hour, and in a few cases 30 cents. They therefore claim that they have gained the essential points they set out to establish, "free employment of labor, according to capability and non-recognition of the claims of the union to dictate either an artificial standard of wages or other conditions."

Building operations in Montreal are exceedingly active just now, and in some cases night gangs are actually being put to work, something which has never been done in the city before.

MONTREAL HAS A BUILDING BOOM

Last week was an unusually good one for the building trade in Montreal, the permits issued being far above the average both in number and amount. The estimated value of new buildings for which permits were taken out, is no less than $307,230.

The volume of building operations in Montreal this year may be gauged from the fact that up to date, 1,329 permits have been issued by the Building Inspector for the current year, as against 1,335 for the whole of last year.

LARGE BUILDINGS FOR MONTREAL

Two building permits aggregating $261,000 were issued from the Building Inspector's office at the City Hall, Montreal, last week. Both buildings are to be erected in the uptown section of the city. The one which will cost $161,000 is the new and magnificent Nurses' Home for the Royal Victoria Hospital. It is to be fireproof and the work of erection will be commenced immediately under the supervision of the architects, Messrs. E. & W. Maxwell.

The other permit is for what will be known to be the Lindsay building, on St. Catherine street, for $100,000. It will be built of sandstone of seven stories high, and when completed will be entirely used for offices. Mr. A. F. Dunlop is the architect, and Mr. Charles Thackeray is the general contractor. The work of construction on this building is also to be rushed. There were also a large number of smaller permits issued for dwellings and tenement houses which are to be erected in all parts of the city.

WESTMOUNT'S NEW CLUB HOUSE.

Messrs. Hutchison & Wood, architects, of Montreal, have let contracts for building a clubhouse and curling rink for the Heather Club of Westmount. The plans of the clubhouse show that arrangements have been made in harmony with the purpose intended. The rinks will have four sheets for curling, and the building itself will be of balloon frame with concrete for outside walls and Windsor cement on the inside, all reinforced with expanded steel lathing. This method is only in its infancy in Montreal, and the probabilities are that it will be used most extensively in the future.

BUILDING AT BRANDON.

A half a million in new buildings and another $100,000 in city improvements will be the record of Brandon's prosperity this year. This amount will be reached and probably well exceeded before operations have closed for the season of 1905. Although scarcely up to the figures of last year, when the amount paid over for building operations and municipal work reached almost $700,000, which included an $80,000 wing to the asylum, this year's record is remarkably good. The largest building in this year's list is the new Y.M.C.A. building at $72,000, the remainder ranging from $35,000 down.

WINNIPEG'S NEW RECORD.

Already the magnificent building record established last year at Winnipeg is being approached, only about $200,000 being required to equal last year's total of $9,500,000. Last Monday twenty-six permits were issued for buildings aggregating in value $50,000. Comparing the figures with the corresponding date last year, it is found that this year's total exceeds that of last year by almost $1,500,000.

ARTIFICIAL BRICK.

Recently a large factory has been established in British Columbia for the manufacture of artificial sandstone bricks for building purposes. It is a recent German invention, in which sand and quicklime are mixed together in certain proportions, the latter hydrated in a mold in which a vacdum is produced, and as there is no space for expansion of the lime of hydration, the compression of the material follows. The brick is further compressed in stamps of high pressure and than passed into steam boilers in which a current of steam is kept up for 8 or 10 hours, causing a chemical combination of the sand and lime and producing hydrosilicate of lime. The lime acts as a binding material or cement, uniting the particles of sand together and producing a brick of exceeding hardness and practically impervious to moisture.

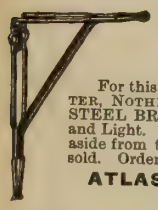
HANGING WINDOW SASHES.

SOMETHING decidedly original in the hanging of window sashes is described in a recent issue of the Scientific American. It consists in linking together the two sashes of the window in such a manner that the weight of one serves as a counterbalance for the other. No sash-cords, weights, or pulleys are necessary, and the disadvantages attending their use are thus entirely avoided. The space taken up by the sash weights is considerable, and in some cases architects find it almost impossible to make room for them. The cords, too, are in time weakened, either by wear on the pulleys or decay, and are liable to break. But aside from this the sash must fit loosely in its frame so that it will slide freely, with the result that the window is drafty and rattles in windy weather. That the new construction possesses none of these disadvantages will be apparent to all. The sashes are connected at their sides by levers, fulcrumed at their centres to the window frame. The upper sash is provided near the top with a pin at each side adapted to travel in a groove in the window frame, and the lower sash is provided with bolts, which serve as pins but which may also be pushed home to lock the sash in various positions. When the lower sash is raised its upper end swings outward and the upper sash is lowered, owing to the lever connections.

If desired, the lower sash may be swung out at the top without raising the bottom, which is bolted to the frame. A window may thus be locked open at night, providing an ample circulation of air without fear of sneak thieves. This arrangement, it will be seen, opens the window at the centre to admit air which, owing to the inclined position of the sash, is directed upward to prevent a draft. The impure air at the same time flows out at the top. A false sill is hinged to the lower sash, and this may be swung down to close the opening at the bottom of the window, if desired. When the window is closed the levers act to jam the sashes tightly against the parting bead, rendering the window watertight. If, in case of a driving rain, any water should leak past the parting bead, it would be caught in the grooves, and flow back to the sill. By avoiding the use of weights, the windows may be made 6 inches wider on each side, providing a material increase in the light area of such buildings as factories and the like. This window construction also offers the further advantage that the glass may be cleaned from the inside of the room. The bottom sash may be unbolted and drawn in to bring both sides within easy reach for cleaning. To clean the outside of the upper sash, a portion of the parting beading is removed by turning the thumb-screws, which permits the sash pins to slide out of the grooves. The sash may then be swung inward on the levers. The inventor of this improved window is an Australian, Alexander Knox, now of New York City.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.
Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works
NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand"
OF PORTLAND CEMENT.
Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

The Best Door Closer is . . .
NEWMAN'S INVINCIBLE FLOOR SPRING
Will close a door silently against any pressure of wind. Has many working advantages over the ordinary spring, and has twice the wear. In use throughout Great Britain and the Colonies. Gives perfect satisfaction. Made only by
W. NEWMAN & SONS,
Hospital St., - - BIRMINGHAM

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO. LIMITED.
TORONTO, ONT.

. . . FULL STOCK . . .
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

NOVELTIES FOR AMUSEMENT.

THE accompanying cuts show several novelties now being manufactured by W. H. Johnston & Co., of Peoria, Ill., that have met with a very pleasing reception in the States, thousands of them being sold; the game "Lawnodd" is entirely new, and can be played by two, four, six or eight players; requires small space, and affords a vast amount of pleasure. The 999 Junior, shown above, was originally intended for children between five and ten years, but the speed and pleasure it gave the little ones attracted the attention of adults to such an extent that the manufacturers have been compelled to build them to carry one, two, three or four adult riders; they can be used in Winter or Summer, with wheel or runners, as shown. The sail was originally intended to be used on ice or snow, but has been very successfully used with the wheels. The manufacturers are desirous of placing these novelties on the Canadian market and as their patents are about to pass to issue in the States, they would be pleased to take up correspondence with some responsible Canadian firm who would manufacture them on a royalty under Canadian patents. All correspondence should be addressed to the firm name as above.



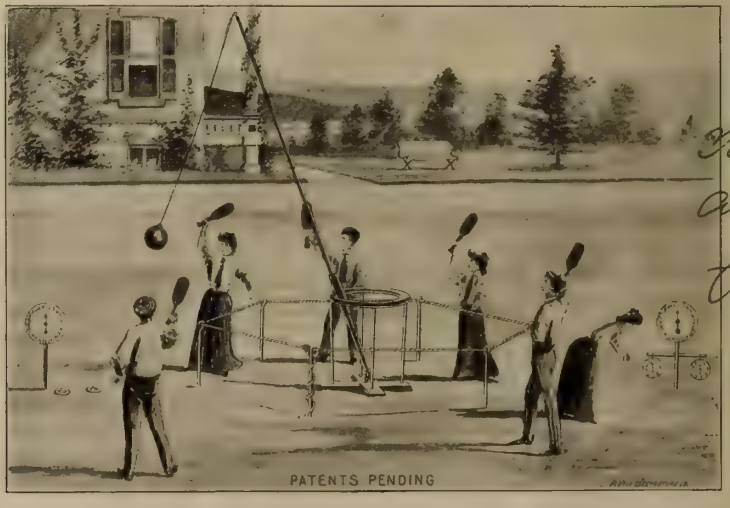
RETURNED
SEP 25 1905

"999" on Runners.

This sailing carriage or land boat has been on the market for some time, and has met with a great deal of success. It usually proves a very rapid seller after it has been introduced in a community, one sale provoking a score or more.

WANT TAX REPEALED.

The Montreal branch of the Canadian Manufacturers' Association are doing their utmost to have the $300 tax on foreign commercial travellers repealed. At the first meeting of the newly elected executive last week it was decided to draw up a petition opposing the tax. This will be submitted to all members of the local branch, after which it will be presented to Provincial Treasurer Mr. J. C. McCorkill, with an urgent appeal to have the act killed.



RETURNED
SEP 25 1905
To Owner
our Book
Page 7

The "Lawnodd" Game.

BUILDING NOTES.

Contract for a new convent has been let at Sarnia.

A large opera house is to be erected at London.

A public hall is to be erected at Abbotsford, B.C.

James Curry is erecting a new mill at Burnamthorpe.

A new skating rink is to be built at New Hamburg.

P. Tipson, Brantford, is building a brick residence to cost $1,475.

W. H. Pennock, Victoria, B.C., has purchased a site for a new residence.

The Guelph and Goderich railway are to erect twelve stations to cost $150,000.

The B. C. Electric Railway Company are to erect an office building in Victoria.

M. Bussiere is to erect a $5,000 building and P. Savard a $1,500 structure at Quebec.

Dr. Morrison, Sarnia, is to erect a three-story block to contain three stores.

The Temple Realty Company, Vancouver, are to build a business block to cost $19,700.

A $50,000 Methodist church is to be erected at College and St. Clarens avenue, Toronto.

G. R. Taylor, Vancouver, is to erect an eight-room dwelling and fifteen cottages at Sechelt, B.C.

The Guelph Artificial Stone Company has secured the contract for a $4,000 Baptist church at Galt.

The Brantford Electric & Operating Company are to erect a new $10,000 building for an auxiliary steam plant.

Permits have been issued in Hamilton for residences to E. A. Depew to cost $2,000, to John McClemont to cost $1,800, to David Newlands to cost $1,800, and to W. J. Blackborough to cost $3,000.

It is announced officially that it is the intention of the Grand Trunk Pacific Railway Company to build and operate a number of hotels along its system. These hotels will constitute a chain from the Atlantic to the Pacific.

The contract price for the fine new buildings at the Ontario Agricultural College, Guelph, to be used for farm mechanics and implement demonstrations and which are to be erected by W. J. Whitham, of Brantford, is $39,100. Work will be begun at once.

Winnipeg is to have another big skyscraper. The Canada Life Assurance Co. has decided to tear down the present four-story building in the Spring, and start the erection of a steel structure that will total something nearly a million. Preliminary plans are already under preparation.

About $100,000 is being spent this year in new buildings in Virden. The two principal structures are the $25,000 public school and the drill hall and armory for the 12th Manitoba Dragoons at a cost of $10,000. Among other buildings are A. Megaffin's $4,000 residence; Megaffin's sale stable, $2,500; addition to F. Palmer's home, $3,000; new residences for A. G. McDougall, $3,000; additions to W. J. F. Frame's house, $2,000; John Bradley, $1,600; A. E. Smith, $2,000; J. A. Blakeman, cement blocks, $3,000; Arthur Mason, $2,000; M. McMullen, $2,000; W. H. Ireland, joinery works, $2,000; Mrs. McIntyre, $1,400; Frank Higgins, $1,400; Mr. I. J. Bennett, $3,000; C. Wogan-Wainewright, two brick cottages, $1,000; Thos. Hoskins, $1,000; A. C. McDougall, $1,200; E. Forster, $1,000; Fred Sandford, $3,000; Jno. Caldwell, $3,000; A. W. Jolly, $1,400; W. Manser, $1,400.

FALL PAINTING

It is conceded that the Fall is the best time for painting. Time, however, only influences results—It does not guarantee them.

The best time should be improved by the use of the best material. White Lead always has been and still is the most efficient and economical paint for house-painting.

Tiger  Brand

WHITE LEAD

is as pure a lead as can be made. Always uniform—it's one of the advantages in favor of White Lead—no mixture to take a dozen chances on. It's in the property owner's interest to use it. It's in your own interest to sell it.

THE MONTREAL ROLLING MILLS CO.

TORONTO BUILDING PERMITS.

Mrs. Lee, brick dwelling, Grace street, $3,200.

John Allen, three brick dwellings, Bolton avenue, $6,000.

Geo. Fuller, roughcast dwelling, Carlaw avenue, $1,700.

H. H. Suydam, two brick dwellings, Spadina Road, $9,000.

E. Smeall, brick and stone dwelling, Beatrice street, $2,500.

St. Matthew's church, brick dwelling, Bellwoods avenue, $3,800.

C. S. Blackwell, addition to dwelling, 596 Jarvis street, $3,000.

W. Mitchell, brick and stone residence, Clarendon avenue, $2,500.

T. W. Wood, one pair roughcast dwellings, Givens street $3,000.

Misses Langton, brick and stone dwelling, Rusholm Road, $6,000.

M. C. Kelly, one pair roughcast dwellings, Natallie street, $3,000.

Wm. Scott, two detached brick dwellings, Harvard avenue, $6,000.

Thos. McIlwain, stone and brick dwelling, Jamieson avenue, $6,000.

Messrs. Mason & Risch, brick factory, 642 King street west, $40,000.

J. J. McLaughlin, stable, concrete and brick, Sherbourne, $8,500.

R. J. Kennedy, stone and brick dwelling, near Yonge street, $3,000.

A. J. Thompson, stone and brick dwelling, Rusholm Road, $4,500.

Phippen Bros., two pair roughcast dwellings, Howie avenue. $4,800.

Messrs. Coker & Manock, brick veneer dwelling, Emerson avenue, $1,500.

D. Block, one pair roughcast dwellings, 66 and 68 Caroline street, $3,000.

Felix Napley, brick and stone store and dwelling, Centre avenue, $3,000.

C. Mould & Co., brick veneer store and dwelling, Regent street, $2,500.

S. B. Coon, two pair brick dwellings, 81 to 87 Roxborough street, $14,000.

W. B. Charleton, one pair stone and brick dwellings, College street, $5,000.

A. R. Clarke & Co., Limited, leather finishing factory, Eastern avenue, $2,000.

Thos. R. Whiteside, one pair roughcast dwellings, Brooklyn avenue, $3,000.

E. Hyland, brick and stone addition to hotel, corner Queen and Jarvis, $2,000.

Messrs. Washington & Barlett, brick store and dwelling, corner Queen and Broadview, $2,000.

C. Wilson & Son, warehouse and factory, corner of West Market and Esplanade streets, $7,000.

James Lancaster, Alteration and additions to dwelling (brick) No. 184 Dundas street, $2,500.

Fairbanks-Morse Can. Manufacturing Co., one-story factory, reinforced concrete, Bloor street, $18,000.

Sell Continuous Satisfaction

ALUMINUM OIL HEATERS

Equipped with Safety Burner—that's the Heater for your trade.

Won't have to send a clerk out to look after it every week; won't have to make an excuse and break promises. When you sell the **Aluminum** you just hear words of satisfaction and gratitude.

It meets expectations and is the only oil heater in the world that does. Give your trade the BEST—there's money in it. Drop us a postal for literature and price.

METAL STAMPING CO., Dept. 12.—Jackson, Mich., U.S.A.
W. J. McMURTRY, Galt Ont., Canadian Agent.

100 CANDLE POWER



½¢ PER HOUR

AUER GASOLENE LAMP

Gives more light than

10 COAL OIL LAMPS, 6 ELECTRIC OR 5 ACETYLENE LIGHTS, AT A LOWER COST THAN COAL OIL.

Each lamp makes and burns its own gas. No wick, no dirt, no grease, no smoke, no odor.

Catalog and discounts on request.

AUER LIGHT CO., 1691 Notre Dame Street, MONTREAL

TO MANUFACTURERS' AGENTS:

HARDWARE AND METAL has inquiries from time to time from manufacturers and others wanting representatives in the leading business centres here and abroad.

Firms or individuals open for agencies in Canada or abroad may have their names and addresses placed on a special list kept for the information of inquirers in our various offices throughout Canada and in Great Britain with ut charge.

Address

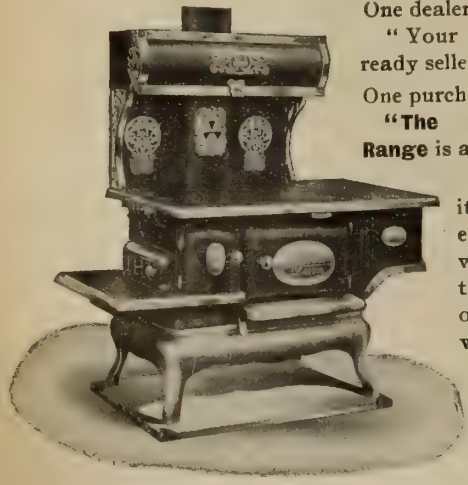
Business Manager

HARDWARE AND METAL

Montreal and Toronto

THE EMPIRE QUEEN RANGE

has the confidence of hundreds of dealers and thousands of users.



One dealer writes:
"Your ranges prove ready sellers."

One purchaser writes:
"**The Empire Queen Range** is a perfect baker."

These unsolicited testimonials express exactly what we have tried to impress on your mind—viz., the excellence of the "Baking Quality," "Selling Quality" of **The Empire Queen Range.**

We will send a booklet free

The Canadian Heating & Ventilating Co. Limited

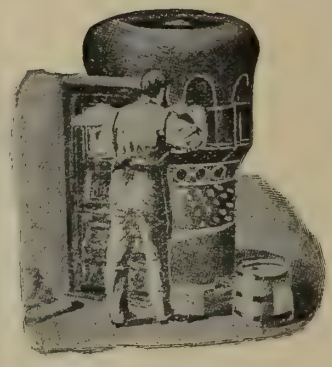
OWEN SOUND, Ontario

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

ON APPROVAL

We will send any quantity of



Sterne's Asbestos Stove and Furnace Cement

on approval. Bet it will suit you, if you will get a trial order. It's made properly. It sells quickly. Have you ordered? Will you order?

WRITE TO

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

FIRE BRICKS

Over 300 styles, suitable in every sense. Accurate Fitting our specialty. The prices will stand looking into as well as the grade of the clay.

Furnace and Stove Cement and Stove Castings

You are looking for figures on these and we can give them. Write and get catalogue.

JONES BROS., - Bracondale P.O., Ont.

STOVES AND TINWARE

A FIRELESS COOKER.

A NEW method for cooking by retained heat has been invented by Felix Kahn, of New York City, who has assigned the patents covering his invention to James S. MacCoy, of 1122 Broadway, New York City. In the cooking of foods as ordinarily practised there is a great waste of heat, care, and attention, an unnecessary amount of wear and tear on the cooking utensils, a large loss of food material, and too frequently an inferior quality of food, due to the drying and burning and the loss of the juices which give wholesome, nutritious, and palatable qualities to the food. This is due to the fact that the cooking is usually done by continuous application of the heat, which wastes 70 to 80 per cent. of the heat, occupies the stove with utensils for a needless length of time, and subjects the utensils to just that much more wear and destructive influence of the heat, as well as consuming an unnecessarily large amount of fuel.

The invention is an improvemeot over a former one, wherein the food which had been previously stewed or boiled was kept in a hot condition. By subsequent experiment it was found that after having first permeated food with heat at a cooking temperature, it was possible to stew or boil the same to perfection by the heat as conserved against loss by radiation, but that it was physically impossible to steam or dry-cook in that device by heat without the addition of a body of water. In the improved form of the device this is accomplished by placing a body of water in the bottom of the cooking receptacle, and providing a perforated rest which is placed over the water and which supports the pan or secondary cooking receptacle containing food. Substantially, the apparatus consists of an outer casing of metal and an inner casing of heavy tin. Between these are the non-conductors—paper, cylinders of dead air, and a body of fibrous material. The tight-fitting lid is similarly constructed. This effects a perfect retention of heat. As said above, in the bottom of the cooking receptacle is placed a quantity of water and a perforated support for the vessel containing the food. The manner of using the apparatus is very simple. An article of food prepared in the usual manner, and placed in the granite-ware cooking receptacle, is put on the fire until the contents are thoroughly permeated with the heat at a cooking temperature. The receptacle is then set into the heat-retaining part of the fireless cooker. This is closed and set aside for a period of time depending on the character of the food, and the same will then be found to be cooked to perfection. The fireless cooker has been exhaustively tested, about one hundred recipes having been put through this method by the Greater New York Cooking School with highly satisfactory results. For two Summers it has been used practically with great success by Mrs. Lemcke, proprietress of said school, at her Summer hotel.

The cooker is adapted for general domestic use, also for use in buffet and dining cars, steamships, yachts, automobiles, etc. One of its most interesting forms is the workman's dinner pail. It cooks while he works; he can have a hot meal wherever required.

THE ONE-HORSE FURNACE MAN.

LIKE all other business men, the stove dealer has troubles of his own, and particularly is this the case in the many small towns throughout the country. Here there are often men of a mechanical turn of mind, more or less regularly engaged in other pursuits, who set themselves up to instal furnaces and do occasional jobs in tinwork or easy plumbing. As these men do not keep up a store, and have no expense for light, heat, insurance, or help, their competition is by no means fair to the hardware man, who has to meet all these incidental expenses, as well as the cost of stock.

A citizen in a medium-sized Canadian town decides to put in a furnace, and, by some means or other, the whole town knows of it inside of twenty-four hours. The enterprising stove dealer immediately sets out to learn what kind of furnace is required, and prepares to quote a price on it, accordingly. First, he puts down the cost price of the furnace, then adds so much for his men's time on the job, and tacks on a moderate percentage of profit. He is then ready to lay his figures before the buyer.

But in the meantime the one-horse man has paused in the operation of sweeping out the town hall, of driving the local beer wagon, and also gets on the scent. If he is accustomed to pay regularly, he can get the same terms from the manufacturer as the dealer before referred to. He adds to this about the same amount for his labor as the dealer has done for his help, and he will be an unusual citizen who gives the contract to the dealer at an advance of perhaps twenty per cent. on the one-horse man's figures.

How is this difficulty to be overcome? Perhaps a good many of those who read this page have the same or a similar competition, and yet, through failure to acquaint themselves with the troubles of their fellow dealers in other towns, are under the impression that it is a purely local condition.

Here, then, is the necessity for organization clearly shown. The master plumbers have an agreement with the plumbing supply houses, by which the latter refuse to sell goods to anyone except master plumbers, and the difficulty now under discussion could be solved by a similar agreement with stove and furnace manufacturers. But individual stove dealers cannot hope to accomplish anything in this direction. In union is strength, and the united efforts of the Canadian hardware trade could do much to abate all such nuisances.

The Western Retail Hardware Dealers' Association, which includes in its membership nearly all the hardwaremen of Manitoba and the Territories, is doing a great work in shaping the destinies of the trade in the west, and the success of this organization should stimulate dealers in the older parts of Canada to try the merits of a trade association. The time is ripe for such a movement, and, if undertaken, the heartiest co-operation of Hardware and Metal is assured.

THE WESTERN BUSINESS.

REPORTS from the western country are very favorable, and the outlook for a large volume of business in ranges, heaters, etc., during the coming Fall is exceptionally bright. Prospects depend largely upon the crops, and as these are large dealers can look forward to prosperous times.

The crop is so large and the prices are so good that the farmer will not only have cash as soon as he sells something, but he will feel like buying the new heater that has been wanted for several years, perhaps. He will not feel that economy is necessary, and will buy a high-grade stove, of good size, not worrying about the slight additional cost that the bigger firebox or more nickel might cause.

When the farmer is prosperous it goes without saying that the rest of us are feeling pretty well financially. The carpenter, the mason, the blacksmith and every working man is busy. They have money and can buy what they need.

While the Fall is the heater time of the year, the indications are that cooks and ranges will be little, if any, behind the other class of stoves. The trade has ordered cooks and ranges liberally, feeling that with the general prosperity it is not unlikely that a large number of these can be placed. This is likely to be the case. The consumer has the money, and with a little urging is just as likely to put in a new range as he is a new heater—especially where the latter is not an absolute necessity.

TIN IN SOUTH AMERICA.

UNTIL lately tin ores were considered rare in Peru, the only deposits known to exist being those described by Professor Raimondi in the district of Moho, Province of Huancane, Department of Puno, in which locality the eminent authority referred to encountered a new ore deposit containing sulphur, lead, tin, and antimony. Mineral veins and vainlets containing tin were afterwards described by Engineer Carlos Posth as existing in quartz formations in the Pataoca and Acaobina spurs of the Andes in the Vilque district. Nevertheless as molybdenum, a mineral which usually accompanies ores containing tin, is widely distributed in Peru, it has long been prophesied that

The New

National Oak Heater

for Hard or Soft Coal, Lignite, Coke or Wood.

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

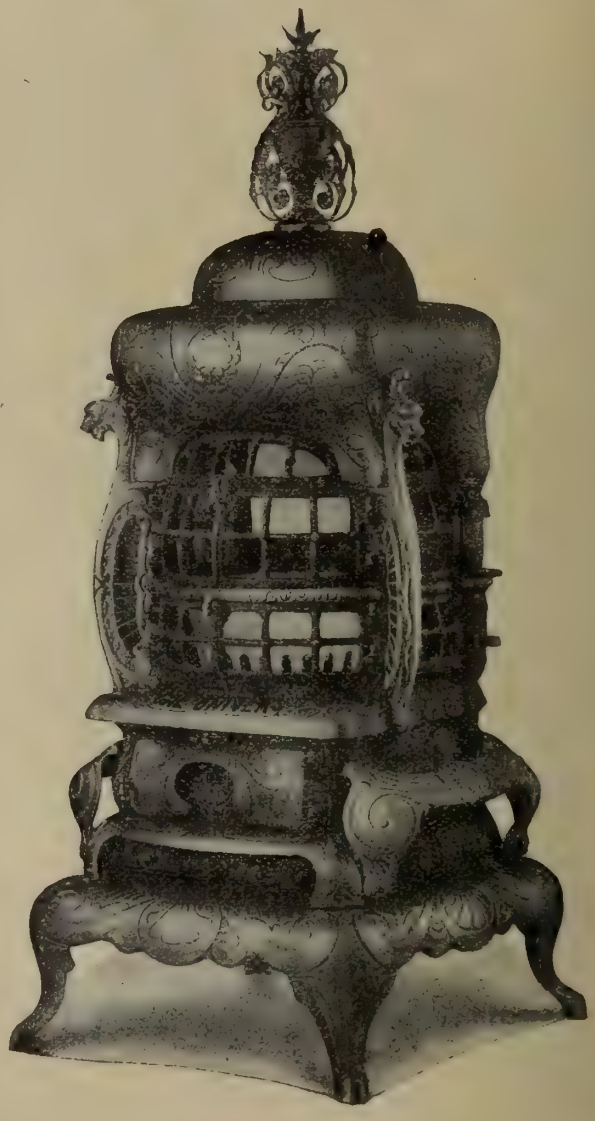
THE MOFFAT STOVE CO., LIMITED

WINNIPEG WESTON, ONT. CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

BASE BURNERS

ARE NOW IN DEMAND



The base burner you want to buy is the base burner that will sell—the one with some individuality.

The GRAND IDEA is just a little different from anything else on the market.

A LITTLE BETTER AND A LITTLE MORE UP-TO-DATE.

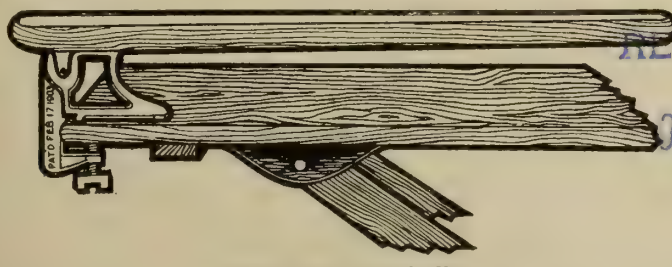
The GUELPH STOVE CO., Limited

Guelph

tin would be found in other Provinces of the Republic. This has actually happened, inasmuch as among some samples of ore sent to the School of Engineers by Doctor Azzali to be analyzed, one of these, which came from the Province of Cajatambo, was rich in metallic tin.

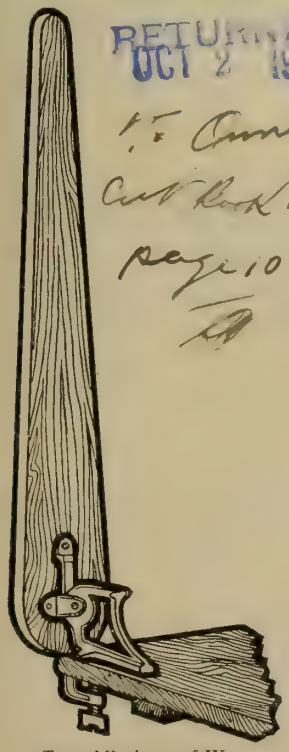
AUXILIARY IRONING BOARD.

A NOVELTY which should find a ready sale is being sold by W. H. Glenny & Co., Rochester, N.Y., being a most substantial and satisfactory auxiliary to table or regular ironing board for quickly ironing sleeves, shirt waists, children's clothing and other small articles.



Ironing Board Ready for Use.

The turn-back feature is its great convenience. It allows for this auxiliary ironing board being where it is wanted all the time. Besides these features it is very strong and very nicely made from hard wood with rounded edges, tapering in shape. The iron part is aluminum finish to prevent rusting. It is not a



Turned Back out of Way.

cheaply constructed article, but one built for everyday use and for universal satisfaction.

NON-EXPLOSIVE METAL POLISH.

The liquid polishes as sold in tin cans or bottles are made from such materials as the following. Although in a liquid form, it does not necessarily follow that a liquid polish is less economical than pastes, because the efficiency of both is dependent upon the amount of stearic or oleic acid they contain, and a liquid such as below is as rich in this respect as most of the pastes, especially those kinds containing much mineral jelly and earthy matters which are practically inert, and can only be considered as filling material. Thus it is a fact that an ounce of fluid polish may possess more polishing potency than an equal weight of the paste. Proportions are: 16 lbs. crude oleic acid, 4 lbs. tasteless mineral oil, 5 lbs. kieselguhr, 1½ oz. lemon oil. Make the earthy matter into a paste with the mixed fluids and gradually thin out, avoiding lumps. Apply with one rag and finish with another.

PASTE STOVE POLISH.

A paste polish for grates and fenders which will not dry to a hard and shrunken lump in the tins, may be got with this mixture: 99 lbs. resin spirit, 12 lbs. ceresine wax, 10 lbs. Japan wax, 10 lbs. bone black, 10 lbs. plumbago, 2 lbs. powdered copperas, 1 lb. petroleum jelly. Liquefy the waxes, then cool and thoroughly mix the other ingredients with it, to produce a non-lumpy paste. To be applied with one brush or cloth and polished with another.

NEW FOUNDRY BUILDINGS.

Forwell Bros., Berlin, are preparing the plans for their foundry site and buildings will be erected as soon as possible on the lot in Woodside Park. The two main buildings of the foundry will be of brick; one 52x100 feet, and a second 35x100 feet. There is to be a stock shed 20x65 feet and a metallic supply shed 18x115 feet. These buildings will cover over 12,000 square feet.

STOVE ITEMS.

The James Smart Manufacturing Company, Brockville, have secured the contracts to heat the R. C. church and the Presbytery at Wyoming.

The short periods which in the early and later part of the year serve to connect the two great seasons of Summer and Winter trade, are usually somewhat depressing times. Just at the present we are giving a lingering farewell to the Summer. Grumbles and sighs are indulged in as the unsold Summer goods, the lawn mowers and the freezers, &c., are stowed away to await the return of the Spring, and as it is almost too early to put on show a full range of Winter goods, the time is very opportune for a special show of a few good selling novelties and catchy lines. When times are bad and the ordinary stock hangs fire it is a good plan to awaken interest with a few novelties which, having some unusual characteristic, are bound to arouse curiosity and arrest attention.

SOL-A-RINE
The Great Polish
For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."
Send for Circular
H. F. FALKINER,
60 George St., TORONTO



OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON'
KNIFE POLISH
JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

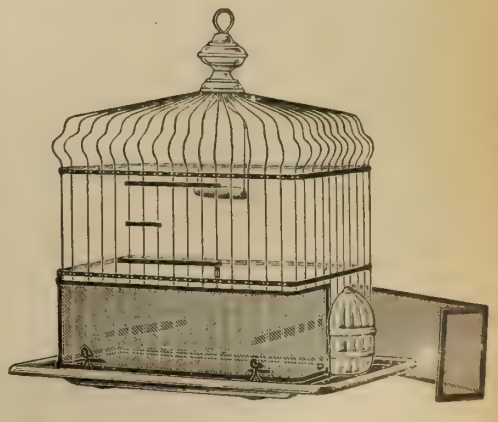
Order To-day



Receive To-morrow

Here we are again with the best FLOWER POTS, FERN PANS, SAUCERS, ETC. equipped for your trade. No. 1 assortment, Pots and Saucers; 50 4 inch, 50—5 inch, 50—6 inch, 20—7 inch. Special price, including crate, $5.60 net. Special orders filled.
THE FOSTER POTTERY CO,
HAMILTON, LIMITED.

CAGES



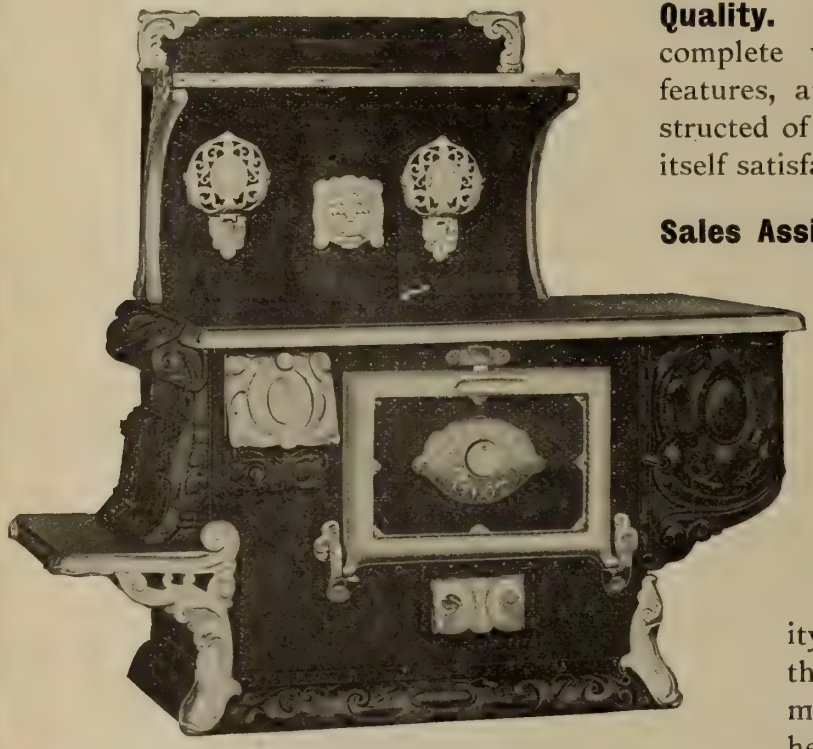
Bird Cages, Japanned and Brass Parrot Cages, Squirrel and White Rat and Mouse Cages, Breeding Cages. The most complete line of Cages manufactured on this continent. Styles, sizes and prices to suit every purchaser.
E. T. WRIGHT & CO., Manufacturers HAMILTON,

Walker "Pilot" Steel Range

OUR MOTTO :

"Quality will be remembered when price is forgotten"

Dealer's Profits. The dealer's profit on the sale of a **Walker "Pilot"** is frequently double what the ordinary range affords, and the price to the consumer meets competition.



Cut showing ***Walker "Pilot" Range*** with High Shelf and Reservoir. Note handsome appearance obtained by adding the ***Walker Hearth Construction,*** an entirely new feature in steel ranges.

Quality. The **Walker "Pilot"** Range is complete with all modern and desirable features, and is properly and honestly constructed of the best material, and has proved itself satisfactory wherever sent.

Sales Assistance. We assist the dealer in every possible way in the sale of the **Walker "Pilot"** Range, and are ready at all times to work with them for our mutual advantage.

This Combination of **Profits, Quality** and **Sales Assistance** will easily permit you to control the Range Trade of your locality, and to build up a business larger than heretofore thought of, and a money-maker that will make your heart glad.

The Walker "Pilot" agent is going to be **the** stove-man of your town, therefore it will be well to obtain agency before it is too late, and order on a sample range for your floor.

If you have not got a copy of our catalogue on file, send for it. It is free and shows other money-making lines.

The Walker Steel Range Co., Limited,

Grimsby, Ontario

"TORTOISE" HEATING AND COOKING SPECIALTIES FOR 1905

Made in Seven Styles

RETURNED OCT 9 1905
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T. Owen Ant Book 41 page 52
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"PERFECTION" TORTOISE HEATER
Series 300. Style "A"
DESIGN REGISTERED



"STANDARD" TORTOISE HEATER
Series 200



"STANDARD" TORTOISE HEATER
Series 100



"PEFECTION" TORTOISE COOKER
Style "B"
DESIGN REGISTERED.

THE "SLOW BUT SURE COMBUSTION" LINE.

NO GRATE TO SHAKE OR BURN OUT. **SIMPLE, POWERFUL, ECONOMICAL.**

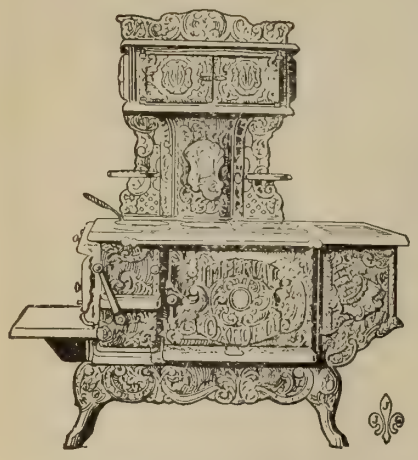
☞ If you want to handle the biggest, best and most up-to-date line you must deal with us.

Our "TORTOISE" Booklet, with net prices, mailed promptly on request.

THE JAMES SMART M'F'G CO., Limited, - BROCKVILLE, ONT.

The name **"OXFORD"** stands for sixty years of successful stove-making. It means to you, if you choose to represent us, the use of our well-established reputation, the highest quality of goods, a liberal division of profits, and

Our Guarantee Bond which goes with every Range



THE IMPERIAL OXFORD RANGE

Talks for itself

The Oven Has No Equal Scientific range construction has reached its highest mark in the Diffusive Flue, which not only heats the oven evenly but gives it perfect ventilation.

Advantages of the Draw-out Duplex Crate The Draw-out Duplex Grate used in the coal-burning range is remarkable in its utility, and minimizes the trouble of making repairs. No disturbance of the firebox linings is necessary. For wood-burning a bottom grate, front grate and grate lock can be applied to a coal-burning range.

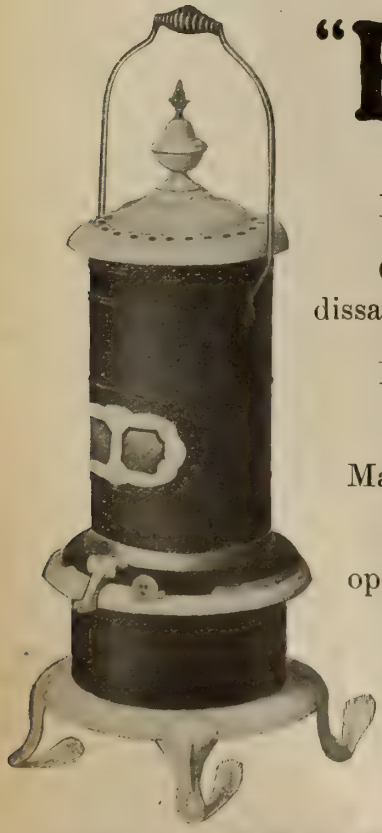
Great Fire-Box Capacity The firebox is accurately proportioned to the oven size and gives all the heat that can be needed. The water-front is exceedingly powerful, and where a water-front cannot be used the reservoir supplied is specially designed to keep a large quantity of very hot water constantly on hand.

But—let us send you our handsomely Illustrated Catalogue.

The Gurney Foundry Company, Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.



"Famous" Oil Heater

It is again time to think of your light heater trade.

Our "Famous" Oil Heater is a proved success, and you will have no dissatisfied customers with it.

Burns with a clear white flame.

Throws out an intense heat at a cost of about one cent per hour. Makes no odor whatever.

Can be carried from room to room, and is so simple that a child can operate it.

Cold air is drawn from off the floor and discharged, thoroughly heated, from top of heater.

Has seamless copper tank which never leaks. We can ship promptly. Advertising matter free.

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LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

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President:
JOHN BAYNE MACLEAN

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WESTERN HARDWAREMEN.

SECRETARY McROBIE, of the Western Retail Hardware and Stove Dealers' Association, writes Hardware and Metal from Regina, giving some account of the progress which is being made in the work of organization. During the last three weeks he has been at work in Saskatchewan, and evidently he is finding the trade in the new Province as favorably disposed toward the association as are the hardware dealers in Manitoba. The Arcola line is now thoroughly organized, and work will be commenced now on the Prince Albert branch. Prospects in Saskatchewan are very bright.

JUDGES' SALARIES TOO SMALL.

MUCH surprise has been expressed in some quarters on account of the intended resignation of Hon. Justice Wallace Nesbitt from the Supreme Court, but in well-informed circles it is only the expected that is likely to happen, it being generally recognized that the salaries paid to Canadian judges are entirely insufficient for them to live according to the standard of the position owing to the increased cost of living, especially in the large centres of population. It is but a couple of years since Judge Nesbitt forsook the practice of law for the Bench, doing so only because he was promised that much larger salaries would be paid to occupants of judicial positions in the future.

When the recent increases were passed by the Dominion Parliament, however, it was pointed out by the MacLean Trade Papers that the increases were entirely too small. It is understood that Justice Nesbitt protested, and has finally found it necessary to resign from the Bench owing to his inability to secure a guarantee that the salaries paid to Canadian judges would be increased to a point where they would compare favorably with the remuneration given occupants of the Bench in Great Britain, the United States, and Australia. In all of these countries the scale of salaries is nearly double that paid to Canadian judges.

Since the announcement of Judge Nesbitt's determination to re-enter private practice three of the best known lawyers in Toronto are understood to have been offered the vacancy, but none of them could afford to accept at the present salary. It is to be hoped that at the next session of Parliament steps will be taken to still further increase the salaries paid to Supreme Court judges, as the position requires the ablest men produced in the Canadian law courts. Before his appointment to the Bench Justice Nesbitt was recognized as one of the ablest lawyers in Canada, and his income was said to have been fully $25,000 per year. It has, therefore, been a great sacrifice for him to occupy the Supreme Court position, and as he has not been away from his private practice long enough to lose his connection it is almost certain that he can look forward to an annual income of about $50,000 during the next ten years if he resumes the practice of law.

That the payment of higher salaries will result in the acceptance of judicial positions by the ablest lawyers is indicated by the newspaper reports stating that there are about forty applicants for a vacant Senatorship in the Maritime Provinces. The increased salaries paid to Senators and members of the House of Commons has certainly encouraged a larger number of men to seek these positions, and of the increased number of candidates a better and more representative class of men are certain to be selected. The same result would follow the payment of respectable salaries to judges, as while the honor of the position and the certainty of annuity after a long term of service is of great value, we cannot expect men capable of earning from $15,000 to $50,000 per year to give up this income for the salaries now paid to judges, the highest of which according to the new scale adopted is $9,000 per year. It must be remembered also that lawyers in private practice enjoy greater freedom, and have better opportunities for financial investment than occupants of the Bench. These points undoubtedly weigh greatly with lawyers when offered appointments to judgeships.

If the prestige of "British justice" is to be maintained Canada must pay her jurists salaries equal to the amounts which private corporations are willing to pay for similar service. In the past this has not been done, and the resignation of Justice Nesbitt, while a distinct loss to the community, will not have been without a corresponding benefit if it impresses upon the Government the necessity of adopting a scale of judicial salaries in keeping with the higher cost of living and capable of favorable comparison with the remuneration given judges in other countries.

PROBLEMS OF BUYING STOCK.

THE bane of the retail merchant is the slow selling article. Some merchants have the faculty of collecting a supply of this class of merchandise, which operates very materially against the profits of the business. A man of course cannot always tell what the demand for the goods he carries on his shelves will always be like, for he must take chances, and if he sold only those goods which are staple articles and which every other dealer handled, he would miss many opportunities to make money; but it is in estimating the size of the demand that he will be able to make for the goods that the secret of successful merchandising lies.

The average salesman introducing a new line is very prone to urge his customer to purchase more than he actually needs, for he figures that if the dealer has a large supply on hand he will make an extraordinary effort to push the goods. With this idea in view, special deals involving discounts for quantities are offered, and here is where the good merchant shows his calibre. He realizes that there is no money in tying up a lot of his capital for the sake of making an extra two or possibly five per cent., when he could invest the money in something which will turn several times in a year, and he will refuse to take advantage of these extra concessions and will buy conservatively.

The temptation is often very strong to load up on a certain article, but the man who has the courage and stamina to stick to the policy of buying only what he needs will have his capital in such shape that he has a big advantage over the man who is always looking for the extra quantity discount.

The advantage of taking a number of side lines into the hardware stock is that the merchant always has something to work on then. If he can't sell anything in the regular hardware department maybe he can put out a few clocks or a few watches, or some fine silverware or some glassware. There is no hard and fast limit set down for the hardware stock. Anything that he can sell legally the hardwareman has a right to handle.

MANUFACTURERS AT QUEBEC

Notes on the Annual Convention in the Ancient Capital.

IN certain respects the 34th annual convention of the Canadian Manufacturers' Association, which opened in Quebec on Monday, 18th September, was not attended with the full measure of success that usually characterizes both business and social functions of the organization. The registration list showed an attendance of only a little over 150 delegates, whereas 100 to 150 more were expected. Then the weather was decidedly unpleasant. On Monday there was a sort of combination of Scotch mist and genuine Canadian rain. On Tuesday the rain ceased, but the clouds and muddy streets remained.

But the moderate attendance and the weather did not after all seriously affect either the business transactions or the social functions of the convention. In spite of these things the convention was a success. The large proportion of the members of the association who came to Quebec evidently did so for the purpose of attending the business of the convention. Consequently the attendance at the business meetings was possibly as large as if the registration of delegates had been larger.

* * *

The pre-arrangements of the good people of Quebec were excellent. They could scarcely have been better, and the proof is that everything went off without a hitch. The handsome and spacious city hall was practically deeded over to the association for the purposes of the convention. The council chamber, from the windows of which could be seen the St. Charles River and the famous Laurentian Mountains, was set aside for the regular meetings of the convention while the committee rooms were reserved for section meetings and the secretary's offices. And what applies to the arrangements for business applies with equal force to the social functions. Mr. G. A Vandry, chairman of the Quebec branch, and Mr. Geo. E. Amyot, vice-president for the Province of Quebec, spared neither time nor pains, and much of the success of the convention was due to their labors. The association can scarcely forget the Quebec convention.

* * *

The stove manufacturers want a specific instead of an ad valorem duty. They contend that the Customs duty as it at present stands does not give them sufficient protection on the cheaper classes of stoves. On the better classes of stoves they are quite competent to meet competition from the United States or any other country. And this was the sum and substance of the business that occupied the attention of the Stove Manufacturers' section. And they all appear to be agreed as to its necessity.

* * *

The convention proper opened on Monday afternoon at 2.30. President W. K. George occupied with becoming dignity the imposing chair, or rather, throne, of his worship le Maire of Quebec. Secretary Younge, with equally becoming dignity, occupied a seat at his right, and the benign finance minister of the association, Treasurer Booth, sat at his left. while on the front benches, taking a fatherly interest in the proceedings, were ex-President W. K. McNaught, fresh from his victories at the Canadian National Exhibition; Vice-President Ballantyne, Montreal; ex-Secretary T. Russell, Toronto; Mr. George Amyot, Quebec, and other veterans.

* * *

President George did not waste any time in preliminaries, but at once got down to business, the report of the treasurer being the first item on the programme. Treasurer Booth does not present his report after the manner finance ministers do their budget speeches. He



Mr. C. C. Ballantyne, Montreal.
The New President of the Canadian Manufacturers' Association.

does not attempt to make things appear better than they really are. He did not mince matters when he said that while there was a balance in the bank of $4,250 at the end of the financial year, and that the association possessed a surplus of over $6,000, the expenditures had increased at a greater ratio than the membership, rapid as that increase had been. He was so earnest about this that he asked for an expression of opinion from the convention as to the advisability of increasing the membership fee. This led to the most important discussion of the afternoon. The consensus of opinion was in favor of something being done, but just what demanded careful consideration. It was felt that nothing should be done that would tend to impair the membership. As one delegate said, "What we want is members. It will have more effect with the Government when we are impressing our views upon it." As no alteration in the fees can be made for another year, the question was relegated to the executive committee for consideration. If the opinions expressed can be taken as a criterion, the increase in the membership fee will be largely borne by the larger employers of labor.

* * *

Secretary Younge's report was noted for two or three suggestions it made. One was to the effect that although the membership of the association had increased by 328 during the year "it was absolutely necessary for something to be done to increase the membership fee." In this it will be seen he concurred in the suggestion of Treasurer Booth. The other was recommending the appointment of a traveling secretary. In fact, he pointed out that the present staff of 25 employes needed enlarging, while the present headquarters offices were inadequate for the present requirements of the association.

* * *

The consensus of opinion among the members was favorable to Mr. Younge's recommendations, and that referring to the appointment of a traveling secretary was referred to the finance committee, who will in turn report to the executive committee.

* * *

The report of the parliamentary committee, whose duty is to keep an eye on Provincial and Federal legislation, showed that that committee had not slept—at any rate, when it should have been awake. And by keeping awake, some objectionable legislation had been prevented. There was one thing, however, which the committee had not been able to prevent, and that was the tax which British Columbia and Quebec had imposed on commercial travelers. The report deprecated the tax and the members of the convention who spoke in regard thereto endorsed its sentiments. Mr. George Amyot, of Quebec, was cheered to the echo when he declared that each part of the country should do business with the other, without the legislative barriers as that described in the report. Mr. Edward Gurney, of Toronto, declared that all trade legislation should be in the hands of the Federal Parliament. His sentiment was also warmly applauded.

* * *

Before 10 o'clock on Tuesday morning the convention was at work again considering reports. The report of the Fire Insurance Committee recommended that authority be given that department to

conduct an insurance brokerage for placing the insurance of the members of the association and was productive of a great deal of discussion. Mr. G. M. Marter strongly opposed the proposition, urging that they would be antagonizing the insurance companies, while, before the insurance branch of the association could place business, it would be necessary to become the agent of one or more of the existing insurance companies. The discussion was profitable as well as interesting. It was shown that in consequence of the Toronto conflagration increased rates were arbitrarily imposed throughout the country on risks that were altogether dissimilar from the class destroyed by the fire. Mr. McGibbon, of Montreal, made the assertion that rates in Canada are two to three times higher than in the United States, which, in view of the fact that the latter were their competitors, seriously militated against the Canadian manufacturer. The consensus of opinion was that a campaign of education in regard to insurance would be of great benefit to the members of the association and that a great step along this line would be made if Mr. Heaton, the manager of the fire insurance department, or his staff would visit their factories.

Mr. Fleury, of Aurora, Ont., pointed out that as a result of suggestions made to him by Mr. Heaton he was securing a much lower rate than formerly.

The Insurance Committee will be permitted to do what it deems best in regard to the brokerage proposal.

* * *

What is generally conceded to have been the best report submitted to the convention was that presented by the Railway and Transportation Committee showing that the efforts of the committee had been productive of results most beneficial to the members of the association. For example: On behalf of the Metallic Roofing Co. the committee had made representations to the Board of Railway Commissioners in regard to classification of metallic shingles, and the result obtained, according to the statement of the manager of the company who was present, was the saving of about $3,000 a year in freight rates.

One point in the report which occasioned some little discussion was in regard to the owners' risk condition and penalty clause imposed by the railways, and was raised through a question by Mr. W. S. Fisher of St. John. Several of the delegates expressed the opinion that the clause was illegal and instances were given in which, where shippers had refused to be governed by it, the railway companies had not enforced it. Although the matter has been before the board of railway commissioners for some time a deliverance has not yet been made upon it.

PERSONAL MENTION

Ontario.

Mr. McCurdy, of McCurdy Bros., Stratford, was in Toronto this week.

Suckling & Co., Toronto, are advertising the assets of the Dominion Fence Co. for sale.

James H. Randall, tinsmith, a well-known resident of St. Catharines, died suddenly last Monday.

Jos. Heard, Fenelon Falls, has returned from a long holiday in the country, much improved in health.

Frank Leslie, of P. Leslie & Son, hardware merchants, Alexandria, entered the ranks of the benedicts last Wednesday.

Thomas Elliott, formerly a hardware merchant at Perth, Ont., was a caller at the Toronto office of Hardware and Metal this week.

Charles E. Paton, of the firm of James W. Paton, Adelaide street, Toronto, has just returned from a ten days' holidays.

Mr. Short, manager of Revillion Bros., Edmonton, has been in Toronto for about a week. Mr. Short will also spend a few day in Montreal.

Samuel Graham, representing W. R. Humphreys & Co., Limited, cutlery manufacturers, Sheffield, has been in Toronto with his samples during the past week.

The Gutta Percha and Rubber Mfg. Co., Toronto, have gotten out a neat advertisement in the form of a clock illustrating their "Maltese Cross" brand of rubber.

John Lemmon, of the firm of Lemmon & Lawrenson, hardware merchants, Kingston, has purchased the interest held by the latter partner. The firm will hereafter be known as Lemmon & Sons.

W. G. Syffert, late with A. J. Colvin, has opened a hardware store at Galt, where he will carry a full and complete stock of guns and ammunition, stoves and ranges, small hardware, etc.

Rumors are current of the proposed establishment of a new wholesale and retail hardware store in Toronto. A firm of lawyers are said to be working on the securing of a charter for the company.

Mr. Turnbull, of Turnbull, Howard & Co., Brantford, was at the King Edward Hotel, Toronto, for a couple of days this week. Mr. Turnbull had been down in Montreal trying conclusions with the Westmount Bowling Club.

Thomas R. Wood, vice-president of the Ontario Lead and Wire Co., Toronto, died a week ago at the age of 65, being buried on Monday last. Mr. Wood had been quite active in the business during the past few years, and was well and favorably known to many readers of Hardware and Metal.

Other Provinces.

T. J. Farley and R. C. Ward, Wetaskiwin, are to open a hardware store at Lloydminster, Alberta.

W. S. Fisher, of Emerson & Fisher, St. John, N.B., has been on a business trip to Charlottetown, P.E.I.

J. S. Orr and W. Whyte, Wetaskiwin, have purchased a stock and are erecting a building at Daysland, Alberta, where they will establish a hardware business.

Arrangements have been made for the sale of the hardware business of MacPhail & Co., 651 Granville street, Vancouver, to Logan E. P. McAdam, late of Dunedin, New Zealand.

Quebec.

J. A. Boudrias, of Chateauguay, was in Montreal last week, calling on the jobbers.

Isaie Hardy, general storekeeper, of St. Bazile, paid a business visit to Montreal last week.

J. Allan Munro, of the Canada Paint Co., Montreal, has returned from his trip to the Old Country.

Geo. Boyd, of the Montreal Rolling Mills, has returned from a pleasant vacation spent at L'Achigan.

T. G. McClatchie, tinsmith, of Hemmingford, called on the Montreal jobbers and supply houses this week.

Chas. Milot, general storekeeper, of St. Monique de Nicolet, visited Montreal on a business trip this week.

A. Arel, of Beauharnois, was in Montreal last Monday in connection with his extensive contracting interests.

L. J. Moger, tinsmith and roofer, of St. Antoine, was among the outside buyers in Montreal during the week.

E. Ryan, lately with the H. S. Howland Sons & Co., has joined the sales department of Lewis Bros., Limited, Montreal.

Geo. J. Crowdy, Montreal manager for James Hutton & Co., is away in the Old Country. He is expected home early in October.

The Canada Paint Co. have completed arrangements to increase their facilities by the erection of a new warehouse on William street, Montreal.

K. B. Thornton, of the J. G. White Co., New York, and formerly of the Montreal Light, Heat and Power Co., spent a few days in Montreal this week.

W. C. Webster, Jr., of the firm W. C. Webster & Son, wholesale and retail hardware merchants of Coaticook, was in Montreal on business during the week.

G. P. Breckon, assistant manager of the Metallic Roofing Co., Toronto, accompanied by his wife, spent a few days in Montreal this week, stopping at the Windsor.

The Canadian Fairbanks Company have made arrangements for the publication of a monthly magazine to keep their customers and others in touch with the progress of their business.

C. S. Lowe, of the office staff of the Whitman-Barnes Manufacturing Co., St. Catharines, Ont., was in Montreal with the Athletic lacrosse team and played a splendid game for the Minto Cup challengers.

Mr. Ross, of Ross Bros., hardware merchants, Edmonton, was in Montreal this week, after visiting Toronto and New York. Like all westerners, Mr. Ross is very enthusiastic over the prospects of that part of Canada.

A. B. Allan, of Allan Whyte & Co., Glasgow, Scotland, was in Montreal this week. He is here to extend his Canadian business and spoke very hopefully of the future of the firm's interests in this country. Allan Whyte & Co. are contractors to His Majesty's Government, and own the Clyde Patent Wire Rope Works of Rutherglen, Glasgow. They are also manufacturers of wire rope for collieries, mines, aerial tramways, etc. Their representatives in Canada are: Wm. Stairs, Son & Morrow, Halifax, N.S.; W. H. Thorne & Co., Limited, St. John, N.B.; Drummond, McCall & Co., Montreal; and John Burns,

The Story of Our New Publication

The BUSINESS MAGAZINE

We have decided to start almost immediately the publication of a new monthly magazine for busy men and women, in which we will reproduce the very best articles contained in the magazines of the world—not dry statistical articles, but bright, clever, readable matter of special interest to business men.

Readers of Hardware and Metal know that every month a great many articles and sketches appear in the magazines, which they would like to read. They are prevented from doing so by the great number of the magazines and by the expense of securing them. Just think what an opportunity the Business Magazine affords them of getting the very best of these publications at a ridiculously small cost!

All the magazines of the world will be received month by month at our office. They will be distributed among the members of our editorial staff, who will make selections from them. These will be submitted to the managing editor of the magazine, who will cull out the unsuitable matter. Finally, before being sent to the printers, a council of the managing editors of the MacLean Trade Newspapers will be called to pronounce a final verdict on them.

The result will be a magazine without a dull page—a magazine that you can read with pleasure any time—a magazine that is the gateway to the best current literature in the world.

In addition to the articles which will be reproduced, those other articles which we are unable to print will be listed, so that every month readers will obtain a key to every article on a commercial subject that has appeared.

The Business Magazine will contain 150 to 160 pages and will be published about the first of every month. Its subscription price will be $2.00 per annum.

The MACLEAN PUBLISHING CO., Limited

Toronto **Montreal** **Winnipeg**

Subscription Form

THE MACLEAN PUBLISHING CO., Limited,
TORONTO.

Please put me down as a subscriber to the Business Magazine, for which I agree to pay $2.00 per annum.

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MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 22, 1905.

FINE orders, both for immediate and future delivery, have been taken this week, some wholesale houses reporting that they are now busier than at any other time during the year. They have never before had so many orders in a single week.

Prices in all staple lines are stiff, with an upward tendency, while a slight advance has been made in the price of brass and copper wire. Instead of a discount of 60 per cent. off the list, as has been reported in our current market quotations for some time, the ruling discount is now 55 per cent. net cash 30 days, f.o.b. factory. Hay wire is selling very strongly at present.

Country dealers are sending in good orders for horse blankets, sleigh bells, curry combs, skates and other winter goods. Indications point to a record-breaking business for the approaching season. Washing machines are also well to the fore in all orders which are being forwarded.

Ammunition continues to be the strong feature of the market, and rifles are going out fast. Sportsmen are eagerly preparing for a great season in shooting big game this year.

Axes—A brisk movement is going on all the time, now. Our prices are still: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—The demand keeps up well. Our quotations are as follows: Axe handles No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Business is improving with every week. We quote: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—The demand has decidedly improved, although the market still feels the effect of the recent cut price war. Even yet, lanterns are being sent out to fill orders booked months ago. In spite of the withdrawal of prices by prominent manufacturing firms, we still quote: Cold blast, $4.50; No. 0 Safety, $5.50.

Rivets and Burrs—The regular demand is experienced. All the staple hardware lines are selling very fast just now. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—We quote: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—Prices are very firm, and nails are in better demand than for some time. We quote: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—Are rather dead, and very few large orders are being received. Prices are $2.20 per keg, f.o.b. Montreal

Horseshoes—Fall business is coming on, as is shown by the increasingly large orders flowing in. Our prices are: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

THE WEEK'S MARKETS IN BRIEF.

Linseed oil has advanced 1c. in Montreal.

Brass goods have not yet made their expected advance.

Tin has declined half a cent on the Montreal markets.

Canadian crude oil has advanced 5c.

Scrap rubber is quoted half a cent higher.

Brass and copper wire are now quoted at 55 per cent. discount instead of 60 per cent.

Sporting Goods—Ammunition continues to lead the market in sporting goods, though skates are coming rapidly to the fore. We quote as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Conditions remain unchanged. The season is somewhat backward. There has been no change in prices.

Cordage — A fairly active market is maintained. Prices as quoted in our current quotations in the back.

Cement and Firebrick—Good jobbing orders are being received, but no large inquiries are reported. Prices are: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—A splendid flow of orders indicate a big demand in all parts of the country. Our prices are: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—Though orders are being shipped regularly, the business is not so large as in previous seasons, the inference being that consumers are all supplied. Our prices are: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Retailers are becoming alive to the fact that there is a good season ahead for skates, and many inquiries are being received from all parts. Prices vary from 25c. to $2.50, according to quality.

Sleigh Bells—These are also good sellers at the present time. We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We give the same figures as previously. Jute, unlined $4.50: 3-4 lined, $9.50; full lined, $12: 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24: Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—Sales are not yet very brisk but many inquiries are being received. Prices range from $15 to $35 per dozen pairs, according to quality.

Promptness is one of the best of qualities in both merchant and clerk. It is a good idea, when practicable, to be a little ahead of time with our duties. None, of us know what the morrow is going to bring forth, and if anything happens which takes us away from business for a day or two, things will run much smoother if work is well in hand.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Sept. 22, 1905.

WHILE there is nothing exceptional about the volume of business being done, the jobbing houses are well satisfied and are not making any complaints. They look for a very busy time from now on, but have no desire to encourage overbuying by booming business. The crops have been very satisfactory and buying has been as large as conditions would warrant so far, the growth being of a healthy nature rather than of the type of a boom.

Sporting goods continue to be one of the best selling lines and the approach of the shooting season will find the local stores well stocked with guns, rifles and ammunition. There has been a scarcity in some classes of imported shells, however.

Builders' hardware, cement and roofing papers are in strong demand, the volume of business in this branch having been very great this year.

Washing machines, apple parers, step ladders, etc., are all being bought in large quantities, and lanterns are also in active demand.

Axes, skates, sleigh bells, horse blankets, etc., are being called for and trade in these lines will increase during the coming month.

With the exception of copper and brass wire all prices remain the same. The discount on these lines has been cut from 60 to 55 per cent.

Sporting Goods—Rifles and shotguns are selling well and ammunition is moving actively despite the difficulty in securing imported shells there is no scarcity.

Washing Machines—This line is moving more freely.

Chain—Fall trade is beginning to pick up. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders— Step ladders are in strong demand and a large business is looked for next month. We quote as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—A fair business is being done, but not so large as a month ago.

Wire Nails—Trade is very large, but stocks are ample for all demands. Prices are the same.

Cut Nails—There is a very satisfactory trade being done. Quotations are: $2.40 per keg f.o.b. Toronto.

Horseshoes—Good business is being done and a large Fall trade is looked for. Our quotations are: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Axes—Trade is good, but next month will see more activity.

Cutlery—Trade is increasing and case goods particularly are in demand.

Skates and Sleigh Bells—Large orders are booked for future shipment, an increased trade being indicated by the orders in hand.

Lanterns—Many good sized orders are being received for early shipment.

Apple Parers—Trade in this line continues active.

Horse Nails—Trade is active at unchanged prices.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—All the mills are rushed and stocks are being called on heavily.

Cordage—Sorting orders are coming in. Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Our quotations continue as follows: Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is no change in the market and business continues satisfactory. We quote: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse, Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—The demand is fair, but not so large as during the warm weather. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 20c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A good business has been done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—The market has settled somewhat to a steadier basis. The unhealthy competition between rival wholesale buyers has met with a check since our last report, having the effect of checking the unwarranted advances so noticeable of late. Prices have, in consequence, for the moment halted, and we are quoting previous prices, firm and steady. It is not at all unlikely that a downward tendency will be manifest at an early date. We quote:

Hides, inspected, No. 1 per lb.	....	0 12
" " " 2 "	....	0 11
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected	....	0 14
" " No. 2	....	0 12
Lamb skins and pelts, best city slaughter	....	0 85
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 22, 1905.

COPPER is as firm as ever, this week, and there is still a great scarcity of ingot casting copper. Some stories are going the rounds regarding the alleged shipment of copper to China, to await a more pressing need for it in this country and in the United States. This may or may not be true—probably not—but it is certain that something is being done to lessen the available supply. There is practically none offering for immediate acceptance.

Lead has been steady throughout the past week, and there has been no disposition to change the prices.

Tin is hardly as strong as it was at our last reports. People seem to be nervous on account of the decline, but the fact remains that there is not much tin here, and pretty good prices are obtainable. It will probably recover in a short time, and, at any rate, no weakening is expected.

Pig iron has been rather quiet this week, but some orders of fair size have been placed. Many foundries are said to be short of stock, and a better demand is looked for in the near future.

Galvanized sheets are a feature of the market, and are gaining strength quickly. Spelter has jumped up, and as it is an important item in the manufacture of galvanized iron, the result has been felt in the higher prices paid by jobbers this week. In the United States, Apollo sheets have advanced twice during the week, and they are bound to go up on the local market in a very short time.

Canada Plates—No new features have developed during the week, and the following prices are firm: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—A shortage is still reported, though it is suspected that this is a result of artificial conditions. Current prices show good strength, and it is likely that they will hold for some time. We quote: Ingot copper, 17 1-2c.; sheet copper, 24¾c.

Ingot Tin—This metal is somewhat weaker than at our last reports. There is a feeling, however, that it will recover shortly from its temporary stagnancy. We give prices: 35 1-2c. to 36c. per lb.

Pig Lead—Continues quite firm at the following prices: $3.70 to $3.80 per 100 lbs.

Boiler Tubes—Good business is reported at unchanged prices. We quote as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—A quiet, but satisfactory volume of business is being done. We are still quoting:

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.

KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.

LIMITED

DESERONTO, ONT.

Manufacturers of

CHARCOAL PIG IRON

BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"

BRAND.

Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents

Drummond, McCall & Co.
MONTREAL, QUE
or to
Canada Iron Furnace Co.
MIDLAND, ONT. Limited

Get our prices for

GALVANIZED FLAT SHEETS

THE "VANDA" BRAND

For all purposes requiring the best quality.

It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England

Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc.

"Disc," No. 1.....$16.50 delivered Montreal.
"Dom.," No. 1..... 17.50 " "
Usual difference in price for lower grades.
Ferrona No. 1.....$18.00 delivered Montreal.
" No. 2..... 17.50 " "
" No. 3..... 16 50 " "
" No. 4..... 16.00 " "
Londonderry.$18.50 to $19.00 " "
Glengarnock..... 18.25 " "
Gartsherrie..... 19.25 " "
Carnbroe..... 18.50 " "
Carron No. 1..... 19.50 " "
" (special) ..... 18.50 " "
Ayresome No. 1..... 18.50 " "
" No. 3..... 17.75 " "
Summerlee .... 18.50 to 19.00 delivered Montreal.
Clarence No. 1 ..... 17.75 " "
" No. 3..... 17.25 " "
No. 1, Cleveland... ... 17.50 " "

Tool Steel—We give prices: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—Our prices have not changed. A fairly brisk business is reported by dealers at the following prices: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—We give prices as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The firmness of galvanized sheets is one of the strongest features of the market. We are quoting: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—No change has been noted and our figures are still as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—There is still a great scarcity of this article, although conditions are improving a little. We give still our last week's price of 16c. per pound.

Tin Plates—The weakness of tin ingots is not felt by tin plates as they did not advance as strongly as ingot tin during the recent tin boom. We are quoting: Cakes, $3.75; charcoal, $4.00.

Ingot Zinc— This market is decidedly stronger and although we do not give any change in price this week it is considered very probable that such a thing will take place shortly. We still quote: 6 1-2c. to 6 3-4c.

Scrap Metal—Copper scrap is the same as at our last report and is quite as firm. There is rather better demand for cast iron scrap, but wrought is very inactive. The local mills are not asking for any at present, and it is not expected that conditions will improve much for some time yet. Old rubbers are now bring-

TERNE PLATES

"Dominion" Extra quality, bright finish.
"Dean," The old reliable.
"Canada" Good standard quality.

A. C. LESLIE & CO.
MONTREAL.

ASK YOUR CUSTOMERS
if they don't need new pumps. If they do, sell them our
Standard Anti-Freezing Pumps
They'll appreciate getting a pump that doesn't have to be thawn out every zero morning



—McDougall Pumps
—Made in Canada.

Write for Catalogue and Prices.
THE R. McDOUGALL CO., LIMITED
Galt, Ont.

A SUPERIOR PRODUCT
B. K. MORTON & CO'S
B.C. BRAND
DRILL STEEL
Miners endorse it. You could sell it. Write to-day.

AGENTS
E. C. PRIOR & CO., Victoria, B.C.
BAINES & PECKOVER Toronto, Can.
D. W. CLARK, P O. Box 521, TORONTO, Can.

NOVA SCOTIA STEEL & COAL CO., Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS-MARTIN
OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED by young man with thorough knowledge of the hardware business, position as travelling salesman, best of references given. Address Box F, HARDWARE AND METAL, Montreal. [38]

ENGINE LATHE WANTED.

SECOND-HAND engine lathe, 24-inch swing by 10, 12 or 14 foot bed ; state make. Full particulars and best prices to Box 4, Oshawa. [39]

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list ; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. [tf]

TENDERS will be received by the undersigned executors of the late James M. Martin for the purchase of the good-will and stock in trade of the hardware business of the firm of Martin Bros., of the city of Rossland. An inventory may be seen and particulars obtained from the executors.

Wm. Martin,
W. M. Wood,
Executors. [39]

FOR SALE.

FOR SALE—A good set of tinsmith's tools cheap. J. E. Pedlow, Vienna, Ont. [38]

A FIRST-CLASS set of tinners' and pipe fitters' tools for sale. Several of tools are just new and hardly used. W. T. McGibbon & Co., Brighton, Ontario. [39]

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house ; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities ; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. [38]

SITUATIONS VACANT.

WANTED—A traveller to represent us in Ontario ; one who has had experience in the hardware business preferred ; must be a hustler ; state experience and qualifications. Apply J. H. Still Mfg. Co., Limited, Box 1302, St. Thomas, Ont. [f]

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

ing a better price, being quoted at from 6c. to 6 1-4c. per pound. Our prices are as follows: Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed scrap, 75c. to 90c. per 100 lbs.; old rubbers, 6c. to 6 1-4c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street east,
Toronto, September 22, 1905.

OUTLOOK for Fall business is very promising as the large consumption continues unabated. Trade is very good in black and galvanized sheets and the call for lead is very active. In ingots there is not so much doing. While there are no particular shortages, stocks on the whole are anything but heavy. In both bar and pig iron the mills are working at their fullest capacity to supply the steady demand.

Pig Iron—Stocks are very light and some mills are booked ahead for months being out of the market completely. Quotations continue as follows:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	....	18 50
" No. 2, "	....	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	21 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Mills are all running at full capacity and demand is very heavy. We quote as follows : $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—There is a fair demand with prices firmer.

Tin Plates—Demand is active with prices unchanged.

Galvanized Sheets— The demand is very strong. Prices are advancing very sharply in outside markets.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—General activity rules. Stocks are light, and many dealers short. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—There is an active demand. Prices are steady: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—The market is quiet. Prices continue very firm. Our quotations are as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Conditions are unchanged and the market is quiet.

Old Material—Copper and brass are very firm and stocks are very light. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9 1-2c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5 1-2c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Anthracite is meeting with an increased demand. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, September 21, 1905.

ONE of the characteristic buying rushes seems to be on in the pig iron market, reports from all the leading distributing centres showing a heavy movement.

In Pittsburg the purchase on the part of the Steel Corporation of a lot of 10,000 tons of Bessemer pig for prompt delivery has been followed by some large sales, aggregating 65,000 to 75,000 tons of Bessemer and basic pig, the bulk being taken by a large western Pennsylvania steel plant. Eastern Pennsylvania steel mills have again entered the market and have taken considerable quantities of basic pig, the price advancing squarely to $16, delivered.

Chicago reports large transactions in foundry iron, aggregating 25,000 tons, which includes one lot of 10,000 tons of charcoal iron to large car wheel makers. Cincinnati notes some round sales. In Buffalo one furnace interest placed 13,000 tons, while Pittsburg notes the purchase by one company of 10,000 tons of foundry iron. It is estimated that the sales of foundry iron in the New York district, although individually none of them runs above 2,000 tons, will foot up to 30,000 tons during the week. The greater part of this iron is for delivery during the last quarter of this year, and the first quarter of 1906.

Prices have stiffened in all directions as the result of this movement.

It is understood that the Steel Corporation will need 40,000 tons of outside iron for October. As yet no purchases have been made, and it is not yet sure whether the iron will be taken in one block or will be bought piecemeal.

While the largest orders for steel rails which were in the market last week, including the 160,000-ton order for the New York Central, have not yet been placed, some goodly contracts have been booked by the mills. They total up to over 100,000 tons, there being included in them 19,000 tons for the Tidewater Railway, 17,000 for the Reading, 10,000 tons each for the Norfolk & Western, the West Shore and the Oregon & Western, and 7,500 tons for the Appalachiola & Northern. New England roads have come into the market recently and inquiries are at hand from a number of southern systems.

Railroad buying is greatly in evidence, too, in bridge material. The leading interest reports that there are

in hand inquiries for 100,000 tons of fabricated material, the greater part of which is for railroad bridges, some of which are large undertakings.

The scarcity of steel is becoming more pronounced.

Additional work seems to have come to the lake shipyards, report having it that the Steel Corporation has ordered three additional large boats.

Pittsburg reports that further important business for the steel car builders is pending. One system is expected to give out orders for 32,000 cars in 1906.

In the lighter lines satisfactory reports come from the wire trade. The merchant steel trade is in excellent shape, and the bar mills generally are very busy. In the sheet trade complaint continues to be made in regard to prices, which fail to reflect the rise in steel, so that the situation bears heavily upon those mills which do not control their own raw material.

In spite of the large tonnage placed recently in merchant tubes, which includes one very large order, prices remain irregular and unsatisfactory.

The cast iron pipe trade has been on the qui vive about the contract for the New York high pressure service. It has not yet been let.

If prospective builders only realized the advantages of "Metallic" building materials, they would use nothing else.

Wood is not only becoming more expensive all the time, but is the most inflammable material that can be used; slate is objectionable because it quickly loosens up and permits a maximum of leakage.

But "Empire" Metallic Shingles form a striking example of the perfected roofing which is proof against rust, fire, rain and lightning and contains the elements of durability in the highest degree.

Can you imagine any more acceptable proposition to submit to your customers? Will it not pay you to educate them regarding "Metallic" goods? You'll not have to answer complaints if you do.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts.
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Material of every description.

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LONDON METAL MARKETS.

From Metal Market Report, September 20, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 48s. 3d., and Glasgow standard foundry at 46s. 9d., making prices as compared with last week 3d. lower for Middleboro and 6d. lower for Glasgow foundry.

Tin—Spot tin opened firm at £146, futures at £145, and after sales of 160 tons of spot and 280 tons of futures, closed firm at £146 for spot and £145 5s. for futures, making price as compared with last week 2s. 6d. lower on spot, and 5s. lower on futures.

Copper—Spot copper opened firm at £69 2s. 6d., futures £69 2s. 6d., and after sales of 300 tons of spot and 800 tons of futures closed firm at £69 5s. for spot and £69 5s. for futures, making price as compared with last week 5s. higher on spot and 7s. 6d. higher on futures.

Lead—The market closed at £13 15s., making price as compared with last week 2s. 6d. lower.

Spelter—The market closed at £26 10s. making price as compared with last week 10s. higher.

Nova Scotia Trade News

Halifax, N.S., Sept. 20, 1905.

NO change worthy of note has occurred in the hardware trade since last report. Business generally is very quiet. It was expected that with the Exhibition on in this city buyers from outside points would take advantage of the unusually low rates on the railways, and come in to make purchases, but so far these expectations have been disappointing. Very few of the regular customers have placed their orders.

* * *

Arms and Ammunition—Some good sales have been reported. The sailing vessels which are fitting out at this port for the Pacific, have made quite heavy purchases of cartridge shells, guns and ammunition.

* * *

The fishing boat races promoted by the Provincial Government, which took place off this harbor during the latter part of last week, were very successful. The object of the races was to improve the class of boat engaged in the industry. The large wholesale hardware firm of Stairs, Son & Morrow, which is interested in the development of the fishing industry, presented a very fine spirit compass to the Togo, one of the winning boats, and at the presentation of prizes on Saturday Rear Commodore Bell announced that Messrs. Stairs, Son & Morrow had generously offered to supplement next year's prize list by one hundred dollars.

* * *

W. B. Arthur, who formerly was in the hardware business in this city, has returned from a trip to Montreal, where he closed arrangements with Caverhill, Learmont & Co., wholesale hardware merchants, as their representative in the Maritime Provinces, with headquarters in Halifax.

* * *

Matheson & Co., Limited, of New Glasgow, N.S., have under construction at their works a complete gold mining outfit for Mings, Newfoundland. The plant will consist of crusher, engines, boilers, tools and concentrating table. The plant is for the Goldenville Mining Co., in which St. John, N.B., people are largely interested. A shaft has been sunk to a depth of 150 feet, and the tests which have been made are very gratifying. This is the first mine in Newfoundland where gold has been found in paying quantities, and the Matheson mill will be the first one ever erected there.

* * *

General Manager Mitchell of the Maritime Coal and Railway Company, says that the company has in contemplation the erection of a big steam plant at the mines for the purpose of supplying Amherst with power. The power will be generated at Chignecto and conveyed by wires a distance of six miles. It is expected that at least 2,000 horse-power will be available for distribution. The proposition if carried into effect will be of valuable aid to a number of the manufacturing industries of the town. The output of the coal mines of the company is now about two hundred tons daily, and the number of men employed there is 150.

* * *

Prices quoted here follow:

Lead pipe	$ 4 99
Sheet zinc, in casks	7½c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb.	3½ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 15
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 00
Black sheet iron	2 25
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94 to 96
Boiled oil	54
Raw oil	51

Even if you don't want to buy, it will pay to read the advertisements in your trade paper.

Mail-order houses never stop advertising and they are eternally after business. Better follow their system rather than rail against them.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Sept. 22, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

ACTIVITY marks all branches of the wholesale hardware trade and some houses are working overtime to fill orders. There are not many price changes of importance. Glass is selling at lower prices, a reduction of 2c. per gallon has been announced in linseed oil and petroleum has been advanced 1-2c. per gallon. Wholesale houses are bringing in large stocks before the close of navigation and numbers of orders are being booked for delivery after the lake routes are closed. The trade have been carrying light stocks during the last year or more and now that a year of prosperity seems assured because of the bumper crop there is a tendency to buy freely. The result is seen in the heavy buying of the last three weeks.

Lanterns—Wholesale prices are steady, but the retail trade is still in trouble with destructive department store competition. We quote:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Prices are quoted as follows:

Barbed wire, 100 lb	$2 85
Plain galvanized 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. The price is steady since the recent reduction to $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots 3c.	discount.
" " small lots 2½c.	"
Hex " case lots 3c.	"
" " smaller lots 2½c.	"

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is very active at following unchanged prices:

Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—The shooting season opened on the 15th inst. and already there are numerous assorting orders for supplies, owing to the very heavy demand. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is active

and prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Coke plate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—An advance of 1-2c. per gallon was announced on Monday. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.
Gasoline, 74 76	27c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums,

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST., WINNIPEG, Manitoba

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

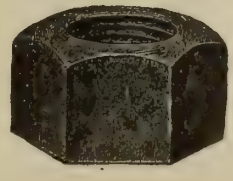
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

GILBERTSON'S

COMET

Selected Soft Smooth

Comet Brand GILBERTSON'S

galvanized sheets. All live jobbers handle this brand. It sells without talking. Perfectly galvanized, carefully selected. Price lower than other high grades.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

Before placing orders for CHAINS and ANCHORS, WIRE RODS, TUBES, ETC. ETC, communicate with:

Rd. JOHNSON, CLAPHAM & MORRIS, LTD.
MANCHESTER, ENGLAND
who will quote delivered any point as may be required.

15 1-2c.; 1-lb. tins, 17c.; 1-2 lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2 lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net

Canadian Paris Green—50-lb. drums, 17c.; bulk, 18c.; in 1-lb. packages, 20c.

Paints and Oils—General business in paints and oils is very active this week. The only price change quotable is a decline of 2c. per gallon in linseed oil. We quote:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls	0 02½	
" " in kegs	0 02¾	
Turpentine, pure, in barrels	0 96	
Less than barrel lots	1 01	
Linseed oil, raw	0 60	
Boiled	0 63	

Window Glass—There has been a decline in window glass and prices are quoted now as follows:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.15
26 to 40 "	2.40
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.00
41 to 50 "	4.50
51 to 60 "	5.00
61 to 70 "	5.50
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

British Columbia Trade News

Vancouver, B.C., Sept. 15, '05.

NOT only is the Dominion Exhibition bringing increased activity and prosperity to New Westminster this year, but there are a number of very important industrial enterprises being established, or extended, which will add materially to the permanent prosperity of the city by the banks of the Fraser River. One of these, a tannery, is almost the first institution of the kind in the district. Certainly it is the first large tannery in the Province. A smaller one has been operated in former years at New Westminster, but the new institution is to be of considerable proportions and of capacity equal to the larger plants in the east. The Fraser River Tannery Co., which is erecting the plant, is expending $60,000 in all. The buildings are well on the way, and part of the plant is installed. Other machinery is to arrive, and by the end of October or first of November, it is expected that there will be active work going on.

The new saw mill of the Small & Bucklin Lumber Co. is nearing completion on Dockyard square. A very large plant has been erected, all necessary buildings for a complete lumber business, wharves for steamers, and also covered sheds for shipping by rail. The machinery put in is all of the most modern and complete style, and the mill will have a very large output. It will be running in the course of three or four weeks.

The Brackman-Ker Milling Co. are erecting large wharves and warehouses on the river front, and it is expected that before the Dominion Fair comes on vessels will be loading and discharging there. This will sonsiderably increase the shipping facilities of the river port, and with the improvements of the channel of the Fraser river being carried out with the big dredge King Edward, and in contemplation later, the long-deferred hope of royal citizens may be realized of making New Westminster once more a port for sea-going vessels.

* * *

Preparations are well ahead at the Exhibition Grounds for the Dominion Fair, which begins on Sept. 27. New buildings have been erected and accommodation provided for anticipated large exhibits. The entries have been pouring in at a very rapid rate, and in every line a very representative exhibit is expected. From the east, many manufacturers have signified their intention to be represented with their goods, and space has been asked for. Not much room will be left after all allotments are made, though with the careful preparations ample accommodation has been provided for all exhibitors. One of the principal features will be exhibits of products from various districts of the Province, each district sending a district exhibit covering the range of production and industry. Mining and fishing, as well as the lumber manufacturing, are also to be prominently displayed, so that visitors from other parts of Canada or elsewhere will be assured of seeing not only what the country is doing, but what can be done here. Weather conditions being favorable, and indications point to that, there is now no question of the success of New Westminster's Dominion Fair.

* * *

Vancouver is interested in the proposal of the Australian Commonwealth to charge duty on cost of goods made in Canada, plus freight to point of shipment by reason of the fact that a big portion of Canadian goods sold in Australia come to Vancouver for shipment over the Canadian-Australian line of steamers from this port to Sydney. Another way in which she is interested is found in the fact that all the Canadian manufacturers are practically centred in Ontario. The long freight haul, if duty is collected on cost with freight added, would prohibit shipment of many lines now made in the east. If these were made in Vancouver, the freight haul would be avoided, and to a certain extent the difficulty obviated.

* * *

The development of coal properties on the Yukon promises to replace wood as a fuel on all the river boats, and to a large extent in Dawson. There is a coal mine at Tantalus, on the Upper Yukon, and several of the White Pass steamers are now using it with good results. Down the river, at Coal Creek and Nulato, there are mines being worked, and the coal is sold to Dawson trade. Below Eagle, on the Yukon, another mine is also being opened. In the past there were many wood camps scattered along the river to supply the steamers, and also to ship wood to Dawson. These may in time be altogether superseded by the development of the coal measures of the north. The N. C. Co.'s steamers on the river have been equipped with oil burners for some time, the company bringing the crude oil from San Francisco.

* * *

Vancouver Board of Lrade and City Council are interesting themselves very greatly at the present time in the project of inducing industries to locate here. The provision of a large supply of electric power, at reasonable rates, has had the effect of making it possible for small industries to locate without investing large capital in steam producing plant. It is further possible, by use of electric power, to establish plants in locations where the use of steam power would be an objection. A special committee is handling the proposition.

* * *

The renewal of the street lighting contract in the city of Vancouver has raised in the mind of Mayor Buscombe the possibility of having a municipal lighting plant, and with it saving money for the city. He has been going into the matter very thoroughly, and is impressed with the wisdom of the plan if present prices are maintained. He also considers that the city could very well undertake to supply the citizens with the incandescent light at reduced rates. The former lighting contract, now about to expire, cost the city at the rate of about $90 per light, for all night service. The new bids, two of which were received, one from the B. C. Electric Light Co., and one from the Stave Lake Power Co., bring the price down to about $40 per arc light per year, both being based on electricity generated by water power. If the city goes into business it would purchase electric energy from one or other of the companies. The B. C. Electric Co. is the one now in business, and the Vancouver Power Co., which recently completed its waterpower plant, is subsidiary to it. The Stave Lake Power Co. has construction now going on on its plant.

* * *

Over a thousand men are at work on the Spence's Bridge-Nicola branch of the C.P.R., and the sub-contractors expect to get their work done before the snow flies. The building of this branch opens up half way into the Similkameen district from the north. On the V.V. & E. in the southern end of the Similkameen district work is being pushed, the line running from Grand Forks to Princeton, and when that part is finished it is intended to run right along to the coast, which will be reached in about three years. From Midway to Keremeos is now under contract, and work is being pushed on the grading. Over 1,500 men are now employed in this work, and the number is being added to constantly. The contractors claim it is one of the heaviest railway contracts ever let in the Northwest, only the lines of the C.P.R. through the Rockies and the Great Northern through the Cascades alone excepted.

* * *

A Seattle company, the Asphalt Paving Co., has the contract of re-surfacing the asphalt-paved streets of Vancouver, being several thousand dollars below other bidders.

* * *

Railway Commissions, Transportation Commissions, Tariff Commissions, Fisheries Commissions, all are to meet in British Columbia in the near future, and there is perhaps still further commission business to be sprung on the devoted Province before an end is made of Royal Commissions. In the work of all of them, however, British Columbia has an interest, and in some of them she is deeply interested.

WESTERN FAIR AT LONDON

AMONG the thirty-eight Fairs that have been held in London since the institution of the Western Fair it may safely be said that none has been attended with a greater degree of success than the one that came to an end on September 16.

Much of that success must, of course, be attributed to the beautiful weather that prevailed without a break until the Friday evening when Jupiter Pluvius gave vent to his pent-up energy and made those once thronged Fair grounds a drooping and a dripping wilderness devoid of human life save for the occasional figure of a stout lady making record time for the pavilion.

Who cared, however? The Fair was practically over, for Saturday was the day for exhibitors to pack up and look pleasant. Wednesday and Thursday were the big days on which the success of the Fair depended and on those mornings anxious-visaged directors could be observed scanning the heavens with as much interest as Galileo ever displayed, though of a different kind. Joy succeeded anxiety, however, and the number that attended the Fair on those days was greatly in excess of the corresponding figures of any previous year.

In the Main Building there seemed to be a slight falling off in the number of exhibits but from the aesthetic point of view they perhaps reached a higher standard than last year.

The piano industry had as usual the largest number of representatives. The furniture industry was also well represented. Two soap and two chocolate firms had displays. It seems a pity that London manufacturers do not display a greater interest in the Western Fair. Surely it is good advertising for the Western Ontario field and it would certainly help London. Yet several prominent industries were totally unrepresented.

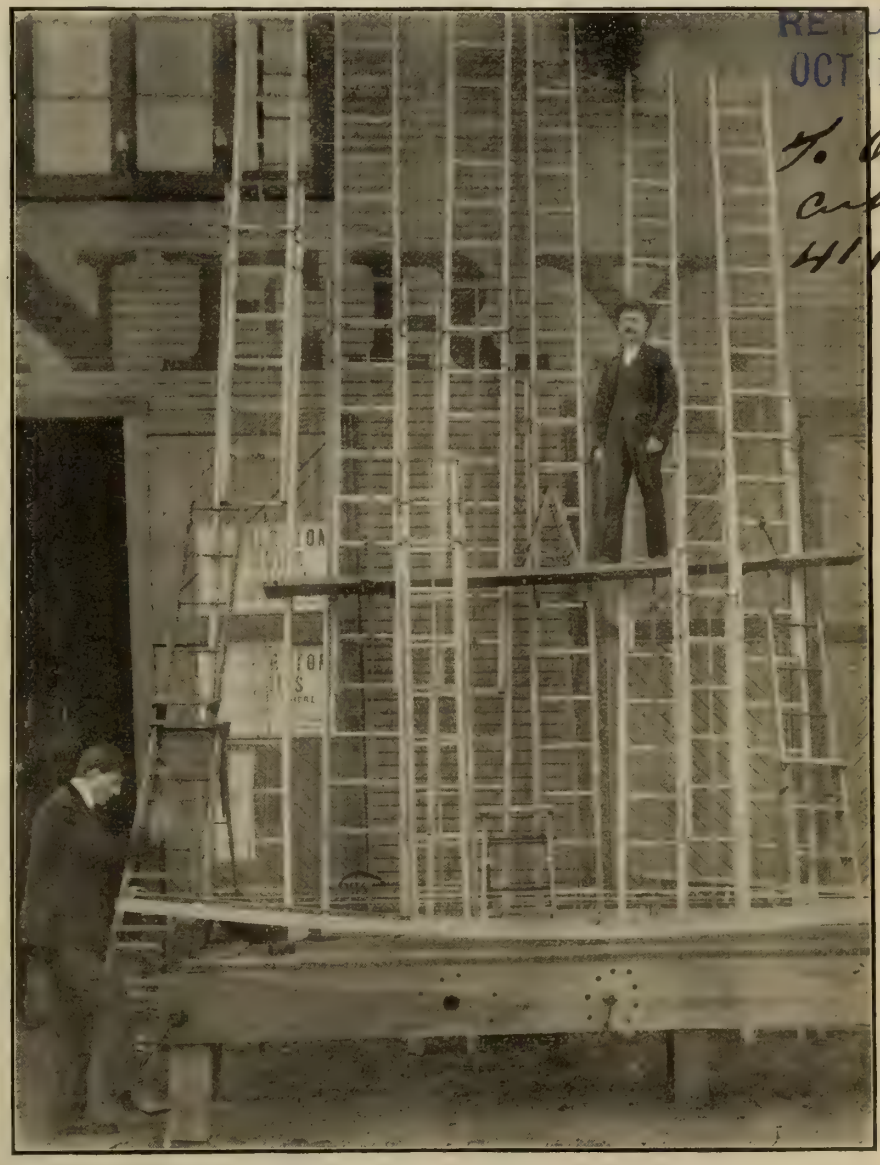
The Stove Building was the scene of some excellent exhibits, six stove companies being represented there. The Machinery Building had its usual complement of farm implements and machinery very similar to last year, and the same can be said of the Carriage Building. The Agricultural and Horticultural Buildings contained an admirable display of farm produce, fruit and flowers. This was really one of the best feaeures of the Fair. As to the exhibition of paintings,

"I would that tongue could utter
The thoughts that arose in one,"

but we must leave that section to the art critics. A good deal of the life and fun of the Midway was lacking this year. The determination of the directors to admit no shows of questionable character or in the nature of fakes necessarily caused a good deal of cutting out. The vaudeville show included some new and thrilling acts and the fireworks were excellent and went off without a hitch.

The Waggoner Ladder Co., Limited.

A knot of interested visitors was always to be seen at the exhibit of the Waggoner Ladder Co., shown now the fifth year at the north end of the Machinery Hall. The chief feature of the exhibit was the Waggoner Extension Ladder. A selection of these of different lengths and types was placed against the building where they showed to excellent advantage, but the greatest interest was shown in a workman of the firm who, with his bench and appliances, worked away as if in the factory putting in the steel wire reinforcement which constitutes one of the important points of merit in the ladder. The cut herewith shows the operation. The ladder is bent with a windlass, the high carbon steel wire strung tight with another windlass and fastened securely at both ends, then stapled firmly into a groove at the back of each side rail. This wire has a strength of 2,000 lbs. to each wire and enables the ladder to be made with about half the weight of timber otherwise required. With the celebrated Waggoner Steel Safety Lock this makes probably the very best ladder produced anywhere. Crowds stood around the bench all the time watching the work and the company report their sales the largest they ever made at the Fair, every implement agent and hardwareman who saw the exhibit asking to be allowed to handle the goods.



Western Exhibition—Display of Waggoner Ladder Co., London, Ont.

Another very useful and attractive article exhibited by this company was the Davis Clothes Reel for the yard. This is very simple and useful. It carries 130 feet of clothes line cable and occupies a space 16 feet in diameter. It saves the need for shovelling a long line of snow from clothes lines in winter and is very

handy the year round. The company give liberal terms to dealers. E. H. Briggs & Co., Winnipeg, represent the company for the Northwest.



Western Exhibition—Showing made by Dennis Wire and Iron Works.

Dennis Wire & Iron Works Co. Limited.

An exhibit that found a host of admirers was that of the Dennis Wire & Iron Works Co., Limited. The front was railed off with lawn fencing, a handsome aluminum bronze gate providing an entrance. Inside on the walls and floor a complete range of the company's wire and iron goods was shown. A wrought iron piano lamp with scarlet shade threw a soft light over some handsome pictures on wrought iron stands that gave the finishing touch to the display.

We would strongly impress on the hardware trade the opportunities they have for obtaining large orders for this class of goods and thereby earning substantial commissions for themselves. The hardware merchant always knows when iron or wire work is required for a bank, church or public institution in his own town. It is not necessary that he should stock the goods. All that is required is that he should use his influence to get the order placed and once this is done his profits are earned just as if he had sold the goods over the counter.

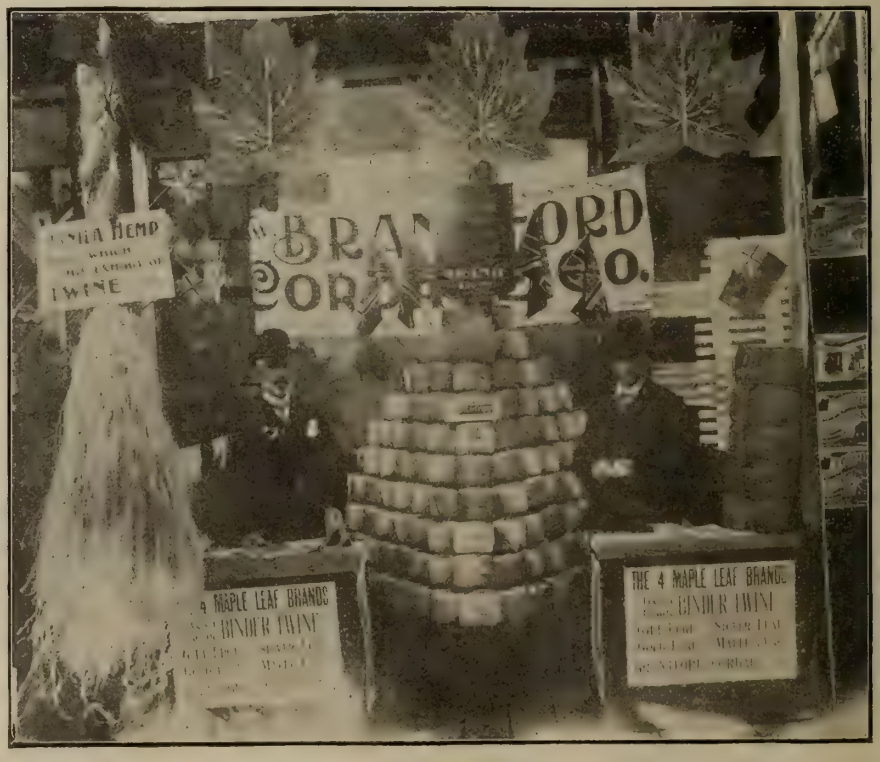
The Dennis Wire & Iron Works Co. make all kinds of brass church work, bank and office fittings, fire escapes, elevator enclosures, iron and wire fencing, iron stable fittings, flower stands and hanging baskets and stands, wrought iron fenders and fire irons, iron screens, etc. The company have a handsome catalogue which they will be pleased to mail on receipt of a postal.

Brantford Cordage Co.

The sole representatives of the binder twine industry were the Brantford Cordage Co. They were located in the Machinery Hall and were a centre of attraction to the farmers. The company had spent great pains and displayed excellent taste in the construction of their exhibit and they had their reward, for not a farmer passed without stopping to examine the pyramid of "Gilt Edge," and exchange some remarks with Mr. White and Mr. Neilson, the company's popular representatives, who were in charge of the exhibit. The "Gilt Edge" brand (650 feet) has now become a household name among farmers on account of its superior and uniform quality. But that applies to all the four brands of "Maple Leaf" binder twine. In the manufacture of these brands every detail is carefully guarded. The fibre used is the longest, strongest and cleanest obtainable. There is complete system and supervision throughout the factory and every detail in the processes of preparing, blending, spinning and balling is carefully watched by trustworthy experts. The bale of finished twine is solid value. It represents 50 lbs. of binder twine. There is no paper or waste material to help make up the weight. Then the bale is corded with 20 feet of good rope made in the factory at Brantford.

It is a remarkable fact that notwithstanding the very adverse conditions in the binder twine industry, the Brantford Cordage Co. have been selling more binder twine each successive season. There is only one explanation and that is superior quality.

It should not be forgotten that in addition to binder twine the Brantford Cordage Co. make all kinds of cordage. The company's representatives will shortly be on the road and will have a proposition of exceptional interest to make to the trade, both in rope and twine. The latter would therefore do well to await their arrival before placing orders.



Western Exhibition Brantford Cordage Co.'s Exhibit.

Moffatt Stove Co.

The Moffatt Stove Co. had a really fine display in the Stove Building. It had a frontage of over 50 feet and excellent judgment was displayed in grouping the various lines of stoves and heaters. Crowds of people stopped to examine the handsome Canada National ranges and other lines, and the company's representatives were kept busy from morning till night. The Classic National range as shown in the model kitchen was also a centre of attraction. It is an exceptionally handsome stove and appeals specially to those who desire a stove

which combines all the latest conveniences together with beauty of design. There were also exhibited Base Burners, Oak Heaters and National Hot Blasts. The last is fitted with patent duplex grates and double heater. Mr. Westman is fortunate in having the sole agency for London for these handsome stoves and ranges.

Hobbs Manufacturing Co.

The exhibit of the Hobbs Manufacturing Co. was admitted on all hands to be one of the most beautiful in the whole Fair. It was located at the north-east corner of the Main Building and was truly a work of art. The north side of the stand was devoted to stained glass windows, the artistic merits of which were undeniably great. On the other side were displayed a wide range of beautiful decorative glass. The famous Maximum light window glass was a prominent feature of the exhibit. The company claim that this is the only daylight-increasing window glass combining lenses and prisms, and is not to be confused with prismatic or any other glass. The Hobbs Manufacturing Co. of London are the sole agents in Canada for the Maximum Light Window Glass.

This company make a specialty of art glass, electro glazed, and also set in heavy metal bar. The latter provides great strength and durability as compared with glass set in ordinary lead. The company some time ago installed a very expensive special plant which enables them to turn out the glass with perfect finish and great rapidity.

Another line they are making a specialty of is the mitred or cut plate glass. They are the only firm west of Toronto making this kind of glass. They also carry a heavy stock of window glass and all kinds of fancy and figured glass for building purposes.

The Western Milling Co. will erect a 20,000-bushel elevator at McLeod, Alta.

The announcement is made that on January 1st next a change will be made in the old established hardware firm of R. P. Butchart & Bros., Owen Sound. A slaughter sale is now in progress.

RETAILERS TO ORGANIZE.

A Montreal despatch says there is a movement on foot among the retail merchants to form an association embracing retail merchants of every description throughout the Dominion, with a central governing body. They will establish agencies in each district and the executive officers of each local board in a Province will constitute the Provincial council, the officers of which will in turn form the Federal Executive of the Association of Retail Merchants of Canada.

NEW COPPER WELDING PROCESS.

Scientific circles are interested in the discovery of a process for welding copper, which has been made by a Winnipeg blacksmith. It is said the process has been thoroughly tested and found perfect, and that copper can be welded to copper or to other metals without impairing the electrical conductivity and other properties of the metal. The process is said to be very simple and no more costly than the welding of steel. The work can be done with a forge, blowpipe or any apparatus which will heat the metal cherry red.



Western Exhibition—Stained Glass Windows Shown by Hobbs Hardware Co.



Western Exhibition—General view of Hobbs Glass Works Exhibit.

PAINT, OIL AND BRUSH TRADES

PAINT TRAVELERS' CONVENTION.

A MONSTER convention of travelling salesmen of the Sherwin-Williams Paint Company is billed to be held at Montreal during the first week of November, about 200 of the most successful and intelligent commercial men in America being expected to be present. The gathering is an annual feature of the company's business procedure, the salesmen from every section of Canada and the United States being brought together for conference at some central point. Last year Atlantic City was the meeting place but this year Montreal is to be the rendezvous. The large Canadian plant of the Sherwin-Williams Company will be inspected and much of an educational value is certain to result. Following this convention the Canadian travellers will confer together during the second week and the plan of campaign during the coming year will be laid out. Mr. C. C. Ballantyne, the new president of the Canadian Manufacturers' Association, will be the host in his capacity as head of the Canadian interests of the Sherwin-Williams Company.

THE EFFECT OF COLORS.

ATTENTION has been called to the fact that the selection of wall papers is not merely a matter of aesthetic consideration. In these days of highly-wrought nervous systems, due to the rush and strain of American living, the effect of colors on the nerves must be taken into account, and, bearing this fact in mind, the following rules are given :

The most restful wall paper is of one tint, without any pattern ; this is good for nervous people. Have you ever, when ill in bed, reduced yourself to a state of nervous irritation by trying to join a big sunflower or something to its stalk, which has wandered away in the pattern ?

Red is supposed to be rather bad for nerves, but is warm and cosy, especially if patternless.

Browns and drabs depress sensitive folks, while a rich, clear brown is said to be quieting and soothing.

Green is splendid for the eyes, and ought to be in writing rooms and libraries.

Clear, but not too vivid, a yellow produces exhilaration and self-confidence, we are told, while violet and lavender depress the spirits.

Too much white is glaring and comfortless, and all pale blues are delightful to the eye.

MAKING TURPENTINE IN B. C.

Operations in the making of turpentine have commenced at Victoria, B.C., the plant of the Monarch Wood Extraction Company being used in the extraction of turpentine and other products from green native fir. The plant was manufactured at the Victoria Machinery Depot and is in charge of Mr. M. Calkins, who proposes to enlarge it as soon as the results warrant. The raw material is found in green native fir. That rich in pitch is preferred, and the company is offering $4.50 a cord for suitable supplies.

PETROLEUM IN QUEBEC.

Survey parties returned from exploration work in Northern Quebec report finding a lake, the shores of which were soaked with petroleum. The oil was said to be bubbling up through the water which was 50 feet deep. If the pressure of the water were removed it is estimated that the petroleum would shoot upwards over 200 feet. The discovery will be further investigated.

WINTER'S EFFECT ON PAINT.

THE weakening effect of rust on steel work and metal surfaces is a source of expense and annoyance to those who have not adopted thorough methods of protection. It is the heat of the Summer's sun that brings about most rapidly those changes which result in the loss of elasticity and protective power in protective coatings. The rain and snow storms of Winter, with their excess of moisture, naturally result in the corrosion of metal surfaces on which the protective coating has been thus weakened by the heat of Summer.

Paints applied in the Fall dry about as quickly as in the Summer, yet the complete oxidation of the upper portions of the film is not hastened as it is in the hotter days of the Summer. Therefore the original elasticity is maintained longer and the coating is much more durable. The clear, dry weather and the absence of sudden showers of the Fall season, provide conditions most favorable for the proper application and drying of paints.

Particular attention should be given to the selection of capable painters, the right kind of brushes and good paints. Great care should be used in selecting good paints that will hold practically their original shade and resist corrosive agencies for a long length of time.

Notwithstanding the large color house which the Canada Paint Co. erected last year, in close proximity to their present works in Montreal, they have, owing to pressure of business, been compelled to purchase another property on William street, and will immediately proceed to extend their present facilities.

No Use Talking

you can search the market until doomsday and you cannot equal

ELASTILITE VARNISH

at the same price, or better.
It is a customer holder.

In Tins, 1/2 Pints to 1 Gallons.

Manufactured only by

The Imperial Varnish & Color Co. Limited

Toronto, Ontario, Canada



TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited
VARNISH MANUFACTURERS
WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.



FACTS and FIGURES

Continuous manufacturing has made us expert varnish-makers. Our

ARCHITECTURAL VARNISHES

are "full of worth," record sellers. These are facts. Drop us a line for the figures. They will show you that high quality and low price are possible —with **US.**

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

Please mention HARDWARE AND METAL when writing.

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

We know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.



Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, September 22, 1905.

THE state of the paint trade during the past week has been somewhat erratic, some days showing a remarkable flow of orders, and others being noted for their scarcity. On the whole it may be stated, however, that a fair average amount of paint and varnish is being shipped. No local conditions have occurred to affect the price of staples one way or the other. There has, however, been a firming in the price of white lead, and in fact of all lead products. Retail hardware dealers are free buyers of this staple, largely due to the feeling that an increase in price will be the result of the coming into effect of the recent changes in the tariff, which took place on the 15th of this month. The advance already made in lead products covers this duty, however.

Linseed oil has shown strength during the week, and ruling prices at present are 1c. in advance of what we quoted last issue.

Turpentine—The advance of turpentine has been checked this week and we give the same prices as before. Our quotations are as follows: Single barrel 91c. per gallon. Two barrels or over, 90c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—A recovery from the decline recently published is to be shown this week. The following prices are firm: Raw, one to four barrels, 47c.; 5 to 9 barrels, 46c.; boiled, 1 to 4 barrels, 50c.; 5 to 9 barrels, 49c. f.o.b. Montreal. Net 30 days

Ground White Lead—No further advances have occurred, those already noted covering the new conditions inaugurated on the 15th of September, by the total working of the tariff changes. We give the following prices: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—The demand is fairly active. We quote: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)— We quote prices as follows: Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2. 5 1-4c.

Putty—A normal business is being done. We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Prices are still unchanged. We are quoting prices as follows: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—All lead products are pretty active, after the inauguration of the new duties on these goods, and red lead naturally shares in this activity. We give prices as follows: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—The advance made by some firms has not yet become general. We quote: Pure white in barrels, $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints— Business is of fair volume and the prices asked are the same as all season: From $1.20 to $1.40 per gallon.

Castor Oil—Firmness characterizes the market, which is quite active. We quote: 8 1-2c. to 9 1-2c., according to lots.

Refined Petroleum—Reports from the United States show that the price of both crude and refined oils has been advanced by the Standard Oil Co., but that has not as yet affected the Canadian trade. Under the circumstances, however, the prices must of a certainty soon go up.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 22, 1905.

PRICES continue without much change slight stiffening being noted in many of the lines quoted. Turpentine is stronger than last week, owing to the steady buying. Linseed is also strengthening, and while the mills at Baden are crushing some seed and will be ready to ship during the coming week, there is little possibility of low prices. The tendency will still be upwards, as the home product will command higher prices than the imported article.

Crude oil in Canada has advanced in response to the jump made in the American markets, but the refined petroleum has not advanced yet. Higher figures are expected daily, however, and a very large volume of business is being done at the low figures still ruling. Rush orders for delivery before the close of navigation are also common.

The glass situation is unchanged and prices continue unchanged, although one Toronto firm lost $9,000 worth of stock on the Virginian wreck and another house lost $1,500 worth.

A little of everything is being bought and the total amount of business done in paints, varnishes, etc., is very large.

White Lead — Ex Toronto, pure

WHITE LEAD IN OIL

Perfect satisfaction results from the use of any brand of White Lead of our preparation. They stand first for fineness of texture, whiteness, durability and covering capacity.

MONARCH BRAND	DECORATORS'	ESSEX GENUINE
Absolutely perfect. Will stand any chemical test. Guaranteed perfectly pure.	Next in quality to Monarch Brand—a rapid seller.	A great favorite with the painter —our 3rd grade.

25 lb. Irons, 50 lb. Irons; 100, 250. 500 lb. Kegs. Closest Market Prices.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.



COVERT MFG. CO.,

TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

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Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

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GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited

TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES

of every kind, and for every purpose. Our glues enjoy large sales in almost all countries of the world, and our brands are generally to be seen amongst good stocks of glues. We believe we are giving better value than any other manufacturer, and we want to submit our lines to the Canadian test. Samples gladly sent in reply to enquiries.

GROVE CHEMICAL CO. Ltd., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON
OTTAWA WINNIPEG

8 Hours

Is all that is necessary for ***ISLAND CITY*** brand of house or floor paints to dry.

Guaranteed not to peel or crack after drying.

IF YOUR FALL STOCK IS LACKING

LET US KNOW

P. D. DODS & CO.

Toronto, Montreal, Winnipeg, Vancouver



Ambition

She blushed because he kissed her;
His ardent eye on her was bent,
"Your color is so fine" he cried
"I'd like to make it permanent!"

(*Tom Massen in "Munsey's"*)

The color could be made permanent with

THE CANADA PAINT CO.'S CONSTANT RED

A useful and reliable color for SHOP FRONTS, BORDERS, TRIMMING and ORNAMENTAL WORK.

Constant Red is a high-class Paint possessing a good body and stylish appearance. It is sold in liquid form and works freely under the brush.

For Sale by all

Hardware and Paint Dealers

For color cards see our travellers or address the

CANADA PAINT COMPANY

TORONTO. MONTREAL.

white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 92c.; 2 to 4 barrels, 91c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue. in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Canadian crude oil has advanced 5c. and an increase in refined is expected. We quote: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current market quotations.

WINDOW GLASS—MONTREAL.

Efforts are now being made to rescue the steamer Virginian and if they are successful some small quantities of glass may be well enough preserved to put on the market. Another favorable condition is the report that no further strike is likely to occur in the Belgian glass fields. The rumor which was given some credence a few weeks ago is now believed to have been a hoax.

Stocks are now arriving in small quantities and more shipments are expected in the next few days. The advance made last week, however, continues firm, and no falling off is to be expected for some weeks. We quote prices: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

A POINT IN PAINT MAKING.

THE influence of temperature on the consistency of paint is not always sufficiently appreciated, either in the factory or the painter's shop, says an exchange. On the whole the manufacturer is less liable to deviate from the standard of composition on account of differences in the consistency of his raw materials caused by variations in temperature than the painter is when the latter thins his paints himself, because the manufacturer works to a definite formula and uses the same relative proportion of the various ingredients Winter and Summer. The painter, on the other hand, mixes his paints by judgment only, his sole criterion being the ease with which the material can be spread with a brush, and this necessarily implies that the proportion of the various thinners varies according to the temperature and other local conditions. What manufacturers have to bear in mind, however, is that if they send out in Winter a material compounded in a manner suitable for Summer use, or vice versa, there is a strong inducement offered to the user to tamper with the material. This fact is well known to makers of enamels and enamel paints, and at least one well-known firm of makers of a renowned specialty take the simple precaution of recommending their customers, should they find the enamel somewhat "stout," to stand the can in a pail of warm water before use. Simple advice surely, and calculated to save time in investigating painters' complaints.

ZINC PLANT AT FRANK.

Zinc treating works at Frank, Alberta, will be in active operation shortly and the Canadian Metal Company are preparing to treat zinc ores of all grades from the mines in British Columbia. The company owns its own mines but will also handle the output of independent mining companies.

GLASS FACTORY AT CAYUGA.

American glass manufacturers are said to be behind the proposition to establish a glass factory at Cayuga. Excellent glass sand is said to exist in large quantities near Cayuga while the supply of natural gas being piped through the district by the Dominion Natural Gas Company makes available a cheap fuel suitable for manufacturing purposes.

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

CATALOGUES TO TRADE ON APPLICATION

CANADIAN ALUMINUM WORKS, LIMITED

CHAMBLY CANTN, QUE.

H. C. EADIE, Montreal Sales Office, 22 St. John St., MONTREAL

MAXIMUM LIGHT GLASS

HOW IT DIFFERS— We might mention that all other devices designed for the purpose of increasing the daylight must be either placed as reflectors or awnings, or are dependent upon the refractory property of a prism, while **MAXIMUM LIGHT GLASS,** a combination of lenses and prisms, embodies new principles of the laws of light, and makes an illuminating glass, where ordinary flat back prismatic glass is ineffective.

You will understand it better if you have a sample and our booklet.

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.



The Standard Ideal Sanitary Co., Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

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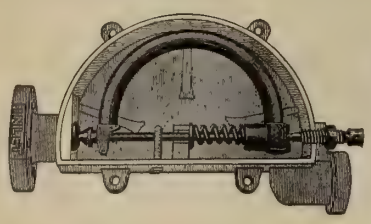
of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



The Heintz Steam Trap

SEND FOR CIRCULAR

Operated by Temperature.
Simplest in Construction.
Made in Five Parts.
Can be Placed in Any Position.
Absolutely Prevents Waste of Steam.

Sent on Trial.

Steamfitters' Supplies

Iron Pipe and Fittings,
Tools, Pipe Covering,
Pipe Cutting—to sketch.

PLUMBING GOODS

Brass Goods. Enamel Ware.
Iron Goods. Earthenware.



The "Amargo" Enamel Bath

4¾-inch Roll Rim.

With Nickel-Plated Combination Waste and Supply Fixture "Hot" and "Cold."

High-Grade.

The James Morrison Brass Mfg. Co., Limited

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HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
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Article XV.

IRON PIPE CONNECTIONS.

FOR the benefit of those who are not constantly working on iron pipe, and who are not familiar with all of the devices used for making final connections between two sections of work,

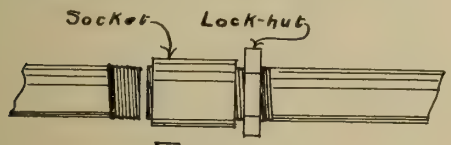


Fig 1

or of the particular adaptations of each of them, it is thought that a short discussion in connection with the accompanying illustrations may not be amiss.

Figure 1 shows a "socket and lock-nut connection, which is made by threading one piece of pipe a sufficient length to allow a lock-nut and socket to be freely screwed on until the end of the pipe comes through to the outer face of the socket, so that when the two pieces of pipe to be connected together are placed opposite each other, as shown in figure 1, the socket may be unscrewed off the long thread on to the short one, until it is perfectly tight on the latter.

The lock-nut is then unscrewed until it is within three or four threads of the socket, when the space between the two is tightly wound with cotton wick, which has first been well oiled. Then the lock-nut is still further unscrewed, until it is made tight against the end of the socket, and a certain amount of the cotton wick having been squeezed into the thread and between the lock-nut and socket, makes a good joint at that end of the latter.

Figure 2 shows a lock-nut connection

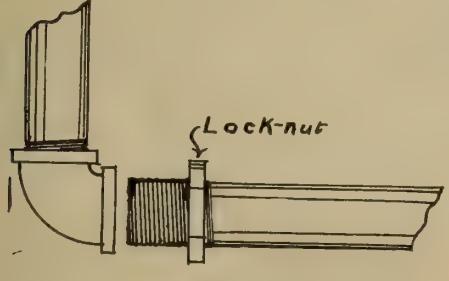


Fig 2

which is used where a socket is not required, as for instance where fittings such as elbows or T's are to be connected together. In this case the "running thread," as it is termed in the steam-fitter's parlance, is made a little more than twice as long as the ordinary thread, then a lock-nut is screwed up to the "butt," the running thread is then screwed into a fitting twice as far as it would go ordinarily, when, if it be screwed back into another fitting until it is right in the latter, there will be several threads of the running thread still remaining in fitting into which it was first screwed.

After the thread on the opposite end of the pipe has been "made up" tight the lock-nut is then screwed up tight to the face of the fitting, the fitter having first introduced the cotton wick before referred to.

Regarding the connection shown in figure 2 it may be mentioned that, where possible, it is better to use a "T" than an elbow, as the running thread has a tendency to strike the back of the latter, though, when necessary, the elbow may be used.

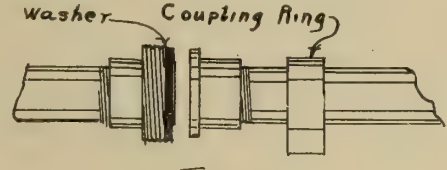


Fig 3.

Figure 3 represents a "union," which is made in three pieces, one piece each for the ends of the pipes to be joined together, and a coupling ring, which in the illustration is shown lying loose on the pipe to the right of the coupling. The means of connecting the coupling is to first place between the two pieces screwed on the ends of the pipes a washer of leather, rubber, lead or other soft substance, and then to draw them together with the coupling ring, which, by screwing up on the thread of the end farthest away from it, draws the two ends together and tightens them against the washer.

This style of connection does very well for gas, or water at an even temperature, but where there is a constant variation in temperature the expansion and contraction in the metals is liable to cause the washer to become loose, and in that way to leak.

The latter objection is overcome in the connection shown in figure 4, which is called a "right-and-left connection." It is made with a socket having in one end a right-hand thread, and in the other end a left-hand thread, one pipe having a right thread and the other a left thread to correspond, and they are put together as follows:

Screw the socket up on one pipe as far as is necessary to make it tight, then draw a chalk mark on the socket, and one on the pipe, both being in a line. Then slowly unscrew the socket, counting the number of revolutions which it makes, and mark down the result. Repeat the operation on the other

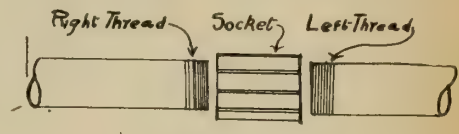


Fig 4.

thread and mark down the revolutions in the same way.

Now assuming that the right thread made six revolutions and the left thread made only four revolutions, the socket would have to be screwed two threads on the right thread, leaving still four threads or revolutions to be turned before it would become tight, and if both ends are then drawn together and the socket turned four revolutions it will become tight at both ends.

The great advantage of this connection is that it is iron to iron when "made up," and will be as safe as any other part of the piping system.

Elbows are also made with a left thread, so that using a piece of pipe between two fittings, the latter taking the place of the socket, the same results may be obtained.

The connections mentioned so far are those which are used on all sizes of pipe up to 2 in. in diameter, and that shown in figure 5, which is known as a "flange" joint, is made of two flanges, one of which screws on each end of pipe to be joined together. A thin washer is placed between them after they have been screwed up tight on the pipes, and then they are drawn tightly together by a series of heavy bolts and nuts arranged around the outer edge.

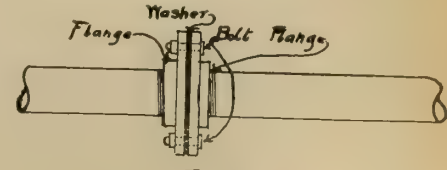


Fig 5.

HEATING AND VENTILATING HOSPITALS.

IN considering the question of the successful heating and ventilating of hospitals, Mr. B. E. Taylor, in an article in a recent issue of the Brickbuilder, presents the following views:

The successful heating and ventilating of a hospital is a vital problem, and

the only absolute rules that can be laid down are those treating, not of manner or detail, but of practical results. The requirement is for all northern latitudes from 3,000 to 5,000 feet of air per patient each hour, warmed indirectly to at least 70 degrees F., whatever the outside temperature. This means an expensive plant and an enormous coal consumption, also every precaution in the way of double run of sash or double glazing, vaulted walls, &c., to assist as much as possible in preventing the loss of heat through unnecessary radiation. In warmer climates construction can be simpler and cheaper, and the radiation can be less with more "direct" work, relying largely on natural circulation for ventilation. Some authorities maintain with considerable force that the sick wards should not be maintained at an unvarying temperature, that nature in its continual change of many degrees from noon to midnight shows that there is a necessity in this direction. If this varying condition is necessary in maintaining health in those who are well, why not in restoring health ? The perfect heating plant will be in a special building by itself or one having the laundry in a second story. It should be installed under one of the hospital buildings only as a temporary expedient when the finances absolutely preclude a special building. High pressure steam should be installed in a complete, perfected plant, to be used for power, laundry machinery, electric light, ventilation, and sterilizing, as well as for heating. If the institution is too small to employ an experienced engineer, a low-pressure steam boiler can be installed for heating, and a small high-pressure boiler can be used for the other purposes enumerated. In small hospitals it will generally be found best for economical reasons, both as to installation and maintenance, to install a low-pressure system. This will give no power for laundry machinery, which in a very small plant must be omitted, and it will give no high-pressure steam for disinfecting, sterilizing, or for inducing draft in the vent flues, all of which are quite necessary, but are impossible without considerable expense. The sterilizing can be done quite as successfully by gas, and in the Summer the ventilation can be by means of the windows and doors and special flues in toilets, heated by Bunsen burners. Whenever possible, it is wise to install a small high-pressure boiler in addition to the low-pressure heating boiler for the various purposes named above. Some of the most expensive and elaborate schemes of ventilation are often found to be perfect in theory, but are very defective in actual use. It takes coal to run a perfect system of heating and ventilation, and the engineer is apt to try to show his great worth by saving coal and by cutting off the electric fans as much as possible. In an institution inspected some time since, where the superintendent was very proud of his ventilating scheme by which the foul air was drawn up into the loft by electric fans and discharged through roof ventilators, it was suggested that sometimes these fans were found entirely cut off, with no ventilation at all. He was sure that his never were, and went up to the loft to investigate, and found, what was apparent from the stagnant air in the wards, that they were not running. While inspecting last year one of the finest and newest hospitals in a remote section of the country, I found very small hot air inlets and vents and foul air everywhere, and apparently no ventilation at all. Expressing to the engineer a desire to make a study of his heating and ventilating plant, he informed me that they had the most complete and expensive scheme in the entire west, laid out by the best engineers, and that the results were perfect. Replying to my statement that the air seemed bad and the ventilation poor, he said, "These fans will do it and do it quick. Why, you can imagine how thick the air gets in the wards by morning. You can almost cut it with a knife. I start the fans, and in half an hour the air is as pure and sweet as outdoors." To run the fans half an hour, morning and night, may be ventilation, but it ought not to be so considered. What is needed is not fresh pure air in two half-hour periods per day, but all the time. In a small hospital situated in a broad expanse of green lawns, the necessity of taking the air for the heating coils from an elevation is not as necessary as in the city hospital, where the air at the ground level is full of dust and dirt and all manner of impurities. Under these ideal conditions the introduction of air through wire mesh covered openings directly to the stacks serves the purpose very well, but a dust setting chamber that has the bottom hinged for cleaning is a safeguard, and the stacks should have slides so placed that every portion of the rough dust collecting castings can be thoroughly brushed and cleaned. When the basement under the pavilion is used as a plenum chamber, as is quite commonly the case, the entire room should be finished as smooth as possible with a plastered ceiling, smooth pointed walls covered with a coat of limewash and a coat of cheap waterproof enamel, with a smooth cement concrete floor sloping to a catch basin and drain, so that it can be thoroughly cleansed and purified with a hose. Usually the heating and ventilating flues are entirely inaccessible, and are therefore never cleaned. The register faces are screwed in place and never removed. They are generally so constructed as to be specially fitted to catch and hold dust and filth and be almost impossible to thoroughly cleanse, and the flues are loaded with filth that can never be removed. The best practice is to omit, as far as possible, the register face entirely, and thus to open both the heating flue and the vent flue to inspection and dusting. When the heating flue enters the room, as it should, at least eight feet from the floor, there is no danger of its being used by patients to throw rubbish into, and the vent flue opening at the floor is much more easily adjusted without a register. The mixing valve under the control of the nurse can be arranged to the amount and quality of the air admitted.

MR. WIGGS' BRITISH TRIP.

MR. W. H. WIGGS, of the Mechanics' Supply Co., Quebec, has written a brilliant and thorough account of the recent trip of the Canadian Manufacturers' Association to Great Britain and France, which the Quebec Chronicle secured for publication while the association was holding its annual meeting at Quebec during the past week.

Mr. Wiggs' impressions, written in a characteristic, clear, descriptive vein, deserve the earnest attention of all interested in England. A representative of Hardware and Metal had the pleasure of reading advance proofs and nothing better, clearer or more comprehensive has been written to commemorate this memorable tour. Minute details are made doubly interesting told by this keen observer. This work was accomplished on the return trip and Mr. Wiggs deserves the heartiest thanks from the association for his self-imposed task. Incidentally he considered Canada afforded more scope for general advancement than England, and his curt remarks regarding vastly different conditions in England than in Canada are entertaining. Mr. Wiggs prepared for the manufacturers a few pleasing souvenirs, to remind them of their Quebec visit and his immense building on St. Peter street was thrown open to all. The trip has put him in splendid shape, and he is again at the helm with renewed activity.

EARLY GAS LIGHTING.

It was not until 1792 that William Murdoch began his investigations into the properties of gases given off by various substances, which eventuated in the establishment of coal gas as an illuminating agent. In 1798, being then employed in the workshop of Boulton & Watt, he fitted up an apparatus for the manufacture of gas in that establishment, with which it was partly lighted. By 1816 gas lighting had become common in London. So rapid was the progress of this new mode of illumination that in a very few years it was in general use throughout the United Kingdom.

NEW VENTILATING SYSTEM.

A LOUISVILLE man, H. E. Thompson, has invented a ventilating skylight which is composed of two parts, movable cap with stationary bottom, operated by means of lever, spring motor, electricity and weights, or by hand. The cap fits in both ventilating and non-ventilating position, and is thereby held firmly against accidental displacement by pedestrians, trucks, or other disturbing agents thereon.

Mr. Thompson, in speaking of the device, says : "The object of my invention is to afford a ready ventilation, exclude rain, dust, etc., and will not shut off the light passing through the closure. To automatically open or close all ventilators throughout the building, and at the same time to accurately locate undue rise of temperature in building, register number of building, number of floor, number of apartment, number of room, and degree of heat contained therein, and can be regulated to any degree of heat. My device will meet these requirements, as is shown diagramatically in this cut. The operation of the device will be readily understood from the foregoing—that is to say, a person on the outside by means of a suitable instrument inserted in notch, will bodily shift the cap as desired, while if one is on the under side, he will readily do the same by means of lever. Upon the breaking out of a fire, the combustible connections, which may be located at any suitable points in the building, will enable thermo-electric fire alarm device to permit the weight to drop and change caps vice versa, as may be desired. Since the opening in the caps register with the prisms when the open-

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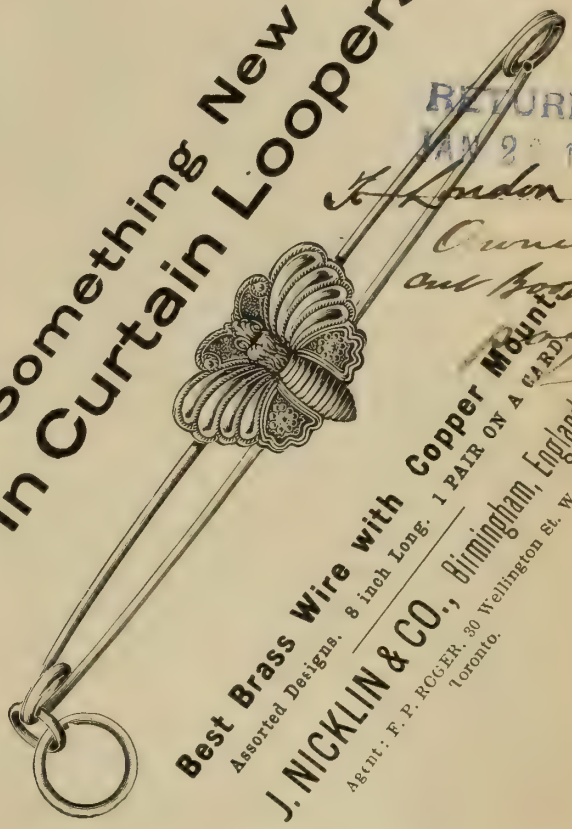
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ings in the ventilators are closed, it is evident that light is permitted to enter the building, notwithstanding rain, dust, etc., are excluded. Also, since the edges of the caps extend over the hinges, as shown, ample protection of the latter is assured. Said caps or covers are suitably pivoted on links, and to levers provided with handles the latter are pivoted to the stationary bottom."

The inventor solicits correspondence and requests that mention be made of the name of this paper.

LEAD VS. IRON PIPE.

IF we lived up to our name we plumbers should know little or nothing about iron pipe work, since the word plumber means, primarily, "a worker in lead," and the day is not far past when the plumber's skill as a craftsman was judged entirely by his ability to construct every required form of lead work, says J. M. Healey in a paper read at the banquet of the Indiana Master Plumbers' Convention. Latterly machine-made traps and bends, and the substitution of cast iron in place of lead soil pipe, have changed in some degree the art of the plumber, although it still holds good that lead work is the distinctive province of the plumber. The changes of which I speak have come to stay, and most of us would not, if we could, go back to the primitive methods of hand work. We are willing also to admit that lead soil pipe, because of its weight, was liable to sag and lose its shape, and that a source of danger lay in its liability to be punctured by nails or gnawed through by the pestiferous rat. Cast iron soil pipe is not subject to these dangers, and, happy thought, it must still be jointed with a lead caulk, with the chances all for cracked hubs or open joints if a tinker attempts to do the caulking. The plumber is still needed to run a stack of soil pipe, and he must be a good plumber if the stack is to be run in good and workmanlike manner. For water supply pipes, range boiler connections, and exposed wastes and overflows, we still maintain that lead pipe, not iron pipe, is the proper material. There is something more than trade jealousy back of our contempt when we apply the epithet of "iron-pipe plumber" to the tinker who tries to break into the trade by the back door of the screwed fitting, rather than by the front door or the wiped joint. Iron pipe is not a suitable material for the purposes I have mentioned for several reasons which will readily occur to anyone who stops to give the matter a moment's thought. In the first place, iron, when unprotected, is liable to rust, thus contaminating the water which flows through supply pipes of this material, or, when iron pipe is used for wastes or overflows, endangering the whole system by stopping up of the pipes with rust, or by offering a means for the escape of sewer gas through scarcely visible but none the less dangerous rust holes. The use of galvanized pipe on supplies is to be condemned, because of danger of poisoning the water. Experience has shown this to be a very grave danger, and one to which the plumber should not permit the householder and his family to be subjected, no matter how great the desire to practice a false economy. Another weak point of iron pipe, which is all too often overlooked, is its peculiar liability to suffer destruction by means of electrolysis. Iron pipes, offering, as they do, a good conductor for stray currents of electricity, are very often eaten away in a surprisingly short time causing useless leakage of water, and if the iron pipe happens to have been used for waste purposes, offering a ready escape for sewer gas into the air of the house. No, my friends, our old friend, the lead pipe, should not be suffered to give way to the new-fangled notion of the iron pipe with screwed joint. I say this, not out of any desire to block the wheels of progress, but out of an honest conviction that no substitute for lead pipe has been found so manifestly superior as to threaten the "lead pipe cinch" of the plumber, about which we hear so much. For exposed work, nickle-plated supplies and wastes are deservedly growing in favor, while for high-class residence work, brass soil and waste pipes are finding a limited use. With this condition of things, however, we should have no quarrel, for on this class of work a tinker does not get a chance to bid. But for all-round utility in the plumbing of all sorts and conditions of houses, lead pipe still remains the plumber's old reliable stand-by, and I predict that it will be many years, perhaps many generations, before the plumber will cease to be, as he has always been throughout the thousands of years in which he has plied his honorable craft, a worker in lead.

SMOKE-TESTING APPARATUS.

G. NEWHOUSE, Leeds, England, has invented a new apparatus which he describes as follows: (1) An apparatus for applying the smoke test to drains and the like, comprising a smoke chamber surrounded by a water jacket and having below a false bottom for smoke producing material, an inlet for air under pressure, said smoke chamber being separated from a coned outlet by a perforated partition, as above set forth. (2) An apparatus for applying the smoke test to drains and the like, comprising a water jacket encircling a smoke chamber, a non-return valve to and a coned outlet from said chamber, a perforated support and perforated partition in said chamber, and an air compressor mounted on said water jacket, the lever handle of which is fulcrumed on the jacket, as above described. (3) An apparatus for applying the smoke test to drains and the like, comprising a smoke chamber enclosed by a water jacket, an air compressor mounted on the jacket and arranged to supply air to the underside of a perforated false bottom to the smoke chamber, and a handle or sling secured upon the jacket, whereby the apparatus may be carried, as above described. (4) In an apparatus for applying the smoke test to drains and the like, a smoke chamber having a coned outlet with intermediate perforated partition, said chamber and cone being encircled by water jacket as above described.

WATER FOR THE FARM.

THE farmer is a large user of water, for no farming operations can be carried on without it. The installation of a water plant for farm purposes—for use in the market house and barn—is, therefore, one of the first essentials to successful farming. This, however, should be but the first step, for a water plant that gives running water in the barn can afford the same facility in the kitchen at small additional expense. No farm wife need be told of the superior merits of running water in her kitchen over the old-fashioned well, or the hardly less archaic hand pump. The latter has, of course, some conveniences over the former, but it entails weary work, and adds a quite unnecessary burden to the many labors that fall to the wife an the farm.

But assuming that running water has been brought into the farm kitchen, the question may well be asked, Why stop there? Why not a bathroom; why not a separate bathroom for the men help? Why not shower baths and all the conveniences that modern plumbing has brought to a relatively high degree of efficiency? All these things should follow as a matter of course, and no doubt would do so could the former be convinced as to their utility, and be satisfied that their installation would not cripple his financial resources. The latter point is apt to have more weight than the former. There is unquestionably a large field for business in this direction. —American Homes and Gardens.

INVERTED BURNER POPULAR.

A FEATURE of the coming winter's trade will be the inverted burner, says the Birmingham Hardwareman. This new member of the incandescent family will give a decided impetus to the incandescent industry. Hitherto the electric light has had a strong pull over gas by reason of the pleasingly artistic and variously ornamental methods of its installation, but now that the inverted gas burner has arrived the rivals are equally matched, and the fight for supremacy will be keener than ever. The inverted burner lends itself admirably to artistic treatment, some inverted lights in a photographic window being repeatedly mistaken for electric. The lights were suspended with flexible metallic tubes, which possibly had something to do with the illusion. Flexible tubes are particularly suitable for shop window lighting, as when the window is out for dressing the burners may be unscrewed and removed, and the tubes hung up out of the way, a very manifest advantage over fixed pendants or brackets. The mantle of the inverted burner, too, has a much longer life than the orthodox pattern, owing to the security of its attachment, and this should be a strong selling point in its favor. An inverted burner should be fixed and lighted over the counter or in the window in order that the effect of the light in its downward concentration may be seen by the customers. It is the ideal light for table work of any kind.

NEW MINERS' SAFETY LAMP.

A Paris correspondent states that French science is busying itself just now with perfecting the illumination of the working seams of mines. Efforts have been directed towards producing a safety electric lamp, and one was recently submitted to the Academy of Sciences by the inventor, M. Tommasi. His incandescent globe is enclosed in a glass cylinder, and there are several acting arrangements for the inlet and the outlet of air, which is also effectually excluded by the breaking of the globe. The exclusion of air, of course, instantly extinguishes the lamp.



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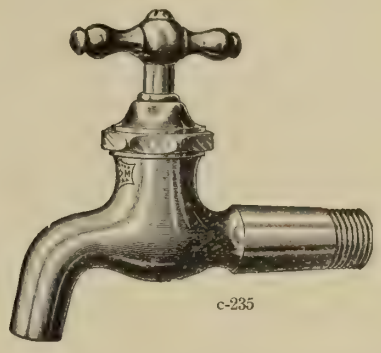
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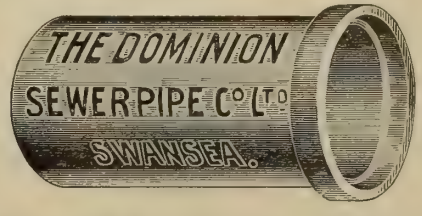
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SOVEREIGN RADIATORS.

AN interesting exhibit made at the recent convention of the National Association of Master Plumbers and Steam Fitters, at Winnipeg, was that of Sovereign Radiators manufactured at Guelph by the Taylor-Forbes Co. The accompanying illustration gives a slight idea of the beauty of the exhibit, it being impossible to reproduce the picture in such a manner as to do justice to the technical features of the Sovereign line. The radiators were closely inspected by the majority of the delegates, the general expression of opinion being that the quality of the castings could not be excelled, and that for beauty of design the "Sovereign" would more than hold its own with any radiators made. The screwed nipple connection was also very favorably commented upon. Mr. H. R. Flett, Toronto representative of the company, was in charge of the exhibit, and his personal popularity had much to do with the fact that the Taylor-Forbes display was one of the centres where a crowd of jolly delegates could always be found.

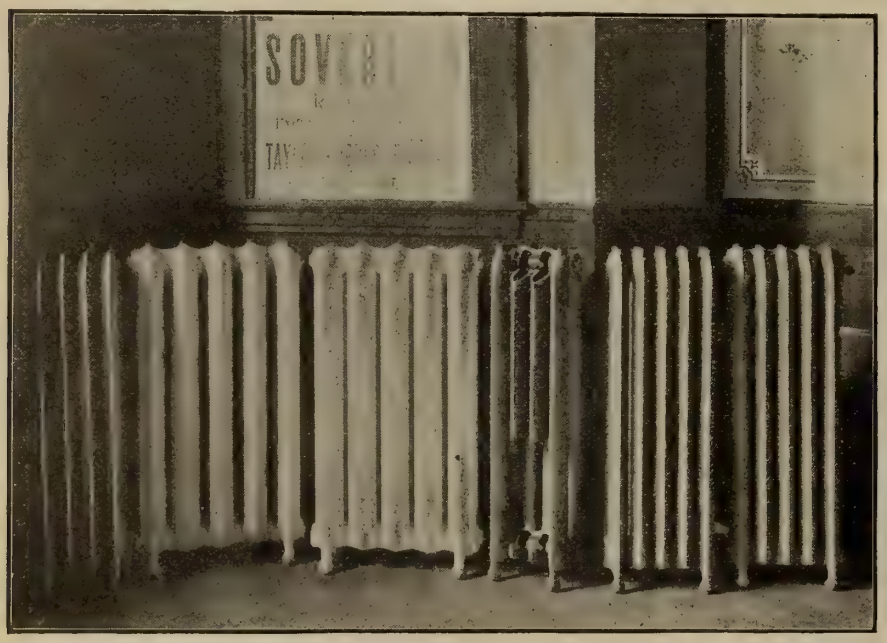


Exhibit of "Sovereign" Radiators, made by the Taylor-Forbes Company, at the National Master Plumbers' and Steamfitters' Convention at Winnipeg.

MORE HEAT FROM A RADIATOR.

IN many rooms the radiator is either too small or the steam pressure is too low to maintain a comfortable temperature in severe weather. If the tenant is enjoying the many advantages afforded by central station electric lighting service, the matter can easily be remedied. Take the fan that kept you cool all summer and set it where it can blow against a large part of the radiator's surface. Turn it on at low speed, or at high if necessary, and your cold room will soon be thoroughly warmed. The philosophy of the thing is that steam at a low pressure carries much less latent heat than steam at a high pressure, and therefore warms the radiator so poorly that only a slight draft of air arises around the pipes, and condensation is slow. With the fan in operation there is a forced draft against the radiator that conducts a great deal more heat away from the iron, cooling it so that much more condensation of steam occurs inside it. The heat thus snatched from the reluctant radiator is held in the circulating atmosphere of the room, which is soon changed from cold to warm at a trifling cost for electric energy.

"BOB" HARRISON RESIGNS.

MR. R. W. HARRISON, of Harrison & Robertson, Toronto, has resigned from the Board of Directors of the Toronto Master Plumbers' Association. Mr. Harrison is very popular and is well known to the trade generally because of his active work at conventions, he having been one of the Canadian delegates to the National Steamfitters' Convention at Atlantic City in June and one of the Toronto representatives at the Winnipeg convention, being chosen Ontario vice-president of the National Association of the Master Plumbers and Steamfitters of Canada at the latter gathering.

Mr. William Mansell, of the Purdy Mansell Company, has been elected to the vacancy on the board created by Mr. Harrison's resignation.

NEW PLUMBING FIRM.

Messrs. Cunningham & Humphries have commenced business in temporary quarters on Mechanics street, Paris. Mr. Cunningham was formerly with Glennister & Co., Paris, while Mr. Humphries had several years experience as a plumber at Brantford.

ELECTRICITY IN FARMING.

Among the latest of the many novel adaptations of electricity is its application to the raising of ducks on a farm in New Jersey. Even the eggs are examined in an electric egg tester. The incubators are ventilated by electrically driven exhaust fans, and it is said that since this application healthier and livelier ducklings are hatched than before. An electric motor mixes the food (something over a ton a day) for the full-grown fowls. Electricity also assists in a novel way in the fattening of the ducks for market. In the words of the owner: "Frequently during the night one duck would become frightened at something, and set up a quack. Before long the whole 5,000 would be at it, and keep on scurrying about in their coops all night. This would materially reduce their weight, even in one night, and was also decidedly unpleasant. I put a small electric light in each coop, and kept it burning all night. Ever since then the ducks have been getting a good night's rest, and their market value has considerably increased."

PLUMBING GOSSIP.

Mr. James Boxall, Lindsay, was a visitor to Toronto this week.

Mr. R. G. Sturgeon, Peterboro, called on Toronto supply houses this week.

W. J. Cluff, of R. J. Cluff & Co., Toronto, was in Montreal on Tuesday.

T. G. McClatchie, of Hemmingford, visited Montreal on business this week.

A. Majeau, tinsmith, of Joliette, paid a flying business visit to Montreal last Monday.

John Howie, plumber, of St. Johns, called on the local supply houses during the week.

Thomas Norris, of Norris & Lockerby, Galt, spent a couple of days in Toronto this week.

J. J. Foley, of the American Brass and Copper Co., New York, was in Toronto this week.

Andrew and R. Wright have returned to Toronto from a holiday trip to Niagara-on-the-Lake.

Mr. Carslake, of Carslake & Lockerby, Collingwood, called on Toronto supply houses this week.

L. J. Moger, tinsmith and roofer, of St. Antoine, was in Montreal this week in connection with his business.

J. Gray, plumber, will remove from 121 Queen street east to 244 Church street, Toronto, on October 1st.

Mr. John Wright, 403 Yonge street, Toronto, is holidaying at Niagara-on-the-Lake, where fishing is reported good.

F. Smith, Stratford, has disposed of his plumbing business to Messrs. McDonald & Henry, plumbers, of Mitchell. The new firm will conduct both businesses in future. Mr. Smith is undecided as to his future plans.

Mr. H. R. Flett, Toronto representative of the Taylor-Forbes Co., has returned from a two months' trip to British Columbia and the west. Everywhere he met with a favorable reception when talking "Sovereign" radiators.

E. A. Rogers, of the James Robertson Co., Toronto, returned a few days ago from a two months' trip to Manitoba and British Columbia. Mr. Rogers reports that there is an unlimited amount of business available in the west, but it must be gone after. The St. Paul supply houses cover the territory well.

TRADE MARK
This design a guarantee of quality.

FIBRE WRAPPING PAPER

STRONG, TOUGH AND STIFF
Will Carry All Kinds of Packages Safely to Destination

WRITE US FOR SAMPLES AND PRICES.

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TORONTO LIMITED MONTREAL

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

Three Days' Work

done in a day. The

METALLIC ASH SIFTER

can be worked with three times the rapidity of the old wooden sifter. No coming apart either. Bottom wires folded in by **Our Patent Double Lock Fold**—secure. No dust either—**Our Metal Cover** looks after that. Further Particulars and Prices gladly furnished. Will **you** write for them?

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

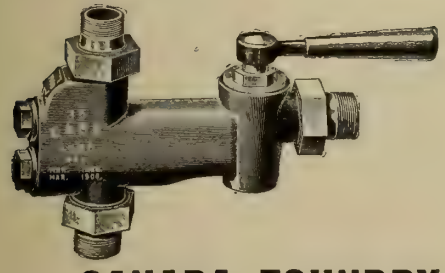
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We make them any shape

Send samples for prices

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A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

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MACHINERY STEEL
TIN *PLATES* ELYN

GALVANIZED SHEETS, "SWORD AND TORCH"
OIL TEMPERED WIRE AND SPRINGS

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Sort Up Your Stove and Heating Stock.

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FOR A HEATER.

SOVEREIGN

AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

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OTTAWA, ONTARIO

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BALL BEARINGS

Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

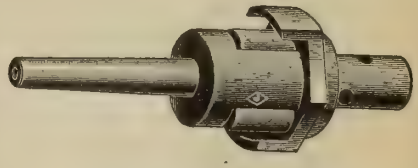
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Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.



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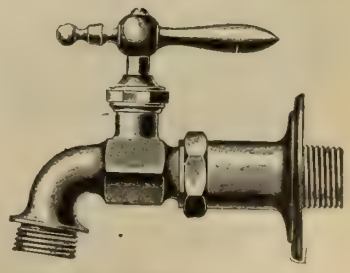
Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

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HESPELER - - - ONTARIO

GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

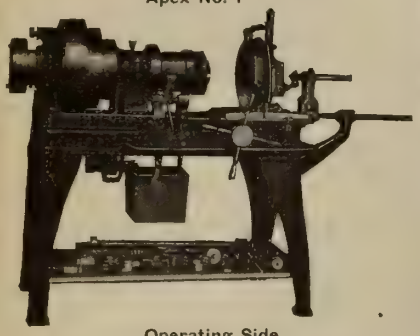
ALL PARTS Made to steel gauges and are always interchangeable.

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THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

The vise is our celebrated serpentine. It is opened and closed while the machine is in motion by simply moving the dog forward or backward. Capacity of machine, from ¼ to 2 inches, inclusive. Especially adapted for making Nipples.

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Kerr's "Copper-Alloy" Disc
GLOBE VALVES

are superior to any other disc valves on the market for high steam.
This is a very superior valve, at a moderate price.

The KERR ENGINE CO.,
Manufacturers Limited
WALKERVILLE - ONTARIO

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 22, 1905.

SUMMER resorts are now practically deserted and, with the return of holiday pleasure-seekers, business in the plumbing trade is receiving quite an impetus. Many good sized contracts have been let for repairs and extensions to heating equipment, and naturally, many needed repairs to sanitation are being undertaken at the same time. Cold weather is not so far away now, and there is a big rush to prepare plumbing systems to withstand the rigor of an eastern winter.

The supply houses are kept busy shipping orders for pipe to all parts of the Province, the demand being unusually big.

Lead has continued unchanged, and is very steady. There is no prospect of any further drop in the immediate future. Brass goods maintain their high figure, due to the steadiness of coppers. There are sensational reports of large shipments of copper having been made to China in order to shorten the supply. It will be brought back when needed. This rumor lacks confirmation, but it shows the tendency of the market.

Range Boilers—Good sales are reported. Our prices are: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Lead products are much steadier than last week, and prices are unchanged. We quote: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c per hundred lbs. extra.

Iron Pipe Fittings—All kinds of pipe and fittings are in great demand, and are being used in extensive repairs to heating and plumbing, especially in Montreal city. Our prices: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—The brisk demand continues, and prices are very firm with an upward tendency. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch. $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—The price lists, as revised last week, are still holding good. Sales are reported in good volume. Prices are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—No change has occurred in the price of solder, which is still reported as follows: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, September 22, 1905.

HEATING contracts are now the feature of the trade, some very large ones being closed and supply houses finding the call for goods remarkably active. Boilers, furnaces, radiators, piping, etc., are all in strong demand and prices are very firm. With the exception of cast iron steam fittings, stocks are plentiful.

Old prices rule on all lines and brass goods have not yet taken their expected jump upwards. Other lines are all firm with buying active. Soil pipe is still scarce.

Lead Pipe—Prices hold firm and buying is very active. We quote: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Shipments are behind owing to foundries being unable to fill orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Stocks are reported scarce in steam pipe fittings. Demand is strong and prices firm Quotations continue as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers— Talk of advance is current, but the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Buying continues active, prices being quite

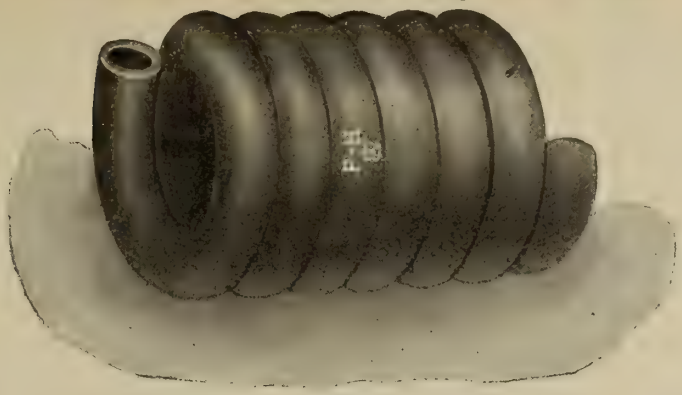
PIPE THAT IS PIPE

THIS IS OUR BRAND

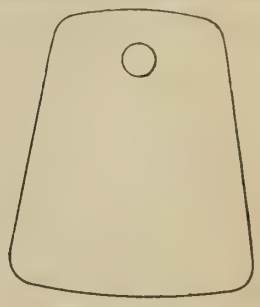
P-H

You Want It.

See that You Get It.



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TAKE NO OTHER

BLACK AND GALVANIZED.

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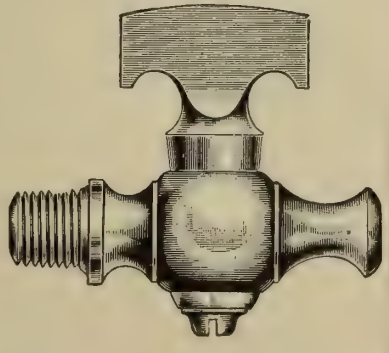
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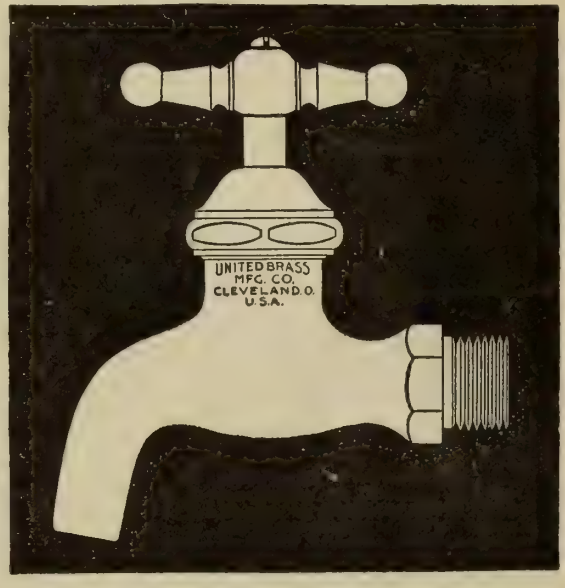
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United Compression work used by Leading Plumbers **Everywhere**

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Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.

PLUMBING AND STEAM FITTERS' SUPPLIES

Our Fall Stock is now in store and is well assorted.
All kinds and sizes of everything in this department.

Promptness Our Motto

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The Best South Wales Produces

IN STEEL COKE TINPLATES

"ELYN"
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Hardware Store Business Methods

Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

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firm. We quote following prices : 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe — Stocks are normal and prices continue steady. We quote : Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—A strong demand exists with prices firm at the old figures. Our quotations are as follows: Bar solder, half-and-half guaranteed, 19 1-2c., refined 18 1-4c., and wiping at 17 1-2c.

Enameled Ware— Demand is very active and producers are kept busy. We still quote the following prices: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50, special, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality $19, special, $17; 3 inch rim, first quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.

FAIRBANK'S VALVES.

Fairbanks valves will be used entirely in the equipment of the new chocolate plant being erected in Montreal for the Walter M. Lowney Company, a contract having been closed between the Canadian Fairbanks Company and Lumsden & Van Stone, contractors, Boston, to this effect.

The Fairbanks Company have just completed an order for the Canada Car Company for Fairbanks valves, covering their entire equipment. The Canada Car Company are using 160 lbs. steam pressure and carrying 153 super-heat. All gate and globe valves on their steam lines were fitted with special metal rings and are giving excellent satisfaction.

A SIMPLE OIL FILTER.

One of the most satisfactory of oil filters is "home made," requiring only two cans and a supply of cotton wicking. The cans are placed on different levels, and the upper one filled with the oil to be filtered. The cotton wicking is saturated with clean oil, and suspended over the edge of the upper can, forming a capillary syphon. The end of the wicking should be allowed to touch, or lie on, the bottom of the upper can. The capacity is only limited by the size of the cans, and the number of wicks used.

Business Changes

Ontario.

L. B. Tape, agricultural implements, Ridgetown, has sold out to F. A. Gosnell.

James A. Childs, blacksmith, North Toronto, is advertising his business for sale.

The Cement Stone & Building Co., Limited, Toronto, are in liquidation with Osler Wade as liquidator.

Quebec.

Larocque & Fortin, plumbers, Montreal, have been registered.

The Mouterdes Electric Accumulator Co., Limited, Montreal, have been incorporated.

Manitoba and N. W. T.

The Calgary Natural Gas Co., Limited, Calgary, have been incorporated.

The Pass Power & Lighting Co., Limited, Frank, have been incorporated.

Robert Laughton, hardware merchant, Leavings, has been succeeded by R. & R. Laughton.

James Murphy, blacksmith, Minnedosa, has sold out to G. R. Charleson.

KEEP A LIST OF LEAKS.

DID you ever seriously try to make a list of the holes through which possibly little bits of profit were constantly dribbling away ? Overbuying is a leak. An extra five off for taking a quantity is a saving, but if the quantity lasts you a period of four times as long as the time it takes to get a fresh supply from your market, you have lost the profit on a part of your capital unnecessarily tied up. And if that loss of profit exceeds your saving, it is not necessary to have additional proof that overbuying may be a leak. Stowing away goods likely to sell on sight, where they cannot be seen, is a hole through which leak profits that might have been made had the goods been properly displayed. Failing to care for goods, so that they get shop-worn and must, therefore, be sold at reduced prices is another leak. Holding of seasonable goods until they become utterly out of style, rather than getting rid of them by taking a small loss, is still another leak.

Letting windows go unwashed and unchanged is a decided leak. Not only are you thus losing profit on sales that might be directly caused by particular displays in the windows, but you are also failing to improve an opportunity right at hand in the form of those windows to give passers-by most convincing reasons for coming into your store. Letting your bills go unpaid until too late to secure discounts that may be offered James A. Childs, blacksmith, North discounts are so small but that they afford a profit over and above the interest that would have to be paid were it necessary to borrow money with which to pay the bills.

The Imperial Engine Co., Limited, intend to commence the manufacture of rotary engines at Cayuga shortly.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
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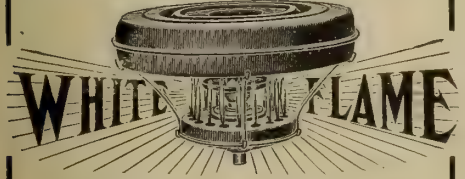
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ORDER NOW

to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

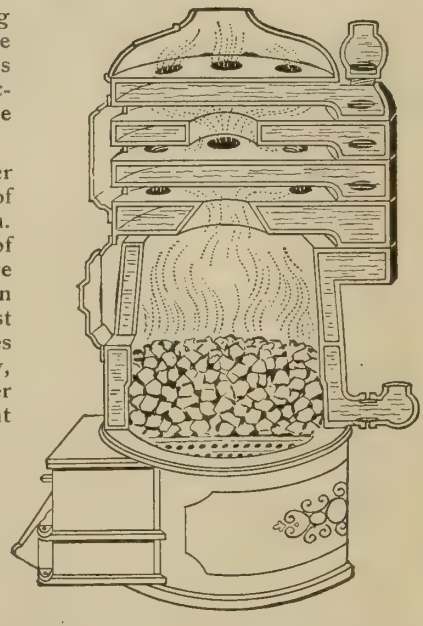
For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58, or send for Catalogue.

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A Superlative Line of Heating Apparatus

The Oxford System

Wide-Awake Dealers Like Our Products because they yield as big a margin of profit as the common kind of goods and give such satisfaction to the customer that his trade is riveted to their stores.



Why Oxford Boilers are Superior The Oxford Hot Water Boiler is a marvel of scientific construction. The sloping walls of the upper part of the fire-pot give unequalled exposure to the action of the heat; the double-sized first water section with bell-shaped flues adds further to the heating capacity, which is greater than that of any other boiler yet made, figuring on the amount of fuel consumed.

Metal to Metal Joints Throughout All connections are made with our Oxford Steel Push Nipple, and the use of gaskets or washers is completely obviated. You will immediately perceive the great benefits derived from this new method of construction.

A Perfect Grate The triangular revolving grate with hollow bars gives all the air-space necessary without allowing any fuel to be wasted. It is very easily dumped and by releasing two screws any bar can be removed through the ash-pit.

Oxford Hot Water and Steam Radiators

used with the Oxford Boilers form a heating system whose efficiency has no equal. They are built of cast-iron, rust-proof, and have unusual strength. Every loop is tested to 120 pounds cold water pressure both before and after being assembled. They are joined with the Oxford Steel Push Nipple, obviating the use of gaskets or washers and, therefore, all possibility of leaking.

Our Guarantee All Oxford Radiators are sold under guarantee of proper construction or replacement of defective castings. WE SELL ONLY TO THE TRADE, and will protect your interests in every way.

SEND FOR OUR HANDSOMELY ILLUSTRATED CATALOGUE.

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TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

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used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

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The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

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Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

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In all qualities and sizes

Bessemer Coke - - - - "Lofoden" Brand
Seimens Coke - - - - "Pelican" Brand
Charcoal - - - - - "Mocha" Brand
Best Charcoal - - "Cardigan" Crown Brand
Staffordshire Bar Iron - - B.G. Crown Branp
Galvanized Sheets "Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

STAG-HANDLED CARVERS.

MAKERS of stag-handled carvers appear to think that there is some likelihood of the public taste reviving in this class of work. At one time, in spite of the somewhat clumsy appearance of these goods, it was the fashion for a certain section of the community to use them in preference to anything else, but their reign was by no means as long as the manufacturers could have wished. The output of Sheffield not so very long ago was extraordinary in this department, and many retailers were led to stock them somewhat heavily. Then the demand fell considerably, and they could not be got rid of even at reduced prices, the result being that a quantity remained on hand. Now it seems there is a better call for them, though it is not, so far as can be gathered, a general one. The demand may turn out to be purely local, though the makers incline to the belief that it will spread. The one great point in their favor is of course their preservation, the white handles being so liable to stain with wear.

WHERE THE SOIL IS ROCKY.

VIRGINIA, as everybody knows, is a State of wonderful and diversified agricultural wealth, but there are portions of it where the farms appear to be composed chiefly of rock, and the thin top dressing of soil requires frequent treatment with fertilizers in order to produce any kind of crop.

As the result of a trade a man from Ohio came into possession of a store in a small town in one of the rockiest of these sections. His first proceeding was to take an inventory of his stock on hand. Much to his surprise he found there was not a plow in the store. He immediately despatched an order for a dozen plows to the nearest wholesale supply house, 50 or 100 miles distant.

The next day he "hitched up" and took a drive over the neighborhood, noting the general outlook and making enquiries among the residents.

On returning to his store he sent this message to his wholesale house:

"Cancel order for plows. Send me a ton of blasting powder."—Youth's Companion.

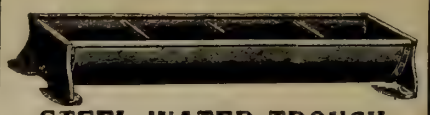
KNIFE CLEANING TABLETS.

Tablets superceding machines and boards as they are applied direct to the knife, and also good as a razor strop application, are as follows: 8 lbs. hard yellow soap, 2 lbs. water, 2 lbs. kieselguhr, 1 lb. rottenstone, 1-2 lb. flour emery or pumice. Shave the soap, put in a pan and gently melt with the water, stirring well, then add the powders, previously sifted together, stir and run out in trays or moulds.

CEMENTS FOR CAST-IRON PIPES.

A good cement for cast-iron pipes is as follows: Roman cement, 48 lbs.; white lead, 16 lbs.; litharge, 4 lbs.; rosin, 2 lbs.; old linseed oil, first boiled with half its weight of rosin, sufficient to make a paste. Mix equal weights of quicklime, Roman cement, pipe-clay, and loam to a paste with linseed oil. Melt together rosin and tallow, and then add plaster of Paris to consistency.

HARDWARE MEN: Our



STEEL WATER TROUGH

s a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. Limited
TWEED, Ontario



The Shelby and Downward Tipless Lamps

produce 50 per cent. more useful light than ordinary lamps, from the same consumption of current.

Sold by all Prominent Dealers Throughout the Dominion.
Write for Prices.

ONTARIO LANTERN & LAMP CO.
LIMITED
Hamilton, Ont.

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

$2 FOR THIS SMALL SUM THE $2
MANUFACTURER and SUPPLY MERCHANT
may keep posted on new openings for trade.
The CANADIAN CONTRACT RECORD
reports weekly all projected building and other construction works throughout Canada as well as new business enterprises.
Send your name and address with $2 for a year's subscription to
Canadian Contract Record
Toronto, Montreal, Winnipeg, and Vancouver
$2 $2

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

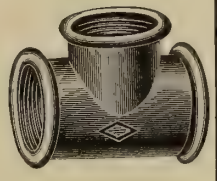
We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.
LLANELLY, WALES



TRADE MARK REGISTERED



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

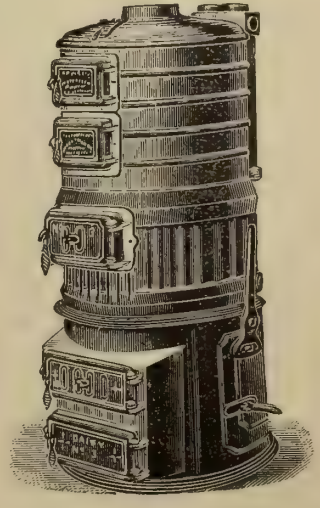
SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.
Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.
50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

GROUPED AROUND

This Star are our Famous

BUILDING PAPER
SHEATHING

TARRED FELTS
READY ROOFING

WRAPPING PAPERS

If you are not already ***using*** or ***selling*** our manufactures write, and we will show you something that will interest you.

DO IT NOW

ALEX. McARTHUR & CO., Limited, 82 McGILL STREET MONTREAL

CURRENT MARKET QUOTATIONS.

Sept. 22, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50
Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
I X X	6 75

Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. } 14x60, " } 14x65, " }	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	..	0 65
" annealed	....	0 70
"M," Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto.
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10½ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
" ¼ "	"	....	5 60
" 5-16	"	....	4 45
" ⅜	"	....	3 85
" 7-16	"	....	3 70
" ½	"	....	3 55
" 9-16	"	....	3 45
" ⅝	"	....	3 35
" ¾	"	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ⅜ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb	4 00
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c 1is. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00		16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet 2½ in.		16 75	14 75
5 " 2½ "		17 50	15 50
5½ " 2½ "		19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "	....	7 50
" 127 E, "	1st "	....	5 70
" 127 E, "	2nd "	....	4 80
" 128 E, "	1st "	....	5 60
" 128 E, "	2nd "	....	4 70
" 129 E, "	1st "	....	5 40
" 129 E, "	2nd "	....	4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	....

Galvanized pipe—		
¼ inch	....	2 86
⅜ "	....	2 89
½ "	....	3 14
¾ "	....	4 02
1 "	....	5 78
1¼ "	....	7 84
1½ "	....	9 46
2 "	....	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings— Standard bushings 50 and 10 and 10 per cent.; headers, 60 flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in. 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 " "	"	1 75
No .7 Fuller's	"	2 10
No. 4½, "	"	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

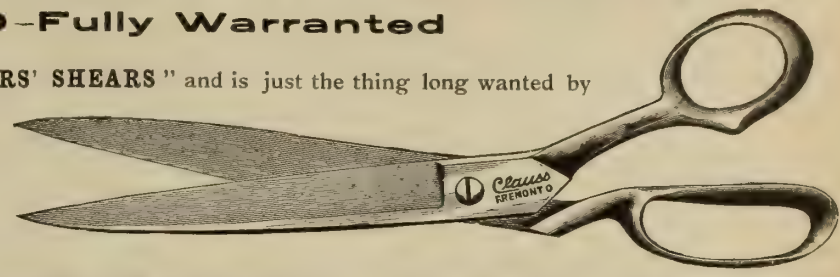
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Dressmakers' Shears

CLAUSS BRAND—Fully Warranted

This shear is made after the pattern "**TAILORS' SHEARS**" and is just the thing long wanted by the dressmakers.



Manufactured by Our Secret Process.

Ask for Discounts.

Clauss Shear Co., 169 Spadina Avenue, Toronto

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18
Wiping	0 17

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75 per M.

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—

	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb. 0 07¾ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz.	1 00	1 50
Bullard's	"	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross 7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz. 2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz.	5 00	9 00
man	"	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz.	0 55	1 00
Axle	"	0 22	0 33
Screw	"	0 22	1 00
Awning	"	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Balky Customer

is harder to manage than a *Balky Horse.* Your customers *won't Balk* if you offer them Paterson's Building Papers and Wire-Edged Ready Roofing, because these goods never fail to please the user.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in.	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70	and 10	per cent.
Arcade	70	" 10	"
Kearney & Foot	70	" 10	"
Disston's	70	" 10	"
American	70	" 10	"
J. Barton Smith	70	" 10	"
McClellan	70	" 10	"
Eagle	70	" 10	"
Nicholson, 60 and 10 to 60, 10 and	5		"
Royal	80		"
Globe	70	to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file bandle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2½ 0 25

HANDLES.

Axe, 2nd growth, per doz. net	3 00	4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS. doz. pairs.

Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.		
Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.		
Heavy T and strap, 4-in., per lb		0 06½
" 5-in., "		0 06½
" 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in.	per 100 lb.	4 50
12 in. up		3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval head
M.R.M. Co. brand, 55 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LAWN MOWERS FOR 1905.

Woodyatt 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in. "	6 00 to	6 50
Daisy, 8 -in. "	5 25 to	5 75
Philadelphia, 7½-in. "	6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in.	5 50	6 25
8-in.	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 0 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

pint in tins	per gross	7 80
½ " "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ o 40 per cent.



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros.' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal		0 11
Pure Manilla		0 14½
"British" Manilla		0 11
Cotton, 3-16 inch and larger	0 21	0 25
" 5-32 inch	0 25	0 27
" ⅜ inch	0 25	0 28
Russia Deep Sea		0 16
Jute		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's....per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, iscount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24		0 85
" 18 x 30		1 00
" 18 x 36		1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb. ..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	...	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan "	0 06	0 07
" slip "	0 09	0 09
Labrador "	....	0 13
" Axe "	....	0 15
Turkey "	....	0 50
Arkansas "	....	1 50
Water-of-Ayr "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.

Blacksmiths' (discount)	60 per cent.
" parallel (discount)	45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

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Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

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High Carbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

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Terms, 2 per cent. off 30 days.

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New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

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Royal Canadian, 11 in. "	....	29 00
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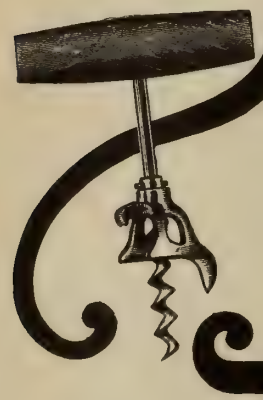
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Pease Foundry Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

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Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Stauntons Limited, Toronto.

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Taylor Forbes Co., Guelph, Ont.

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Frothingham & Workman, Montreal.
Howland, H. S., & Co., Toronto
Kennedy Hardware Co., Toronto
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

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Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

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Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

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American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

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Taylor-Forbes Co., Guelph, Ont.
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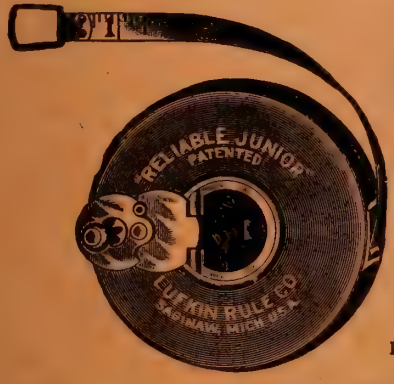
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VOL. XVII. MONTREAL AND TORONTO, SEPTEMBER 30, 1905 NO. 39

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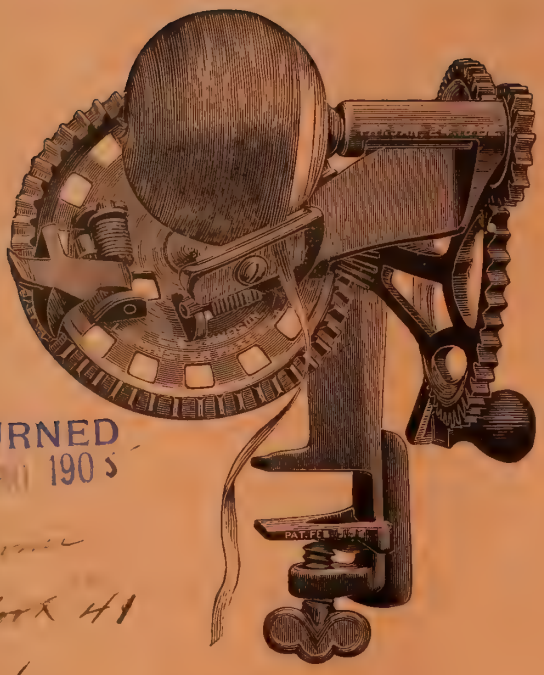
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See Classified List of Advertisements on Page 71.

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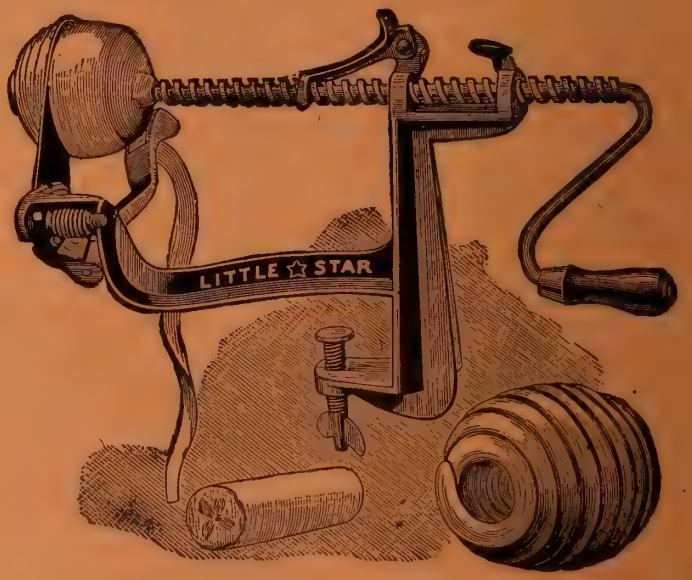
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SEP 30 190

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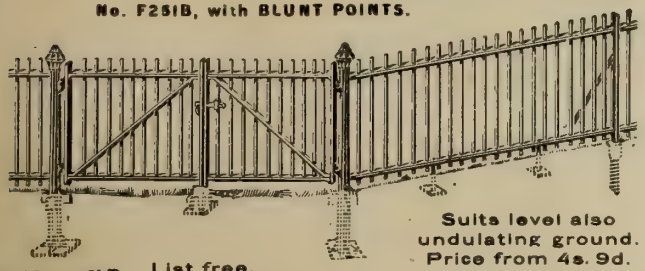
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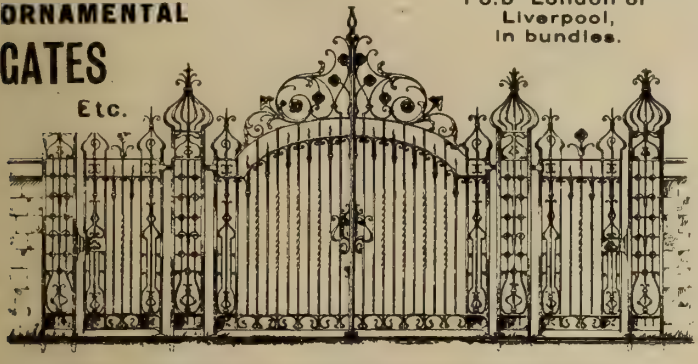
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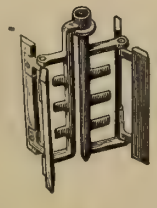
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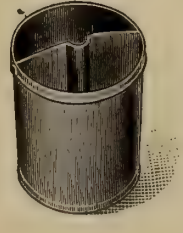
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SEND FOR NEW FREEZER BOOK.

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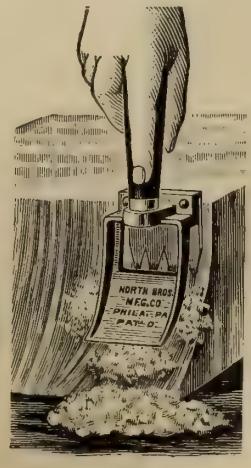
"LIGHTNING" "GEM" "BLIZZARD"

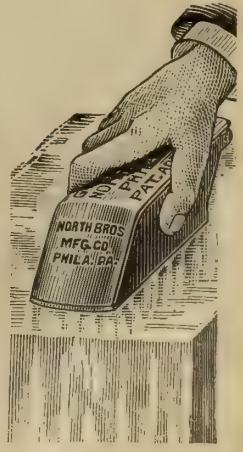


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New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

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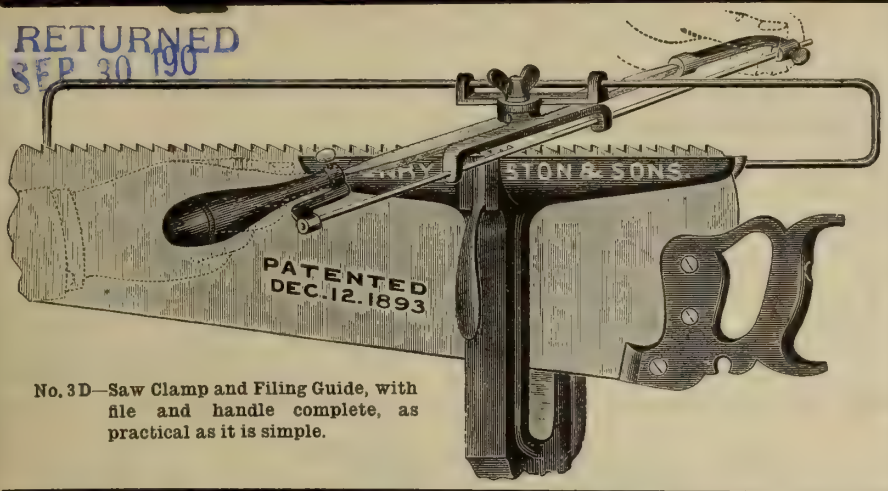
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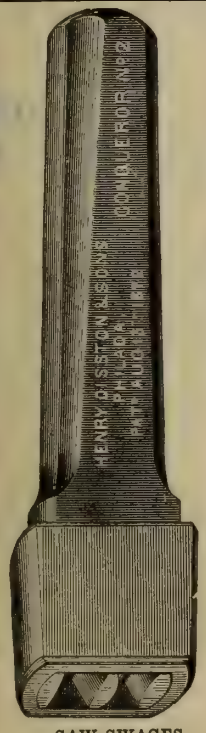
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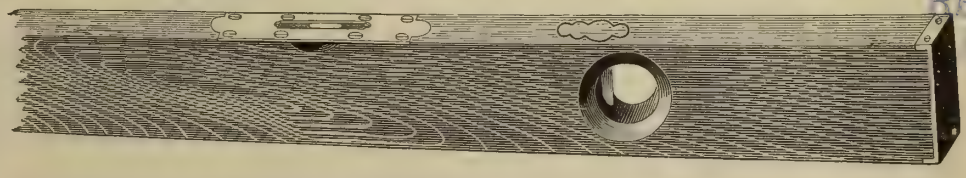
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Quote Low— Ship Quick—

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The Browning Automatic Shot Gun

12 GAUGE ONLY



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couldn't secure you more fully.

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To every hand saw we send out is attached a label corresponding to this.

You assume no risk in selling our saws—your customer takes none in buying them.

We stand behind you and guarantee satisfaction.

Couldn't have anything fairer than that could you?

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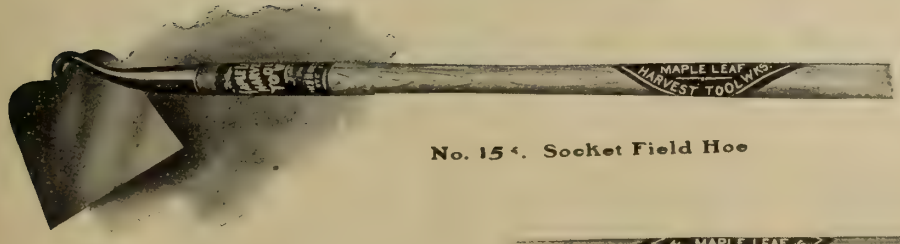
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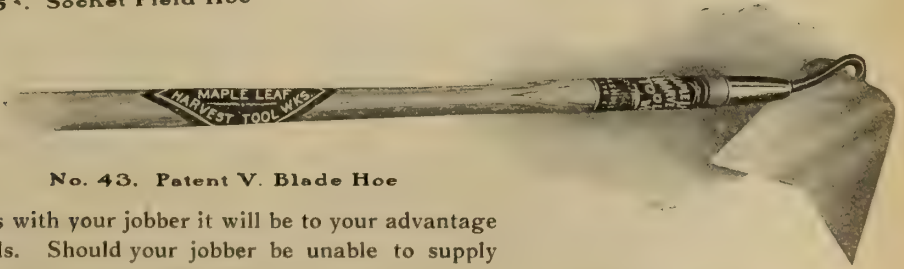
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Made of the finest sword steel by

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

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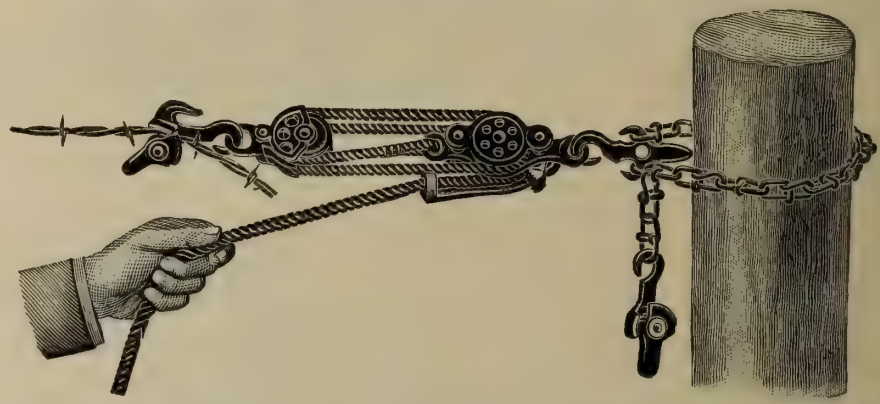
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OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

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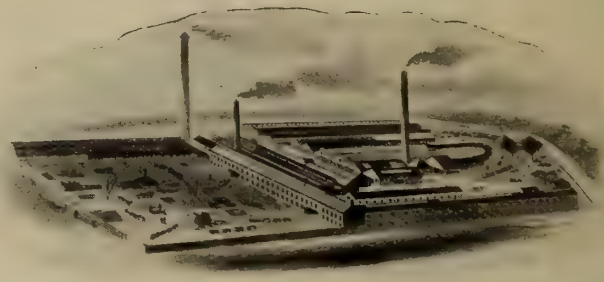
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LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

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You buy goods to sell

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Not to carry on your shelves.

Bailey planes are sellers and easy sellers.

Why? Because they are the planes longest on the market and long known for their good qualities. Because they are being constantly improved. No other planes are ever better.

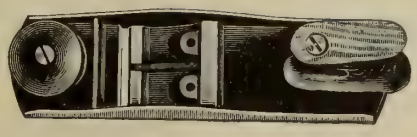
The latest improvement provides a solid bed for the frog. The illustrations show the construction.

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Showing the cutter on the iron frog.

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Showing the machined surfaces on which the frog rests.



Sectional view showing thickness of metal where frog is attached.

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Wholesale Hardware and Iron Merchants, - Montreal, Canada

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GOLDSMITHS and SILVERSMITHS
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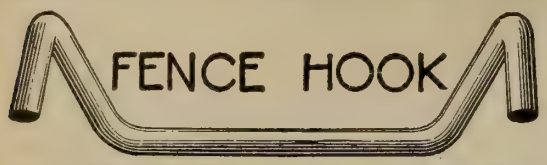
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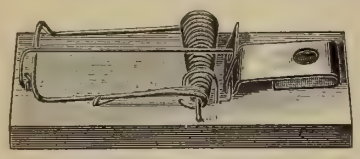
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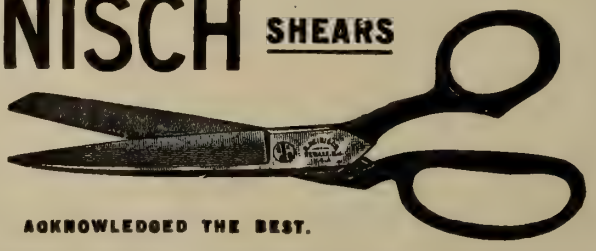
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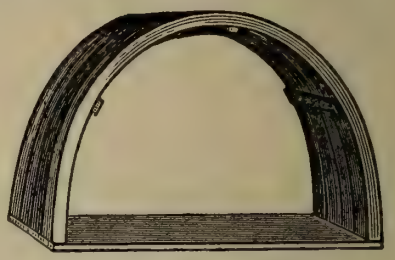
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We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

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Improved Steel Wire Trace Chains

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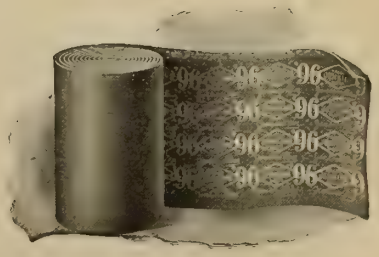
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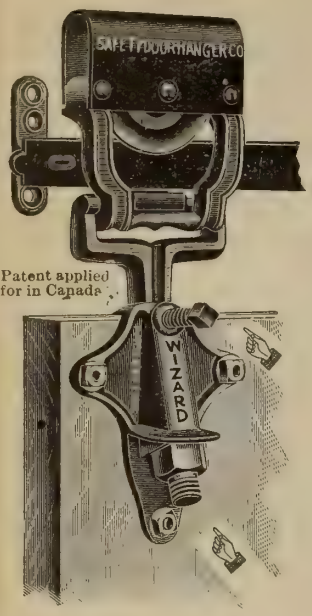


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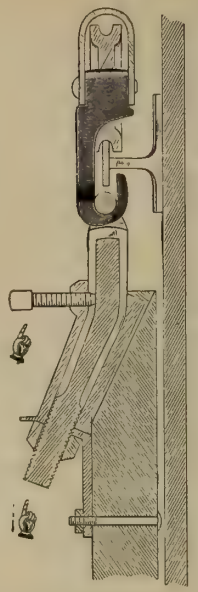
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Lateral Adjusting Screw

If your door binds on the building, turn the set screw to the right; a reverse operation of the screw places door as close to building as desired, thus excluding cold weather.

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Safety Door Hanger Co.,

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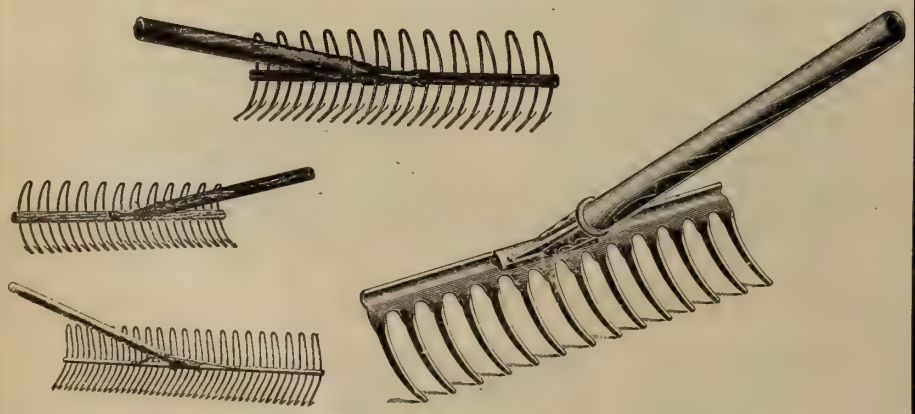
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Our **"CANADIAN" SPIRAL** is exclusively used by some of the most exacting Engineers in the world.

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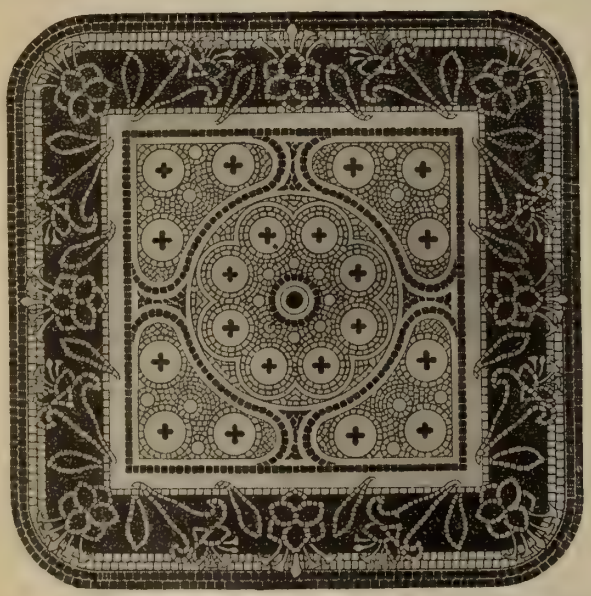
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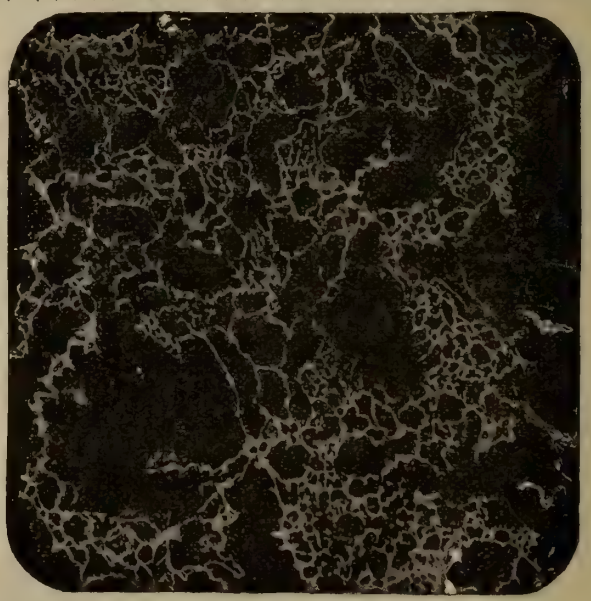
Send a trial order to our nearest Sales Branch. We have distributing warehouses, carrying large stocks, from ocean to ocean. ***Don't delay—write to-day.***

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THE CANADIAN RUBBER Co OF MONTREAL.

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KEMP'S ELITE AND ONYX STOVE BOARDS

Will please your customers and bear you a good profit. Elite boards are made both wood and paper-lined ; 12 sizes. Onyx wood-lined ; 12 sizes. Prompt shipment.

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McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

HARDWARE STORE WINDOW DISPLAY

By L. J. A. Surveyer, Montreal

ONE of the great secrets of success in a retail hardware business is the attractive displaying of goods to be sold. An artistically arranged window has been the foundation of many a man's succes. A good window display will invariably attract the attention of passers by. A love for the beautiful, novel, elegant and lovely is always appreciated by the public. After admiration follows the desire of possession. Time spent in the thoughtful consideration of how best to arrange a shop window so as to make it attractive, is time and labor never wasted.

For some reason hardware merchants do not seem to devote as much attention to their show windows as the dry goods dealers and clothiers. No business possesses in itself greater facilities and a greater variety of materials for fine and attractive display than does the hardware business. The window is, as it were, a vestibule to the customers.

Rated by His Window.

The hardware merchant who wants to make his store well known will find no better help than a correctly dressed window. In his window are seen his taste, thrift, cleanliness and business methods, and he is rated accordingly. No matter where the proprietor may be, his window is always there, exposed to the public gaze, and continually inviting the public to the store. When competition is keen, a dealer has to try different ways to gain trade. In time gone by the customer would seek the retailer, but to-day it is the opposite and the dealer must look for the purchaser. Hence the advantage of having seasonable and well cared for show windows, which will serve as a continual reminder that goods are up to date and the proprietor is progressive.

An Attractive Window is Not Costly.

A hardware window can be made attractive in many ways. One of the main points is cleanliness. An attractive, artistic window does not cost any more for rent or taxes than the repulsive, ugly show of a dusty pile of goods. A display, however simple, should be true, and have the merits of neatness and taste. The badly kept window draws no attention to the store. It is the one with the novel, striking ideas and catchy display which takes the public eye and never fails to increase trade.

Some hardware merchants believe that to have an attractive window is a costly and difficult thing. There is nothing hard about it. He who thinks so should begin by making a small display of a certain line of goods on the counter, and if satisfied, should place it in his window, and he will soon learn that, to use an old proverb, "There is nothing like trying," and that "Thoughts beget thoughts."

Window Decorations Always Pay.

Hardware merchants are now admitting the fact that window dressing is most important to the retailer as an advertising agent. There are still some who do not cultivate it. There are some stores in the city and some in suburban towns where no attention is paid to shop windows. The dusty and smoky plate glass remains uncleaned and fly specked for months and even years. The result is that trade is stagnant, and the store gets no new customers, clerks get discharged one by one, and finally the placard "Store and Fixtures for Sale" is hung up. In the writer's 18 years' experience in the retail hardware business he has met with no case in which window dressing did not pay according to the attention devoted to it. This testimony is believed to be universal among progressive business men. To the ambitious retail hardware clerk there is no better passport to success and advancement to be found than to be an artistic window dresser. There are numbers of clerks who are able to do something in that way. Anyone capable of selling goods behind the counter can become an expert window dresser if he gives a little time and thought to it.

Increased Sales Traced to Exhibits.

When the writer engaged with the present firm some 16 years ago, no attention whatever had been paid to the show window. The bottom was flat, covered with an old piece of carpet, and with no decoration in the sides or back of the window. A few articles were thrown in now and again without being changed or the plate glass cleaned. People were never seen looking in because there was nothing there to draw attention and hardly anything worthy to look at. After giving the object in view a few thoughts, the writer went to work and if the verdict and congratulations of a great many persons may be used, the window may be called a success. No matter at what hour of the day, or specially in the evening, people are seen looking in the window.



Window Display of L. J. A. Surveyer's Store in Montreal.

Never has much time or money been spent to make it look attractive. Judgment and ideas were used; old boards, empty cases, are what the platforms are made of. They were then covered with cambric. A point was made to have glass kept scrupulously clean, and all goods displayed, polished or dusted with a cloth. Since then business has increased. Stock was augmented as well as the staff. Almost every day customers would come in and ask for goods "same as in the window." It has been noticed that persons asking for some line of

goods kept in stock with which the clerk was not familiar would be told, "We have not got them." The customer would answer, "But I saw them in your window."

An ill dressed window shows lack of enterprise and poor business methods, and it is an eyesore to the place where it is located. A little attention given to the window each week has proved to be a good investment.

The Relation to Local Advertising.

A newspaper advertisement merely indicates that one has hardware of a certain kind for sale. A good window display does not only do the same, but at the same time and at far less cost, stimulates curiosity and creates a desire to possess the article displayed. There are many persons who, when they intend to purchase a certain class of hardware, invariably seek the window where the goods are well arranged. A few hours of a clerk's time each week is all that is required to do effective advertising by window dressing. The cost is economical.

It is desirable to show the same kind of goods in the window as are at the time advertised in the newspaper. To the large advertiser his window should be a supplement to the local paper, over which it has the advantage of presenting at once the object the purchaser might happen to need. If well displayed in the window the customer follows out his inteneion to purchase, and the sale is made. There are many people who do not take or have time to read a newspaper advertisement, who, while passing a store, would stop and look at the window, if it is attractive. Attention paid to the store window is one of the best advertisements. Many merchants in various lines of business are unanimous in one sentiment, and that is, a show window well dressed is the storekeeper's card to the passer by.

The writer believes in having more than one article shown at a time. Let the seasonable goods occupy the best place in the window, but this does not prevent the showing of other lines as well, without spoiling the effect of the seasonable or special display. On the contrary it seems to help the special goods to sell faster. One reason for believing this is that two years ago a sale was made to out of town people on account of the show window. They came to this city to purchase all that was required for a country villa they had decided to build. They entered the store and the first words uttered were, "You have a general display of goods in your window. We have been walking around town, but nobody seems to have such an assortment as you display in your window. I hope that we will find everything that we want here!" They did.

A sale of over $500 was made, and they have been regular customers for smaller purchases ever since. Another reason for believing in general display is that it is more attractive and interesting to the masses. If a window should be quite small it would be preferable to display but one specialty or a few lines of goods, making the display according to the size of the window.



Delegates and Supply House Representatives at the Canadian Master Plumbers' and Steamfitters' Convention at Winnipeg, 1905.

Marking Prices on Goods.

Marking prices on goods depends very much upon the locality and the class of trade the hardware merchant has to deal with. If the store be located in a wealthy thoroughfore, goods ticketed in window would not be so important as if the store were situated among the working class. The writer believes in putting prices only on seasonable goods and other articles the merchant wants to push. Too many price tickets in a window takes away the effect of the special goods ticketed. Experience has taught that no more than six or seven prices of goods should be given in a miscellaneous hardware show window. Most people, especially women, believe that when a few articles only are ticketed, they are cheap and bargains. If the display were of only two or three kinds of goods it would be advisable to have prices marked.

Utilizing an Employe's Skill.

In choosing an employe to take charge of show windows, let it be suggested that the one to be selected give evidence of possessing judgment, taste and a trained eye for quick comprehension of how to arrange, distribute and shape a variety of articles so as to present a pleasing exhibition. Before a clerk begins to dress his window he should plan out what he is going to do and have at least three principal objects in view:

1. To display goods kept in store.
2. To draw the attention of the people to the store.
3. To make the exhibit such that it will excite in the people the desire of possession.

If a window is arranged correctly it is a silent and continuous salesman, and sooner or later purchases are made. Goods bought are spoken of to acquaintances, and goods seen in the windows are remembered long after they have been taken out. A clerk with an ordinary amount of intelligence and some ambition, who is not afraid of work and who will take a little pains, will gradually learn to make a good display and become a source of revenue to his employer. The writer has often noticed while dressing his own windows how quickly thoughts would come to his mind and thus enable him to make a finer display than he had planned.

In the hardware business there is gradually opening a wider field for window dressers. In some lines of trade here in Canada they employ persons who make a profession of window dressing. One large department store has a young man who gets $2,000 a year for dressing the windows. If other lines of business can afford to spend so much money for the care of their windows they must have found it a paying investment. Why should it not be the same with the hardware show window?

It is unofficially reported that the Joggin Coal Mining Co., of Nova Scotia, is about to erect a large coal-handling plant at St. John, N.B., the intention being when it is completed to bring coal in to that point from Joggins and there ship it to Montreal in the cars which will be emptied in St. John this winter.

WIRE NAILS
TACKS
WIRE

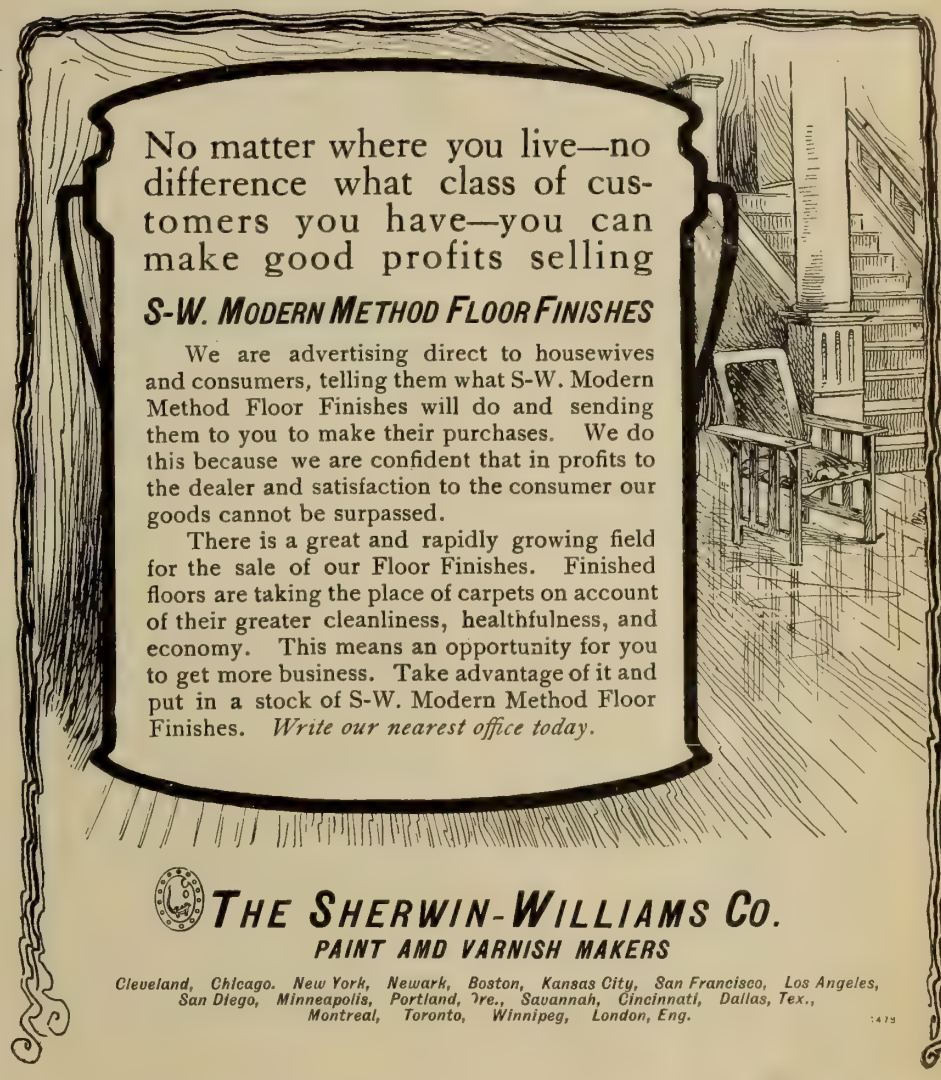
Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

CANADA'S TRADE FOR 1904.

Canada's aggregate trade for the fiscal year ending June 30th last amounted to $470,151,289, being $2,581,749 less than for the previous fiscal year, but showing a gain of $222,512,669 when compared with the best year under Conservative administration. The imports totalled $266,834,417, an increase of $7,622,614 over the preceding twelve months. The exports amounted to $203,316,872, a decrease of over $10,000,000 in domestic and foreign goods combined and of $7,559,493 in domestic products only. Of dutiable goods there were imported $157,164,975, a gain of $1,056,522, and of free goods $109,669,442, an improvement of $6,566,092 over the previous year. The latter item is most satisfactory, indicating as it does increasing importation of raw materials for manufacturing purposes. Following is a statement of imports and exports in detail:

	1905.	1904.
Aggregate trade	$470,151,289	$472,733,038
Total imports	266 834,417	259,211,803
Total free goods	109,669,442	103,103,350
Total dutiable goods	157,164,975	156,108,453
Total exports	203,316,872	213,521,235
Imports by countries—		
British possessions	$ 73,662,290	$ 73,675,411
Foreign countries	193,172 127	185,536,392
Great Britain	60,538,811	61,960,909
United States	166,040,890	156,997,180
France	7,201,679	6,289,362
Germany	6,642,139	8,028,544
Exports by countries—		
British possessions	$113,576,548	$128,951,548
Foreign countries	57,595,213	52,104,130
Great Britain	101,958,771	117,591,376
United States	75 563,015	70,713,078
France	1,511,298	1,597,928
Germany	1,146,654	1,819,223



THE "SUGGESTION" SYSTEM.

HOW to get the benefit of your employes' brains as well as the output of their hands is the problem which has been solved by the National Cash Register Company at its factory in Dayton, Ohio. The means of solving the problem is the "suggestion system," which has been in effect at the Dayton factory since 1894, and which has in recent years been adopted to a greater or less extent in other factories.

The scheme of securing suggestions from employes has been carried out to a very complete extent at the N. C. R. factory, and arrangements have been made by which any suggestion from any member of the organization is easily and quickly brought to the attention of the authorities. The employes have taken hold with marked enthusiasm, and each year thousands of suggestions are received. For handling these and all complaints as well, a department of complaints and suggestions has been organized.

Any employe desiring to make a suggestion for the betterment of the tools, methods or output in his own or another department, writes it out on a slip of paper and drops it into a suggestion box; or, if he prefers, he writes it out on a manifolding autographic register, retaining the original copy and leaving the duplicate copy in the register. In all cases an employe signs his name to a suggestion, and also the name of the department in which he is employed. The suggestion boxes and autographic registers are distributed in all departments, and suggestions are collected from them twice a week by a representative of the Complaint and Suggestion Committee. Upon the receipt of a suggestion it is given a number, entered in a book provided for that purpose. The secretary of the committee then refers it to the head of the department to which the maker of the suggestion belongs, or to the party most directly interested, not disclosing the name of the suggester. It frequently happens that the suggestion concerns more than one department, in which case it is investigated through all of the departments, and its bearing on each considered. The original suggestion is never sent with the correspondence during the investigation, but it is retained in the office of the committee and a copy is made for investigation purposes, or the subject matter is embodied in the correspondence.

If, upon investigation, the suggestion proves practicable, it is put into effect and the originator is notified by letter, which authorizes him to receive one dollar from the cashier in payment for the suggestion. If, on the other hand, the suggestion is rejected, the author is duly notified.

Where possible the reasons for the rejection are given and in either case the suggester is encouraged to try again. At the end of each quarter the best suggestions are selected from those adopted during the three months past, and forty-four quarterly prizes are awarded. The amounts of these prizes vary from time to time. At present the value of the quarterly prizes is $750. Twenty-five prizes aggregating $450 are offered to the employes in the making division. Twelve prizes aggregating $200 are offered to the employes in the office division, and seven prizes aggregating $100 are offered to the members of the selling force. The prizes in both the making division and the office include a first and a second prize for foremen, heads of departments and assistants. They are eligible to compete for these prizes only.

A few examples of the suggestions may prove interesting. In the Indicator Department, where are printed the metal parts of the register which indicate the amount of a transaction recorded, it had been the practice for years to mix certain kinds of ink by stirring them in a bucket, then straining through a cloth. One of the women employes thinking this could be done better and more economically by machine, devised an apparatus, drew the plans and turned them over to the company. As a result the ink is now quickly and cheaply strained by a machine.

In the Typewriting Department the

girls are constantly suggesting ways of saving time and labor, and in the office divisions new schemes for counting and recording are constantly being worked out. As one specific instance of how great a saving one suggestion made, it might be well to cite a suggestion recently made by which the expense of supplies for a certain kind of register is reduced nine cents per machine. This means a saving of $1,200 a year at the present time.

The pecuniary value to the company is not the only valuable result of the system. Under its encouragement the employes are taught to think for themselves and become more efficient workers. At the same time the man or woman who has originality is brought to the attention of the management, and in this way is placed in direct line for promotion.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Ames Buggies.

A VERY neat catalogue has been supplied us by F. A. Ames, Owensboro, Ken. The blue grass region has long been famed for the quality of horses it has grown, and if the Ames buggies are any criterion of the style of work done in the Southern States it is certain that the carriages are fully equal to the Kentucky thoroughbreds. The catalogue is entitled "Buggies Bred in Old Kentucky," and copies can be had on request.

Household Specialties.

A neat little catalogue of household specialties has been sent us by the Rollman Mfg. Co., Mount Joy, Pa., all of the lines shown being certain to meet with a large sale, amongst them being meat and fruit choppers, cherry cedar peach stoners, potato cutters and apple cutters, the latter tool being an exceptionally neat arrangement, which gracefully slices the apple and digs out the core at the same time. All of these tools are well illustrated, and interesting descriptions are given descriptive of the manner of cleaning the various tools.

An Amusing Picture.

Goodrich Rubber Goods are the feature of an amusing picture being sent out by the B. F. Goodrich Co., Akron, O. The picture is entitled "The Goodrich Rubber Man's Vacation," and is an annual event, the company adopting this method of bringing their goods before their customers. Copies of the picture can be secured by any reader of Hardware and Metal who mentions having seen the offer in this paper.

Tinsmiths' Machinery.

Crimpers and groovers are tersely described in the neat folder issued by the Indianapolis Elbow Co., Indianapolis, Ind., manufacturers of the Globe Rural Free Delivery Box and other hardware specialties. The 20th Century Groover for hand use is illustrated, and a short article is also given descriptive of its working advantages. Wheeler's Patent Lightning Pipe Crimper is also written up in the folder and prices on both of these lines are given. Cuts of Wheeler Slip Roll forming machines and circular shears of Wheeler pattern are also given. Hardwaremen and tinsmiths who desire copies of pamphlets describing these machines can secure them by mentioning this paper in their letter of inquiry.

Ormsby's Fireproof Goods.

Fireproof windows are the chief subject of the beautiful catalogue of 88 pages and cover just issued by A. B. Ormsby, Limited, Toronto and Winnipeg. Fireproof doors, shutters and skylights are also illustrated and a good deal of descriptive matter is given in addition to drawings and photographs illustrative of the various classes of work done in this line. From the number of cuts reproduced, showing buildings which have been erected in Toronto's wholesale district since the great fire of a year ago, it is seen that Ormsby's Fireproof Windows are in great demand, the water sprinkling apparatus being also very extensively used. Metal window frames glazed with wire glass are considered to be entirely fireproof, and their general adoption shows the favor in which they are held by architects and builders. Tin armored fireproof doors, fireproof shutters, skylights, etc., and corrugated iron sheets, cornices, ventilators, etc., are also thoroughly described. Mention Hardware and Metal if you send for a copy of the catalogue.

AND NO DISCHARGE

Bang the hammer of a loaded Iver Johnson against the table; throw the revolver around as carelessly as you would a handkerchief; handle it as roughly as you may, and there can be positively no discharge—don't do this with *any other make of revolver* if you value your life.

You can't fire it unless you pull the Trigger

IVER JOHNSON REVOLVERS



are the *only* revolvers absolutely safe from accidental discharge—*as safe in the home as the kitchen stove.* The reason lies in the fact that the hammer *never* touches the firing pin, and the firing pin never comes in contact with the cartridge except when the trigger is pulled *all the way back.*

Our Booklet, "SHOTS," mailed free with our descriptive catalogue, *proves* these claims and describes Iver Johnsons with complete illustrations. May we send it to you?

IVER JOHNSON SAFETY AUTOMATIC

Price: Hammer, $5.00; Hammerless, $6.00

Iver Johnsons are sold by dealers the world over, or direct from us if your dealer won't supply you.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

THE MAN ON THE JOB.

ONE hardware dealer in a town of moderate size takes the following somewhat unique method to get in touch with the various special lines his business makes it necessary for him to handle, and secure an occasional good advertising suggestion with very little trouble. Each employe at the time he is hired is required to file a paper stating what he has worked at in his past life and what the line of business into which his place of birth first brought him. These files are frequently consulted, and when some special line of advertising is to be prepared the assistance of these clerks is called for. For instance, when the copy is being made up for the sale of plows or some other line of agricultural machinery, all clerks who have been reared on a farm are called upon to give in a list of the chief difficulties which beset the farmer in the use of the plow; its usual defects; the points where, under special conditions, it seems to fall short of satisfactory service. If the subject is builders' hardware the carpenter's son is at a premium; for drillers' tools, a clerk who has some personal knowledge of practical well-drilling is a bonanza. The idea is to get the advertising written from the standpoint of the consumer, one of the difficult things for the manufacturer or dealer to do. It takes the man who has been on the job himself to know just what his successors want and what they frequently find; and no one else is on the job of plows quite so well as the fellow who has stood between the handles "when the wind was strong."

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only



Hollow Ware

Scotch Bowls
Low Kettles
High "
Bulged "
Dutch Ovens
Griddles
Spiders



Building Papers

Plain Sheathing	Felt Paper
Tarred Sheathing	Moth-proof Paper
Asbestos Paper	Ready Roofing Paper



Cast Tea Kettles
Tin " "
Copper " "



Dampers

Canada Stamped Steel
American Cast
Diamond "



Stove Boards
Square and Oblong



Pleated Elbows
"Standard" 6, 7-inch



CLOSED

Extension Fire Backs

Adjustable, 4½ x 15 to 7 x 20 inches

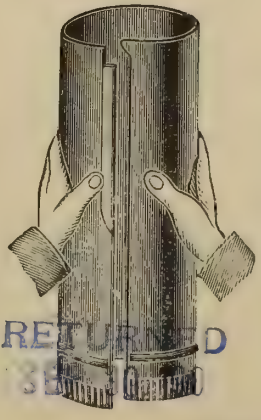


Extension Front Grate

Adjustable, 4 to 6 in. to 11 to 21



The Adams Registers





Stove Pipe

"Empire" "Triumph"

SEE OUR HARDWARE CATALOGUE.

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

Our prices are right.

From Your Standpoint

You have heard that there is an enormous amount of building now under way in Toronto. We would like you to see the architects' specifications for these buildings, just to show you how uniformly popular **"Pease"** is

What Toronto people have decided about the **"Pease"** is what every user of it the continent over has decided.

"Pease"

Economy Hot Water Boiler

The best Heater yet invented. Gives Heat, Saves Fuel

From your standpoint the installing of a Heating Apparatus presents two desirable opportunities—first, to add to your profits and, second, to please your customer and thus gain a permanent hold on his trade. How much easier to accomplish this when you use a Heater that is time-tested and sure—one that the great majority of our people know to be the best !

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

IT is understood that the Nova Scotia Coal & Iron Co. are proposing to establish a shovel factory at North Sydney, N.S. Picks and miners' tools would also be manufactured for the trade in the Maritime Provinces and Newfoundland.

The Elk Lumber and Manufacturing Co. will build new mills at Hosmer, B. C.

The Manning Wood Fiber Co. of Toronto established a factory at Owen Sound.

The C.P.R. have decided to immediately construct a line of railway into the town of Macleod, Alberta.

William Gray & Sons, carriage manufacturers, Chatham, intend establishing a branch factory at Winnipeg.

Red Deer, Alberta, ratepayers have voted to spend $10,000 to aid the erection of a flour mill and elevator at that point.

Berlin is endeavoring to induce the London Machine & Tool Co. to move from London. Various inducements are being offered.

A company has been incorporated at Truro to build a railway to Parrsboro and to Maccan.

The Dominion Geological Survey staff is trying to locate an iron belt in New Brunswick similar to the one discovered in Nova Scotia.

One of the largest American farm implement companies is negotiating for a site and power, intending to locate a large plant at Fort William.

W. J. Pendray's large silk works at Victoria, B.C., are to be enlarged and $45,000 will be spent on a new plant to be established at Sehl's Point in Victoria, B.C.

A new woodenware factory has been established at Hampton, N.B., to manufacture pails and tubs. The capital stock is $24,000, and W. J. Brown, Hampton, is general manager.

R. M. Brown and J. G. Milne of Toronto propose to establish a grist mill at New Liskeard, and may also install an electric plant to furnish the town with power and light.

The C.P.R. is erecting a new machine shop at Peterboro, covering an area of 100 x 60 feet. It is considered necessary for the repairs of locomotives in service between Montreal and Toronto.

The Welland Electric Power Transmission with headquarters at St. Catharines contemplate running power lines to Hamilton and Toronto. The company is backed by New York capital.

Canadian General Electric Co. have secured option on large tracts of land adjoining their present site at Peterboro and propose to spend between $30,000 and $40,000 in increasing their plant.

It is the reported intention of the Lake Superior Corporation's Algoma Steel Company to build a fifty-ton charcoal iron furnace at its plant at Sault Ste. Marie, Ont., especially to take care of the output of the company's charcoal kilns.

The company which is to undertake the development of the Kaministiqua Falls near Port Arthur has let contracts to the Canadian General Electric Co. for erecting equipment worth about $200,000.

The Case Threshing Machine Co., Racine, Wis., are planning to erect a mammoth factory at Winnipeg, in order to supply the Canadian trade. A site has already been secured on the shores of Lake Winnipeg.

Despite the doubling of the import duty on agricultural machinery entering Australia, one of the largest consignments of reapers, binders, threshers and harvesters ever shipped from Vancouver left last week for Sydney.

The Newfoundland Government has about completed the laying of a cable from Canso to Port Au Basque, Nfld., to give the colony telegraphic communication with the mainland independent of the service of the Anglo-American Co.

The rumor that the Steel Trust intends to locate in Canada has been revived. Sandwich is to be the site of the new plant. According to a Detroit despatch land is being acquired along the Detroit River and a very large plant will be established.

The Manitoba Peat Company's plant at Fort Frances has commenced operations. The plant is operated by electricity and contains a large amount of machinery and several storage sheds. The company owns about twenty square miles of peat bogs in the vicinity.

The C.P.R. has ordered rolling stock from the Angus shops at Montreal amounting in value to $3,000,000. The order includes 25 parlor, sleeping and dining cars, 90 passenger coaches and 3,000 freight cars. Twenty-five additional locomotives are already on order.

The Fowler Canadian Co. propose erecting large additions to their factory at Hamilton, the cost of which will be between $50,000 and $60,000. The company now employs about 150 hands and the new additions are made in order that they may enter the beef slaughter business.

It is reported that the Baylis Pulp & Paper Co., of Binghamton, N.Y., have purchased three hundred miles of spruce timber on the River Ste. Anne, thirty miles from Quebec city, at a cost of about $1,000,000. The company will establish pulp and paper mills in that vicinity to cost $700,000.

The Hart Corundum Wheel Company and the Canadian Corundum Company of Hamilton have amalgamated under the name of the Canadian Hart Corundum Wheel Company, with a capital stock of $75,000. The applicants for the charter were the following : Charles D. Warren, Toronto ; C. S. Wilcox, George F. Webb, Harley E. Sherk, directors, and Andrew S. Devine and F. H. Whitton.

The trade returns for the last fiscal year as compared with 1904 show a re-

markable decline in the imports into Canada from the United States of the leading implements for farm use. It may be significant that no complaint was made by the western implement representatives while the Tariff Commission was sitting at Winnipeg, although several other manufacturers were heard from. Taking the ten most important items of import for farm use, which must of necessity be the most important in the consuming west, one finds that the total in 1904 was $4,006,534, while in 1905 it was only $2,804,425, a decrease of $1,202,109, or about one-third. In nearly every item there was a decrease, showing the general trend in the direction of home purchasing.

Companies Incorporated.

The Martin-Senour Co., capital stock $50,000, purpose to manufacture and deal in paints, colors, chemicals, varnishes, oils, glass and all ingredients and products thereof.

Boston Varnish Company, capital stock $50,000, for the purpose to manufacture and deal in paints, chemicals, varnishes, oils, glass and all ingredients relating thereto.

The Canadian Glass Manufacturing Co., Montreal, capital stock $25,000, purpose to manufacture and sell all kinds of glassware, and all material and machinery connected with the same.

The General Brass Works, Toronto, purpose to deal in brass goods, share capital $50,000. Directors are James William Baby, Alfred William Ecclestone and Alexander Watt, all of Hamilton, Ont.

The Sherwin-Williams Co., of Ohio, have been registered in Ontario to carry on the business in paints, oils and colors. The company have appointed A. J. Russell Snow, of Toronto, solicitor, to be their attorney.

Canadian Swensons, Lindsay, share capital $1,600, for the purpose of dealing in all kinds of machinery, etc. Directors to be Henry Rustad of Cresco, Iowa, Isaac Ernest Weldon and William Henry Kennedy of Lindsay, Ont.

The Canadian Tap and Die Co., Galt, purpose to carry on business connected with screw-cutting tools, machinery, etc. Share capital to be $40,000, directors William Morley Preston, Galt, and Franklin Edward Snow and Frank Orrin Wells of Greenfield, Mass.

B. F. Sturtevant Company, of Massachusetts, have been registered in Ontario to manufacture and sell steam heaters, fans and other engines, electric and other motors, etc. The company have appointed John Colon Grant, of Toronto, manager, to be their attorney.

The Oshawa Heat, Light and Power Co., Toronto, purpose to manufacture and supply gas and other artificial light for heating and cooking, etc. Share capital to be $100,000, and the directors are Peter Ryan and Robert James Goudy of Toronto and Loftus Edwin Dancey of Goderich.

The Manson-Campbell Co. have been allowed to increase the capital stock of the company from $300,000 to $500,000.

The Canada Fence Company, London, Ont., purpose to manufacture and sell wire fences and wire goods, share capital to be $40,000. Directors are William Samuel Bryers Barkwell, James Emsley Sutton of London, and Donald McLachlan of Glencoe.



No. 23. OSHAWA, ONT. SEPT. 30, 1905

METAL ROOFING, LATHING and REINFORCED CONCRETE

Three Winners

It is a well-known fact that any construction made entirely of iron or steel is practically immune from the effects of lightning, as the amount of electricity accumulated in the case of a lightning stroke is allowed to distribute itself over the large surface of the roof and to flow off (as water) to the earth at many places, with greatly reduced intensity.

Conditions are quite similar in connection with buildings made entirely with armored concrete—that is, concrete reinforced with expanded metal, etc.—as the discharging current will find the roofing iron and distribution rods of an armored concrete roof struck by lightning a good conductor of electricity, so as to flow off to the more substantial girder iron with which the roofing iron is connected by expanded steel mesh.

Now, as experience has shown lightning not to be discharged to the earth in a concentrated jet from the place of striking, but to have a tendency to distribute itself on all sides if possible, the electricity will be diffused throughout the roof traversed by the net-work of iron reinforcement. The electricity being greatly reduced in intensity will have an excellent opportunity of flowing off to the ground through the metallic conduit used as a reinforcement and the steel superstructure, thus being communicated to the foundation which, in turn, transmits it to the earth.

This shows that neither artificial lightning arresters, nor other appliances of a like nature, will be required for the protection against lightning on a structure consisting of steel or iron construction or reinforced concrete.

Get into this busines at once, and watch the profits for you.

Write or have a talk to **"Pedlar."**

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

"DOMINION BRAND"

IF YOU WANT TO **CATCH** THE TRADE AND **HOLD** IT,
HANDLE OUR QUICK-SELLING LINES OF

Tarred Felt, Roofing Pitch AND Coal Tar

LOCKERBY & McCOMB, 65 Shannon St., Montreal

Your Responsibility

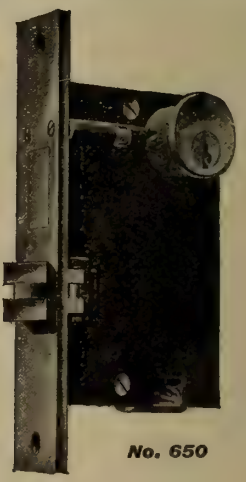


In the relation of seller to user is an important one. Your customer is probably your neighbor and friend and he looks to you for goods that are right. He expects you to give him his money's worth. When you handle the Atkins Celebrated Silver Steel Saws you feel secure in the knowledge that you are selling the finest goods it is possible to obtain in the Saw line. Are you selling them? If no NOW is a good time to make a change for the better. Write for Catalogue and Discounts.

E. C. ATKINS & CO., INCORPORATED Leading Saw and Tool Manufacturers Factories and Home Office . . . **Indianapolis, Ind., U.S.A**

CANADIAN BRANCH: 56 King St. E., Toronto, Can. *NORTHWESTERN BRANCH: Minneapolis, Minn.*

Price and Quality



No. 650

Low Price and High Quality are characteristic of Gurney Cylinder Locks.

Gurney Cylinder Locks

are the equal of any lock on the market. Our workmen and designers are experts. We use the very best raw material and guarantee every lock we send out.

The price is very low—a matter of importance to every builder in making a tender.

Catalogue No. 7 and Supplements will show you GURNEY CYLINDER LOCKS and numerous designs in artistic trimmings.

THE GURNEY, TILDEN CO., Limited

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co, Limited

HAMILTON

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

IMPROVED FIRE PROTECTION.

A GREAT development has recently taken place in all kinds of equipment to prevent fires, but perhaps the most novel and certainly one of the most effective of these is the water curtain which has been more or less in use for about four years. The first attempts were necessarily crude, but now the experts think that they have the water curtain down to perfection.

The great Toronto fire a little over a year ago showed conclusively the great danger there is of buildings taking fire from those which are burning in the immediate vicinity. Especially in lanes and narrow streets, the air becomes superheated so that a vacuum is formed which will crash the window glass in adjoining structures unless it be kept cool. This may also be done by a stream of water from a hose striking the heated glass, which immediately breaks and creates a back draught, thus drawing in the fire. Almost all big fires in a crowded district spread in this manner.

The idea of a "water curtain" to protect against danger of this kind has grown so fast in the past three or four years that it is now reduced to a science, and only this week a Hardware and Metal representative witnessed the testing in Montreal of what is claimed to be the latest and most complete water curtain on the American continent. This curtain has been installed by the H. G. Vogel Co., whose Canadian office is on St. George street, Montreal, and it completely envelopes the great fur warehouse of L. Gnaedinger, Son & Co., on the corner of St. Peter and Recollet streets of the same city.

This particular curtain is in three sections, one of them covering the front of the building on St. Peter street, while the other two protect the Recollet street side. They can be operated singly and independently of each other. Each section is connected with the city water main by a large galvanized pipe, from which smaller pipes of the same material are projected along the tops of the windows, in the four upper storeys. It is claimed that in a high building like this the two lower storeys will require no further protection than is afforded by water dripping from the upper part of the building. At each window is a brass sprinkler head, which perforates the pipe and is so arranged that water spouting from the pipe strikes a concave surface which splashes the water over the whole window. It is obviously impossible for these windows to become heated, and they will consequently refuse to break and let in the back draught which draws the fire after it.

In the case of buildings with wooden cornices, another pipe is laid along the cornice, and sprinkler heads placed at intervals keep the cornice soaked during the progress of a fire in the vicinity. It is obvious that a building with metal roof and cornices, whose exposed sides are equipped with a water curtain, is practically immune from fire from the outside. The force is supplied from the city water mains, but, should these give out, a steamer may be placed in commission and equally good results obtained.

In case of fire on the inside of the building automatic sprinkler systems have been introduced in many of the large warehouses and factories, so designed as to almost immediately extinguish fires which are the result of spontaneous combustion or other causes. A series of pipes, located on the ceiling, with sprinkler heads at intervals of eight feet or thereabouts, form the automatic sprinkler system. The sprinkler heads are plugged with a substance which melts at a relative low temperature, allowing the water to escape automatically and extinguish the fire. As the hottest part of any room is near the ceiling, no fire can get much headway before it is stopped by this ingenious device.

Among the Montreal business houses who have adopted the automatic sprinklers are S. S. Carsley Co., Henry Morgan & Co., W. R. Brock Co., Limited; C.P.R. Angus Shops; Canada Car Co.; Ogilvie Flour Mills; Thos. Robertson Co., Limited, and the Canada Paint Co.

The net result of the adoption of these precautions has been a reduction of between 50 and 75 per cent. in insurance rates. That this system is being extensively adopted is proven by the success attending the efforts of the H. G. Vogel Co., whose business is, exclusively, the installation of automatic sprinklers and water curtains.

BUILDING NOTES.

A labor temple is to be erected at Brantford.

A new Town Hall to cost $10,850 is to be built at Arcola, Man.

A new skating rink is to be built at Fort William by the Y.M.C.A.

The town of Qu'Appelle, Saskatchewan, is to build a Town Hall.

The Bank of Commerce is to erect a new bank building at Vancouver.

The Quebec Bank is to build a $20,000 branch bank building at Montreal.

T. L. Kinarde is building six brick houses in Hamilton to cost $9,000.

The Disciples Church at Ridgetown is being enlarged at a cost of $2,500.

Thornton & Douglas, Hamilton, are building a factory to cost $13,000.

The J. Bertram & Sons Co., Dundas, are to erect a large foundry building.

E. J. O'Neill, Guelph, is to erect a large cement warehouse in that city.

The Welcome Soap Co. are building an addition to their factory at St. John, N.B.

A $20,000 concrete bridge is to be built across the Rideau River at Ottawa.

W. F. McLaren, Hamilton, has secured a permit to erect a brick residence to cost $4,500.

Copp, Dixon & Co. have decided to rebuild their wood working factory at Sackville, N.B.

J. A. M. Atkins, Winnipeg, is to enlarge his office building by the addition of two stories.

James Wilson, Stratford, Ont., is to erect a model apartment house in that city next spring.

A stock company is being formed to erect a large summer hotel costing about $40,000 at Orillia.

R. Alexander, Vancouver, is to erect a $10,000 residence. Parr & Fee are the architects in charge.

A new brick planing mill 80x160 feet and costing $20,000 is to be erected at Sarnia by W. F. Lawrence.

A new gymnasium to cost $10,000 is to be erected in connection with the Baptist College at Woodstock, Ont.

Mrs. Fairbanks, Vancouver, is to erect a $3,500 building at Seventh and Westminster avenues, Mount Pleasant.

Campbell & Morris, Winnipeg, are to erect a business block in North Winnipeg, the block to be four stories high.

John Aitcheson has prepared plans for a modern apartment house, containing six dwellings, to be built in Winnipeg.

Burton & Smith, Brandon, are to erect a $40,000 hotel at Saskatoon, the building being 75x60 and to contain 49 bedrooms.

J. A. Brown is making extensive alterations in the New York block on Granville street, Vancouver, the work costing $20,000.

H. A. Wright, Phoenix, B.C., has secured the contract to erect a new City Hall in that town, the cost to be $4,345, including the plumbing.

William Ker, Hamilton, is to build two brick residences to cost $1,800 each and Frank Depew of the same city is to build two brick houses to cost $3,800.

W. Noble & Co., Hamilton, are to build five frame dwellings to cost $4,500 and D. Brown is to build two brick houses in the same city to cost $4,000.

Messrs. McLachlin Bros. of Arnprior will construct a concrete dam and steel bridge across the Madawaska River. The cost of the undertaking will be about $75,000.

The Jenckes Machine Company, of Sherbrooke, Que., have commenced work on their new factory buildings at St. Catharines, Ont., the contract having been awarded to Newman Bros.

Mr. Tuckwell, Winnipeg, has purchased a site in Fort Rouge West, where he will erect a private school next year. The Children's Aid Society has also purchased a site for a home in the same locality.

E. B. Dean, Vancouver, has secured a permit to erect a frame block to cost $40,000. Another permit issued in the same city was to A. McDonald for the construction of four buildings to cost $8,800.

Buildings being erected in Dauphin, Man., this year are valued at $132,000, an excellent growth for this western town. In all 70 buildings have been erected, most all valued at between $1,000 and $4,000.

The Thornton & Douglas Co., manufacturers of clothing, etc., Stratford, Ont., have purchased a large site in Hamilton, Ont., upon which they will erect a three-story factory building 110x60 feet.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

OF ONTARIO Limited

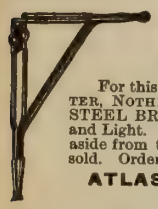
Head Office:

Ingersoll, Ontario.

Walter Mills, General Manager

Ask for quotations for Septic Tanks.

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U. S. A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables— "Machinery," Newport.

Emlyn Engineering Works
NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited

HANOVER, ONTARIO

Manufacturers of the celebrated "Saugeen Brand"
OF PORTLAND CEMENT.

Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

Don't Forget the Name...
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

...FULL STOCK...
Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

MANUFACTURERS' ASSOCIATION AT QUEBEC.

Notes on the Annual Convention in the Ancient Capital.—Continued.

The Manufacturing Grocers' section had a knotty problem to solve, or rather, try to solve. They struggled with the proposed amendments to the pure food law, and after discussing it all morning decided to have another meeting a few weeks hence in Toronto. The particular problem to be solved is what constitutes pure food. If that which is injurious was the question it would not be so difficult, but when there are certain ingredients used in the manufacture of an article with a view to cheapening it, which are beneficial rather than otherwise, the wise ones are at sea. In a word, what is the standard of purity and who is to determine it? Philosophers never had a more difficult task when they essayed to determine "what is truth."

* * *

While there were a number of woolen manufacturers present, the different branches of that industry were not "strongly manned." The section, however, met and after transacting routine business adjourned to meet again shortly. The tariff is of course the chief matter of concern to the woolen manufacturers, and their attitude is the same as it has been for some time.

* * *

In the evening Quebec did itself proud. The weather outside was disagreeable, but the arrangements for the entertainment of the guests were so elaborate and complete that within the town hall, where the public reception was held, the unpleasantness of the outside was forgotten. From the sidewalk to the main entrance of the hall was erected a canopy which effectually sheltered the guests as they alighted from their carriages. Over the main entrance in letters of electric light was the word "Welcome." The corridors were hung with bunting and the Union Jack and tri-color flags, while in front of the gallery in the council chamber, where the reception took place, were the words emblazoned in electric light, "Soley les bien venu." The ladies with their bright and pretty dresses of course very much added to the scene. Addresses of welcome were made by Mayor Parent and Mr. G. A. Vandry, and responded to by Mr. W. K. McNaught, after which President W. K. George delivered his annual address. It was a masterly effort. Dancing followed the speech-making.

* * *

On Tuesday evening a reception was tendered the party at Spencerwood by Lieut.-Governor Jette.

* * *

Mr. J. M. Taylor of the Taylor-Forbes Co., manufacturers of hardware, lawn mowers and radiators, Guelph, Ont., is, with Mr. John Bertram, Sr., of the Bertram Engine Works, Dundas, the oldest member of the executive council of the Canadian Manufacturers' Association having been a member thereof for 17 years, although he is only a young man of 39. During the convention in Quebec last week his many friends presented him with a handsome "loving cup," the presentation taking place on Wednesday evening at the Chateau Frontenac.

* * *

The chief interest in the election was, of course, centred around the contest for the vice-presidency. There were two aspirants for this office, namely, Mr. J. O. Thorn, of the Metallic Roofing Co., Toronto, and Mr. Harry Cockshutt, of the Cockshutt Plow Co., Brantford. Both gentlemen have been energetic workers in the interest of the association and both had a large number of friends. Mr. Cockshutt, however, was the choice of the convention for the office, the holder of which naturally steps into the chief executive office the following year. Mr. Cockshutt has just returned from a six months trip to Australia, while Mr. Thorn has been in Winnipeg for some time on business and is still there.

* * *

The banquet on Wednesday night at the Chateau Frontenac was particularly unique in one respect and that was in regard to the speeches delivered. Certainly at no previous banquet of the association was there such a galaxy of brilliant speakers. Hon. Mr. Lemieux, the Solicitor-General of the Laurier Cabinet, delivered an address the eloquence of which will not be forgotten by any one privileged to hear him. Then there was the silver-tongued Sir Wilfrid Laurier, the Hon. Mr. Fitzpatrick, Attorney-General of the Laurier Cabinet, Hon. R. L. Borden, leader of the Opposition, Lieut.-Governor Jette, to say nothing of the excellent addresses delivered by such members of the association as President Ballantyne, ex-President Geo. Drummond, and Mr. Edward Gurney

MANUFACTURERS ENTERTAINED.

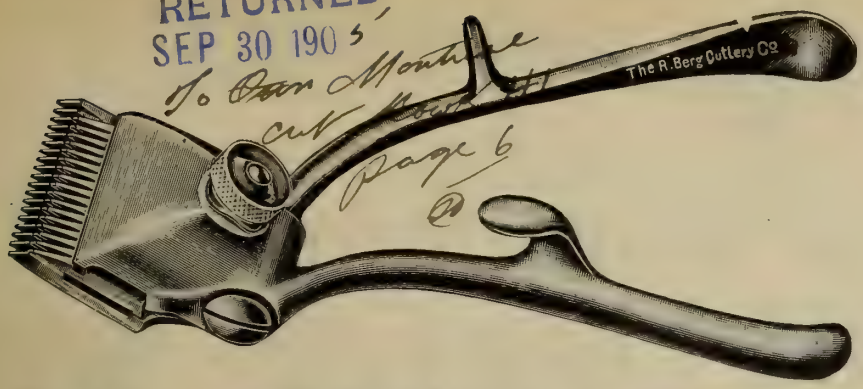
Those members of the Canadian Manufacturers' Association who attended the convention recently held in the city of Quebec will not easily forget the great hospitality extended them on all sides, and the members of the reception committee of the local branch, namely, Messrs. Vandry, Amyot, Morin, Wiggs, Moisan, Ross, and others, deserve credit for the way in which they carried out their programme. Several of the leading business establishments were handsomely decorated, including Z. Paquet's large departmental building, (G. A. Vandry manager), and the large block of the Mechanics' Supply Co., (W. H. Wiggs owner), where appropriate mottoes were displayed .

The leading local paper, the Morning Chronicle, published a most interesting two-page account of the C.M.A. trip to England and France, under the heading "Personal Reminiscences," by Mr. W. H. Wiggs. Mr. Wiggs also sent to every delegate a series of picture post cards, with views of Quebec thereon, and in addition to this threw open the large showrooms of the Mechanics' Supply Co. to the members of the convention, and many of them availed themselves of the opportunity to visit this up-to-date establishment.

C. M. A. TRIP TO BRITAIN.

Mr. W. H. Wiggs, of the Mechanics' Supply Co., Quebec, informs us that any member of the association desiring a copy of the Morning Chronicle, giving a lengthy account of the association trip to Great Britain, can obtain the same by sending him a post card.

RETURNED
SEP 30 1905



"MARS" TOILET CLIPPERS

With milled corrugated under plates.

Superior workmanship and finish.

SIZES : 00, 0, 1, 2 and 3

Can also be supplied with extra combs.

The most practical Barber's clipper in the market.

F. W. LAMPLOUGH & CO., - - MONTREAL

How Quickly

the boys who have to do the sifting would take the

METALLIC ASH SIFTER

if it were offered to them ! Opportunity for use. Opportunity for sale. Just a matter of advertising. Why not put a few of these sifters in your window ? "Seeing is believing"—when the people know they will buy. You have a good stock of ***Metallic Ash Sifters,*** of course.

C. M. CUTTS & CO., Toronto Junction, Ont.
Sole Makers





MAKE YOUR CHOICE ALWAYS

Sterne's Asbestos Stove and Furnace Cement

Other dealers do this and have a good harvest. What's to hinder you getting a trial order ? We will send any quantity ON APPROVAL. How much for you ?

Secure Prices direct from

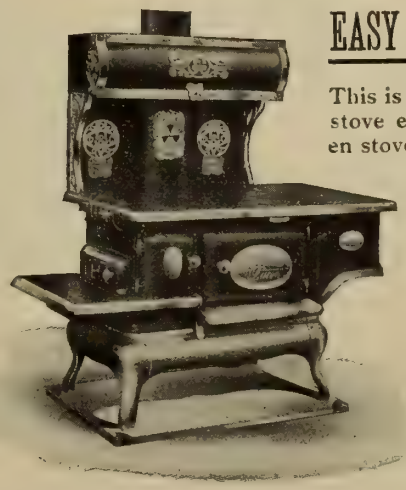
G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

We Make

accurate fitting **Fire Bricks** in a multitude of styles. Prices low. We also make **Furnace and Stove Cement and Stove Castings**

We would like to correspond with you, give you our catalague, forward you our prices. Write.

JONES BROS., - Bracondale P.O., Ont.



EASY TO CLEAN

This is a good point in a stove especially a kitchen stove.

The EMPIRE QUEEN RANGE

has a deep ash-pit, provided with a large ash-pan, to receive and remove ashes, and this pan has effective ash-chutes to prevent the ashes from falling other than into the pan. The flues are constructed on the most modern principles. Become an agent for **The Empire Queen Range.** It sells readily.

The Canadian Heating & Ventilating Co. Limited

OWEN SOUND, Ontario

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

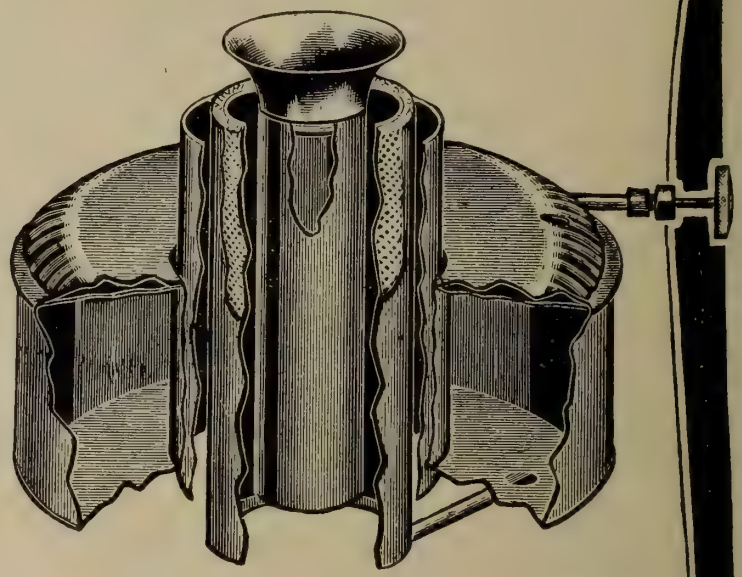


The Aluminum Oil Heater

Sales over the million mark, because we've got the heater that gets the trade.

Get our printed matter and prices before buying elsewhere.

Remember, the *Aluminum* is the only Oil Heater which heats by radiation as well as by circulation—only Oil Heater with partition in drum to deflect the heat and prevent it going straight up.



Our Safety Burner Does It

Look at this burner. Notice solid gallery and solid flame spreader. No perforations there to clog up.

See those generous air passages which makes ventilation and combustion perfect. No possibility of explosions there. Simple in operation as a lamp. Any child can take out and put in wick. Remember, the *Aluminum* is the only Oil Heater that radiates heat like a base burner, from all points. We fully guarantee every *Aluminum* Oil Heater.

Get orders in early for everybody's "getting in our band wagon."

Metal Stamping Co., Dept. 12.

Jackson, Michigan, U.S.A.

W. J. McMurtry, Galt, Ont.

Canadian Agent.

STOVES AND TINWARE

A CANADIAN TIN PLATE INDUSTRY.

FOR some months past readers of of the daily papers have been periodically treated to glowing accounts of the success attending the promotion of a new industry to operate at Morrisburg, Ont., under the name of the Canada Tin Plate & Steel Co. As a friend of all Canadian industries, Hardware and Metal has spent some time in carefully investigating the status and prospects of the new firm. In the course of our inquiry many of the largest manufacturers consuming tin plates and Canada plates (the proposed output of the new concern) have been interviewed, and their views incorporated in this article may be taken as a fair indication of the position maintained by the Canadian interests involved.

The home of the tin plate industry is in Wales, a country which is admirably adapted for the production of this article, having the necessary tin, iron and coal in large quantities. Even the great republic on our southern boundaries was content to import Welsh tin plates until a population of sixty millions seemed to warrant home production, and the Pittsburg district, with its great deposits of iron and coal, gave every promise of success. But, before the Americans could compete with foreign manufacturers, imported tin plates were discriminated against by a specific duty almost equivalent to 70 per cent. ad valorem. The American industry, thus protected, has been steadily growing, but even yet its success is scarcely assured.

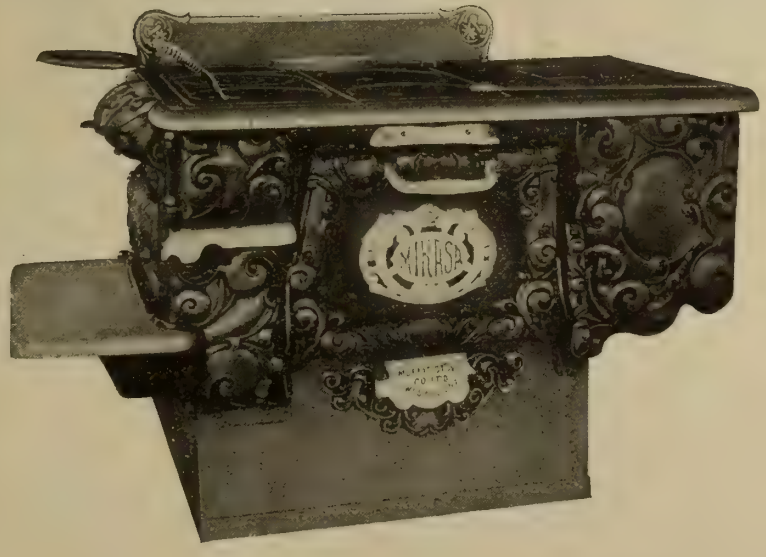
Canada now has a population of, say, six millions, and is consuming a fair quantity of tin plate. As the Canadian tariff puts no duty on this article, it can be delivered to our manufacturers at a moderate expense, and it is estimated that the annual consumption of tin plate, Canada plate and sheet steel, in Canada, amounts to about $4,000,000. It is now proposed to supply this demand with goods "Made in Canada."

Whether this can be done successfully is seriously questioned by the experts whom we have consulted, the chances of success being greatly impaired by the unusual site chosen for the new company's mills. If they were situated at Sydney, in close proximity to the coal and iron mines, there would be some hope of ultimate success. But the town of Morrisburg has been chosen for no other apparent reason than that the promoter of the company holds a franchise from the municipality granting, free of cost, 700 electric horse power, free light and water, and exemption from taxation, for twenty years. It is understood that he intends handing over this franchise to the company for a consideration.

As the only advantage possessed by Morrisburg is water power, and the raw material required will have to be carried so far, we are forced to the conclusion that tin plate cannot be economically manufactured there. Conditions are very similar to those which attended the disastrous attempt to manufacture glass in Napanee some years ago. Labor will be expensive; it will mean a serious item to pay long-haulage freight on raw materials, and shipping facilities for the finished product will be by no means good. This combination of circumstances will necessitate some kind of Government assistance, and it is thought that the Morrisburg company will make a strong bid for support from that quarter.

This assistance may be given in two different ways. The company officials will probably propose that a bounty be paid on the product of the mills, but this is an idea which the Government can scarcely entertain, as the recent withdrawal of the bounty on steel rails seems to indicate a departure from that policy. In any case, the bounty must be regarded as merely preparatory to the establishment of a protective duty, which would be inevitable. The second and more probable method of assistance is a duty which, to be of any advantage, will, according to a conservative estimate, have to be at least 30 per cent., thus giving a protection of 20 per cent. against the British product.

And this is where the difficulty arises. Such a duty would jeopardize some of our oldest and most important inter-





Cut showing cast iron flue back, guuranteed for twenty years. Steel or sheet iron flue backs rust out in a few years on account of the creosote, and condensation of smoke from the stovepipe and chimney.

THE "MIKASA" NATIONAL STEEL RANGE
IN CABINET FORM

The "Mikasa" cannot be beat in its class. The rivet work on the back of the range is just as perfect as on the front.

We guarantee that not one ounce of malleable iron is used in our fire-pots or other parts of the range, except where tensile strength only is required.

The pouch feed door is extra large, and will allow you to feed the fire when the top is covered with vessels.

Our oven bottom patent truss is rivetted in such a manner to the oven bottom that it impossible to warp, crack or change its surface in any way.

Key-plate top, sectional cover, reversible duplex grate, balanced oven door, and large ash pit, are some of the many practical and selling features of the "Mikasa" Range.

MADE ONLY BY **THE MOFFAT STOVE CO., Limited, WESTON, ONT.,** WINNIPEG CALGARY

"Made in Canada"
For Forty Years

Trade C Mark

To The Trade

PLEASE NOTE: That every box of Horse Shoe Nails manufactured or sold by us, has our name and registered trade mark (the Gothic letter "C") on same. Any imitation of either on a box of Horse Nails is illegal, and a penal offence in Canada.

The "C" Brand Horse Nails are sold by us with an absolute guarantee, that every nail is perfect and ready for use, or if found otherwise, they will be exchanged free of cost, or purchase money refunded on application.

Our process of manufacture differs in many respects from other makers, and with better results.

We use exclusively the best obtainable charcoal steel nail rods made especially for our requirements in Sweden, the quality of which has the greatest tensile strength (average 54,000 lbs. per square inch), and durability of any material of which we have any knowledge or used in the world for this purpose.

Our nails are of the best proportions according to size and work required; have hardened bevelled points which will penetrate easily into the hardest hoofs, without either split or bend in driving. The heads will not break off in the most severe frosty weather, or from hard usage on hard roads or stone paved streets.

The combination which "C" brand nails have of great toughness and durability, enables the clinch to hold the shoe on firmly until worn out, or its removal is required.

We claim they are not surpassed in quality, pattern or finish by any other horse shoe nails made in the world, and therefore will be found the most economical for the farrier to use, as compared with any lower priced article made by the "cold process" or of cheaper material.

When asked to purchase second quality nails, now being pushed in Canada, please do not forget that our "C" brand is made in Canada by Canadian labor, and therefore your preference is respectfully solicited by ordering the "C" brand.

We make one quality and have only one price, namely, 4, 10 and 7½ per cent. **discount f.o.b. Montreal.**

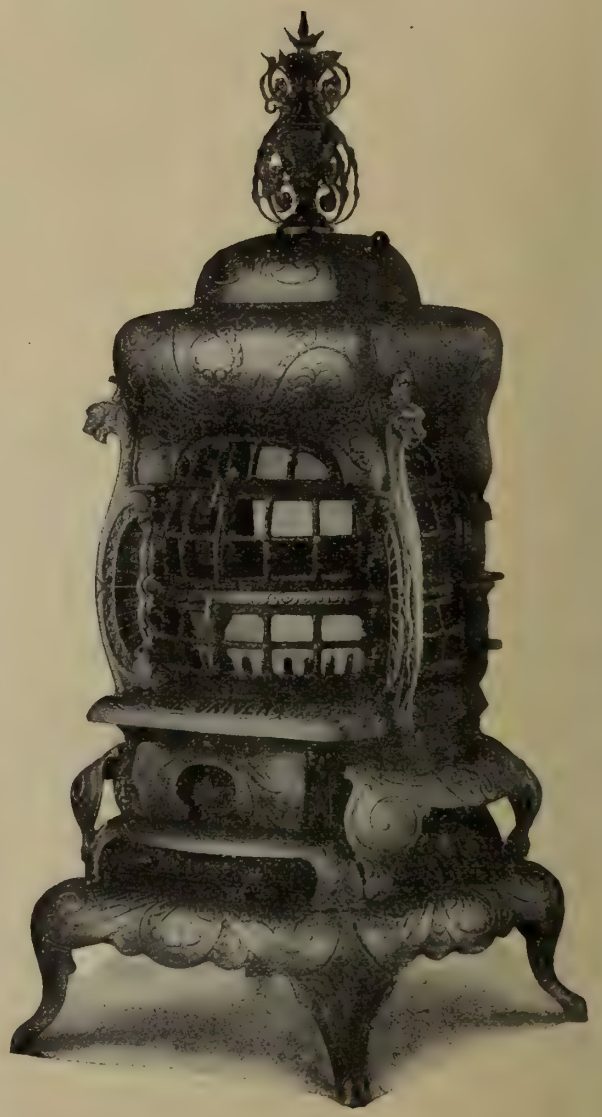
Canada Horse Nail Company

MONTREAL

Established 1865

BASE BURNERS

ARE NOW IN DEMAND



The base burner you want to buy is the base burner that will sell—the one with some individuality.

The GRAND IDEA is just a little different from anything else on the market.

A LITTLE BETTER AND A LITTLE MORE UP-TO-DATE.

The **GUELPH STOVE CO.,** Limited

Guelph

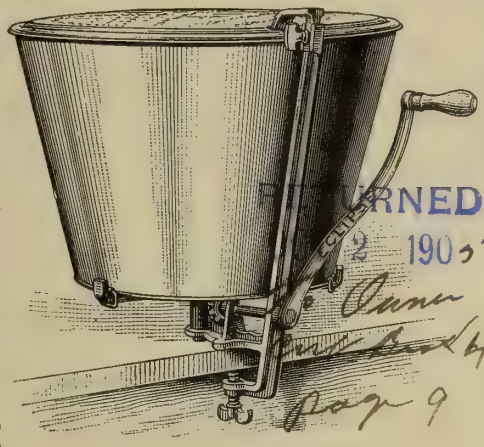
ests, and would raise prices over the whole of Canada for the benefit of one institution, which, to say the least, is merely an experiment. The principal manufacturers whose raw material is tin plate, or Canada plate, are a unit against such an imposition, and it is said that the Canadian Manufacturers' Association will strongly oppose it before the Tariff Commission.

Perhaps the greatest opposition to the scheme comes from the canners of the Dominion. It is a well-known fact that, in the case of many canned goods, the chief cost of production lies in the cans. Therefore, it may easily be seen that any increase in the cost of tin cans, which would be the result of a duty on tin plate, will be prejudicial to the interests of the canners. It is freely stated that to them a small duty on tin plate will be serious, while one adequate to protect the new industry would be nothing short of ruinous. It would permit the American canners to dump their products on our markets at a price which the Canadians could not touch. As a matter of fact, both the canners and manufacturers of general tinware are experiencing fierce competition from the American goods even now.

Briefly, the opinion of the trade who are interested in tin and Canada plate and sheet steel may be summed up in the words of W. E. Ramsay, Montreal representative of the Pedlar People, who thus expressed himself: "If there had been any need of such a thing in Canada, it would have been established long ago by Old Country firms. In the event of the Canada Tin Plate Co. starting a plant at Morrisburg, it is patent that they will approach the Government with hat in hand and ask for a high protective duty on their products. It will mean a serious blow to every producer of sheet steel materials, tin plate products, etc., and will consequently increase the price to the consumer, especially in the Northwest, where wood seems to be scarce and sheet metal products are generally used in construction. An observer has only to look back ten years (that is, since the Fielding Tariff and British Tariff became effective) and consider the great expansion that has taken place in the plants using tin plate, Canada plate and sheet steel as their raw material, to see the effect that this tariff has had on trade in general. It certainly means that if the duty is increased on the product of the proposed Morrisburg mill a few favored persons will become millionaires at the expense of every other citizen of the country."

ECLIPSE BREAD MIXER.

THE accompanying cut shows a new bread kneader, made by the Summer Mfg. Co., No. 229 Franklin street, Boston. Its novelty consists in the tinned dasher being held firmly by a set screw to the frame, which is attached by a thumb screw to the table. The can is held by three wire loops to a spider, which is revolved by a gearing underneath.

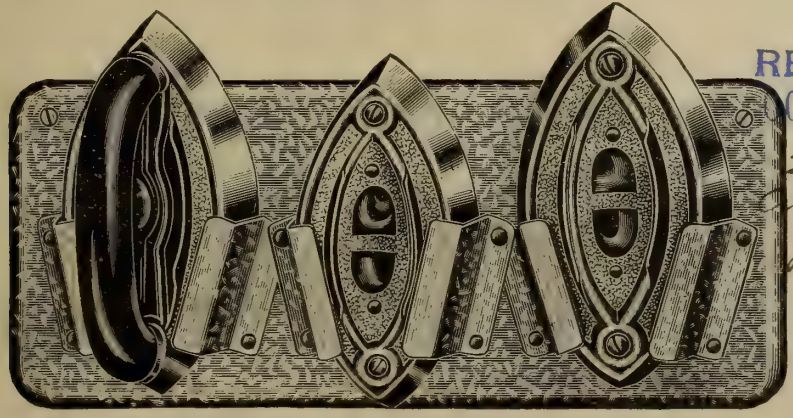


Eclipse Bread Mixer and Kneader.

The manufacturers claim: First—The dough is thoroughly kneaded, and the quality of bread is most excellent and always the same. Second—The kneading is done in three minutes, and there is but little strength required to turn the handle. Third—It works equally well with but one quart, as with eight quarts, of flour. A trial invariably proves its excellence.

NEW SAD IRON RACK.

W. H. Glenny & Co., Rochester, N.Y., have put on the market the new sad iron rack which is illustrated herewith. It is 6 x 14 inches in size, and retails for 25c., allowing of a good display of irons in stores and also proving a ready seller. It is made from very heavy galvanized sheet steel, with three pockets of sizes in proportion to the three sizes of the standard sad iron.



Glenny's Sad Iron Rack.

A huge ten-story warehouse is to be erected in Winnipeg by a company of English capitalists. Darling & Pearson, Toronto, will be the architects. The plans call for a building of about 115 x 250 feet, and from ten to fifteen stories high, the building being fireproof throughout.

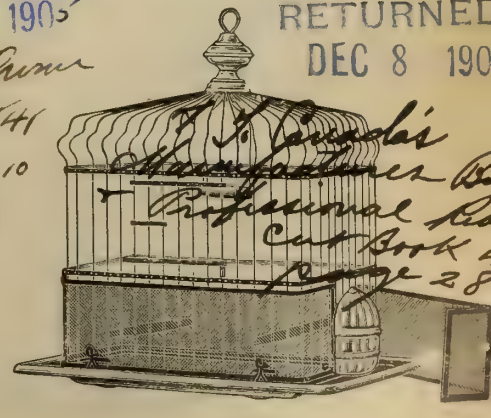


Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F FALKINER.
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH
JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
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No Acid in
YORK
METAL POLISH
York Metal Polish is the quickest, cleanest and most durable polish made. Liquid or paste. 10c. sizes and upwards. Free samples with every order. Free sample to any dealer.
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CAGES



Bird Cages, Japanned and Brass Parrot Cages Squirrel and White Rat and Mouse Cages, Breeding Cages. The most complete line of Cages manufactured on this continent. Styles, sizes and prices to suit every purchaser.

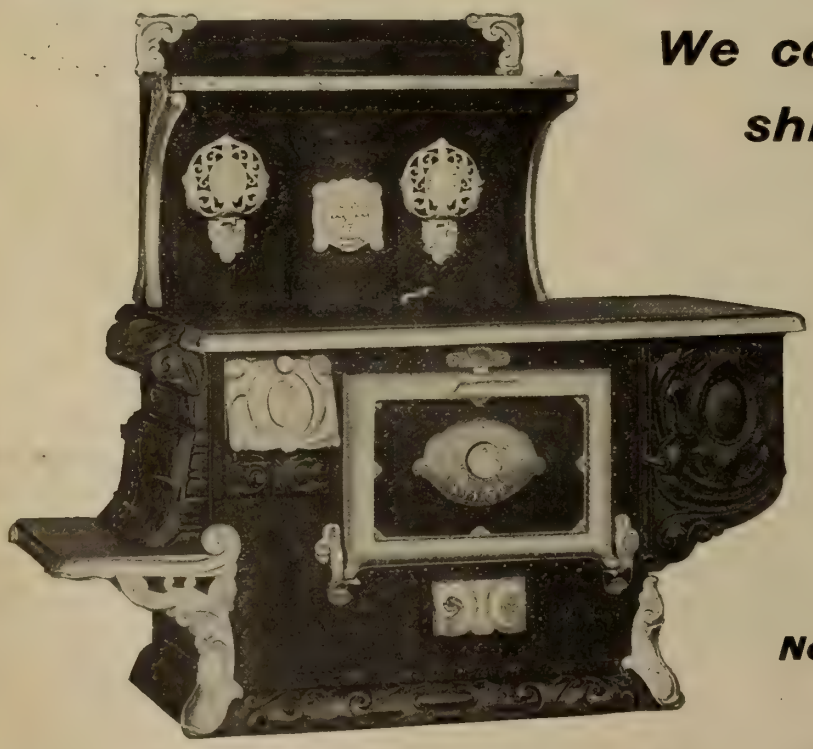
E. T. WRIGHT & CO., Manufacturers **HAMILTON,**

HARDWARE BUSINESS FOR SALE

Owing to the growth of our Specialty Business, now the largest of its kind in Canada, we have decided to dispose of our old established Hardware Business (organized 1867), with possession of the whole or part of the premises occupied, Nos. 1325 to 1331 St. Catherine and 221 to 225 Plessis St., Montreal.

This is a rare opportunity to acquire an up-to-date business with a splendid connection.

JOHN MILLEN & SONS



We can ship promptly

Walker Pilot Steel Ranges

Walker Camp Steel Ranges

Walker Star Steel Ranges

Walker Oaks and Hot Blasts

Now is the time to send in your orders.

WALKER STEEL RANGE CO., Limited, GRIMSBY, Ont.

——Here is the——

"GOOD CHEER" RANGE

You Will Want.

A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price

RETURNED
NOV 15 1905

It has a Full Sized

20-INCH OVEN

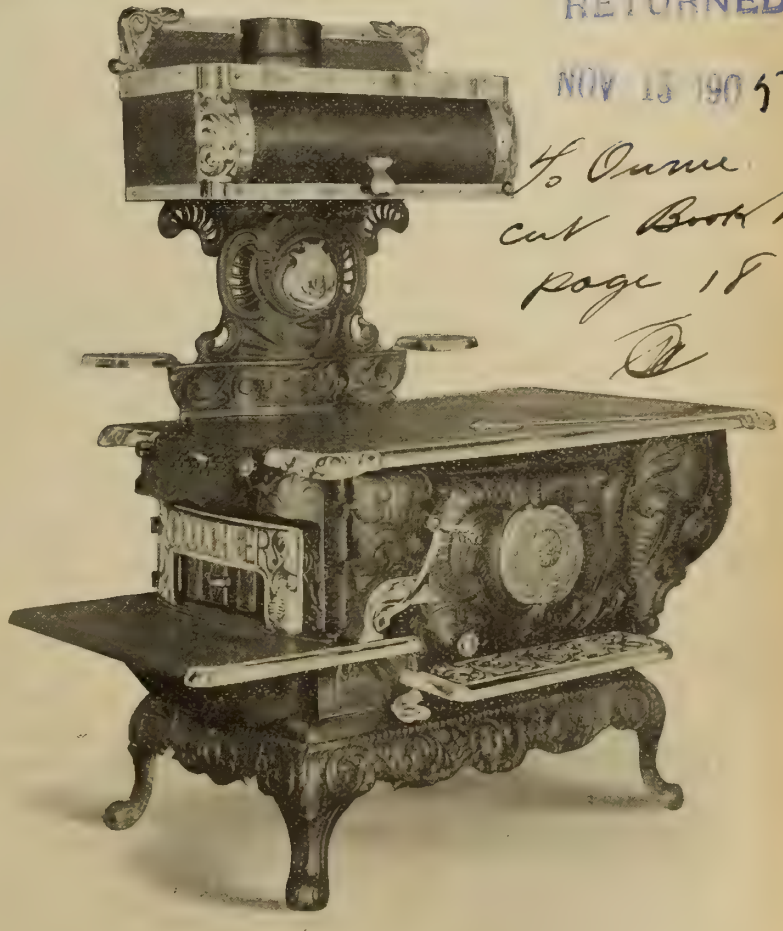
Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted



The "GOOD CHEER" KITCHEN QUEEN

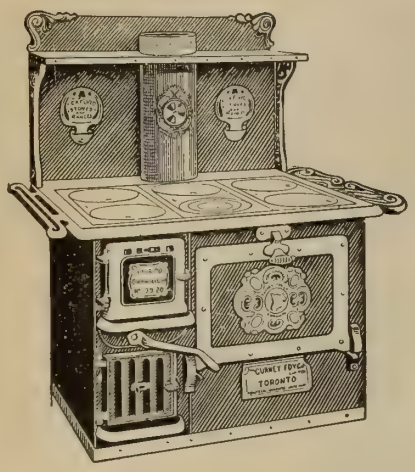
THE JAMES STEWART M'F'G CO. Limited

Winnipeg, Man. **Woodstock, Ont.**

Your Best Interests lie in selling goods which will sustain your reputation, increase the number of satisfied customers and yield you as large a profit as goods which command only a transitory trade.

For sixty years we have been producing the best of everything in stoves and have been assured that we have given the dealer in every instance the best goods and a liberal division of profit.

THE OXFORD CHANCELLOR STEEL RANGE



is the best production of its kind. Its perfect construction and numerous points of superiority are well known.

A Peerless Oven The oven is worthy of special notice. It is a perfect baker and is roomy enough even in the smaller sizes for a large family's needs. The drop-oven door with patent spring gives a perfect basting shelf for roasts.

All Kinds of Fuel Fire-Boxes are provided for hard or soft coal or wood as desired, and are interchangeable so that more than one can be alternated at a moderate extra cost. For burning hard coal the celebrated Duplex Grates give the heat service and can be removed for repairs without disturbing the linings or waterfront.

A Handsome Range Ornamentation adds greatly to the selling qualities of a range, and we have joined an unusual beauty of construction to a style of nickel adornment which gives a most artistic effect.

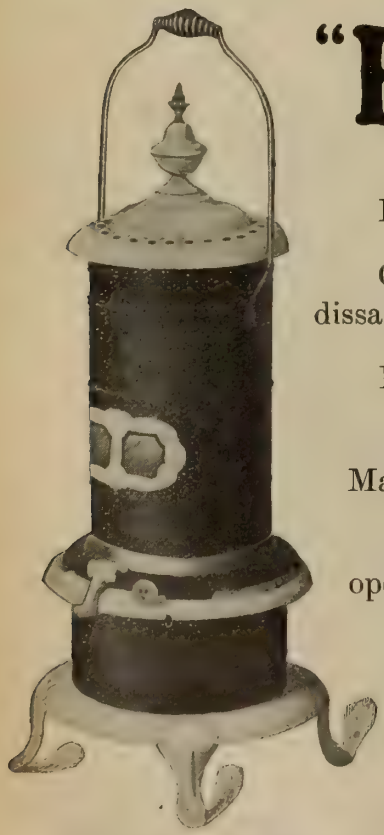
We also manufacture Cast Iron Stoves and Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Steam Boilers, Hot Water Heaters, Radiators, Warm Air Furnaces, and all kinds of Cooking and Heating apparatus, and plumbers' supplies.

Send for Our Handsomely Illustrated Catalogue. It Tells the Whole Story.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER**

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.



"Famous" Oil Heater

It is again time to think of your light heater trade.

Our "Famous" Oil Heater is a proved success, and you will have no dissatisfied customers with it.

Burns with a clear white flame.

Throws out an intense heat at a cost of about one cent per hour. Makes no odor whatever.

Can be carried from room to room, and is so simple that a child can operate it.

Cold air is drawn from off the floor and discharged, thoroughly heated, from top of heater.

Has seamless copper tank which never leaks. We can ship promptly. Advertising matter free.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

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ZURICH, SWITZERLAND - - - - Louis Wolf
Orell Fussli & Co.

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NEW ADVERTISEMENTS.

Millen, John & Son, Montreal.
James & Reid, Perth, Ont.
Stewart, James Mfg. Co., Woodstock.

SANITATION IN MUSKOKA.

LAST week the Provincial Board of Health returned from an inspection of the hotels and private residences in the Muskoka Lakes District, over six hundred buildings being inspected during the trip, about one hundred of these already having installed septic tanks. These were found to be giving excellent satisfaction, but in other places some very dangerous sanitary systems were found, and the owners were ordered to install septic tanks if they desired to occupy the same premises next season. It is altogether likely that over one hundred new tanks will be installed during the coming Winter and Spring, a work large enough to keep a fair number of plumbers busy for several months.

The Board of Health is doing a valuable work in enforcing proper sanitary regulations in Muskoka, the great danger to those who annually seek health and recreation in the cottages and camps on the numberless islands in Muskoka being the defilement of the water supply. General safety depends upon the enforcement of a rule that all garbage and wastes be destroyed by fire or distributed on or under the surface of the ground where it cannot pollute the sources of water supply. Public opinion will endorse the board in preventing slops and drainage from emptying or being thrown into the water. The soil is known to eat up impurities, but as pure water is one of the chief necessities of man—in health resorts particularly—it is dangerous to speculate on the probable presence in the water of agencies capable of destroying the impurities.

Not only is there need for inspection and action by the board in Muskoka, but also in the farming districts and the smaller towns the evils of bad sanitation are evident. Residents in rural communities are beginning to recognize this fact, and modern plumbing is being installed in numerous farm houses and village residences. The energetic work of the board is encouraging this movement, and the result is the establishment of plumbing shops in the smaller towns and an increased business for the manufacturers and supply houses. The Board of Health has the active support of the plumbing and hardware trades in the public work they are engaged in.

THE BANE OF TRADE.

IF you were to ask a number of the most progressive hardware merchants in the country their opinion of the evils existing in the trade, it is almost a certainty that nine out of ten would reply that the worst feature of the entire hardware business is the credit system. More particularly is this the case in districts where the dealers are compelled to depend to a large extent on the farmers' trade. And perhaps the hardware merchants are more peculiarly affected by this condition than those of any other trade, owing to their important dealings with the farming community.

How then is this evil to be dealt with? Is it possible for a country merchant to eradicate the credit abuse altogether? These are questions fraught with the greatest interests of the retail trade, and they must be approached very thoughtfully and very cautiously.

In the first place, the writer is of the opinion that it would be impossible for the dealer in a country town to altogether abolish the giving of credit, but by the exercise of prudence and tact — two qualities which are essential to the successful business man—he can at least adjust some of the difficulties that have been puzzling him. Moreover, in order to secure the best results, he will need all the determination he can muster, and he must not expect to see an immediate improvement in his affairs. Indeed, in some cases it may take two or even three years to accomplish his purpose. That will depend upon the man as well as his surroundings.

Perhaps you would like to turn to strictly cash selling. If so, you must be prepared to practically rebuild your business. Your constituency will be an almost entirely new one. You must appeal to a very different class of customers. Are you prepared to do this, to make such radical changes in your methods?

Again, you may decide to follow, regardless of consequences, some definite policy on credits, hereafter, and if you prove to be as good as your word, it is more than probable that you will lose some of your customers, and your business will need considerable re-shaping before you get back the trade you have lost.

But there is, nevertheless, a feasible plan, and one which has been found successful in many cases. You must decide that you will collect your money earlier in the fall than you have been doing, and follow that plan persistently. When the crops have been harvested and the wheat exchanged for coin of the realm don't let your friends, the butcher, the baker, and the candlestick-maker, get in ahead of you, but wake up and act at once. Furthermore, when your country customers come to you for credit next spring be firm and courageous enough to tell them, with all possible tact, that you are expecting settlements on such and such a day in the fall. Then they will not be surprised when you call upon them to square their accounts, before they have had time to get rid of their year's earnings.

If you will but follow this policy with patience for a few years you will be surprised at the additional respect you will command among your customers, and the additional respect they will feel for themselves. And you will perhaps notice, first of all, that you are being more respected by the wholesale trade. The jobbers have a not unnatural affection for the man who always takes his discounts, and this will be manifested in occasional "snaps" they will give you on odd lines, which will help you to draw trade.

Is this a pleasant picture? Would you like to enjoy the privileges of a cash buyer? Then show that you have determination and persistence, and that you can be tactful in your dealings with customers. Try our plan and see if it will not help you to put down the bane of trade.

PROVINCIAL CONVENTION.

Notices are being sent out advising the members of the coming convention of the Provincial Association of Master Plumbers and Steam Fitters, which will be held in Toronto on Thursday, October 26th. The Executive Committee will meet on Wednesday evening. The date chosen is Thanksgiving Day, and as the railway rates are favorable there should be a full attendance. Meetings will be held in the Association rooms at 21 Richmond St. West.

WATER POWER DEVELOPMENT.

NO matter what may be the outcome of the investigation now being made by the Waterways Commission nor what be the ruling of the Whitney Government in the matter, as to power distribution and its cost, it cannot be gainsaid that the one important consideration as effecting the country at large rests in the matter of the cost of power to the consumer. We have an unalienable birthright in the matter of our water power and no private corporation or political bias should be allowed in any way to act detrimentally to the country's best interests in the matter. Everything points to Canada's industrial supremacy through her advantages in limitless water power. A critical time has been reached in water power development in Canada, particularly as concerns Ontario, from the work that has gone on at Niagara Falls. Millions of money have already been expended and more millions of cash outlay will be required before any appreciable revenue can come to the companies who have shown their faith in the country and in the future of electrical distribution while placing such enormous capital and they should—and there is every reason to believe they will—receive an adequate return for their investment. But as relating to the country's future, it is imperative that the cost per electrical horse power per year be figured to the lowest possible basis. It is strongly advisable that all the water power development on the Canadian side be used in Canadian industries. It is said that sufficient demand does not exist in Canada to serve as a suitable market for the enormous power being developed. Let the companies supply that power at a rate which they well can and still have a fair profit, and the market will arise. Nothing could be more certain.

If the power companies attempt to charge what it is rumored they propose doing in Toronto, and it is to be surmised charges on a like basis within lesser or greater radius of the source of power, it will mean the death knell to electrical power and the hindering and holding back of a wave of industrial activity that fostered at this time would mean everything to future manufacture.

There is another point in connection with the power development problem, and that is its effect on the future of electric traction and hence on transportation. Sufficient advance has been made within the last two years in alternating current motors for electric railway service to place their utility and future position beyond the shadow of a doubt. It is also known that for short distances and numerous runs, the cost of electric transportation is greatly below that of steam. Thus we have a bright outlook regarding cheap transportation, which is an all-important factor to manufacturers and should mean more than would appear at a glance to the manufacturing interests of Western Ontario. Already numerous electric lines operate successfully from town to town, but this is only a beginning and the future will see not only passenger traffic, but heavy freight haulage as well handled by the responsive and powerful electric cars.

Regarding the cost of water power and the saving to manufacturers in Canada from the adoption of electric power industries, Hon. Adam Beck asserts that at present the consumers of the 120,000 H.P., expressly reserved for Canadian users, are using steam, for which they pay not less than $4,000,000 to $5,000,000 per annum, and when the time comes that the steam users of the Province consume 475,000 H.P., which will be available from Niagara, they would pay for that quantity of power generated by steam and coal, not less than from $16,000,000 to $17,000,000 per annum. Mr. Beck believes that within a radius of 200 miles of Niagara Falls power should be delivered at the rate of $15 per continuous horse power per annum for the 120,000 H.P., and when there is a demand for the 475,000 H.P. it should be available at $12 per H.P. year. This would mean a saving to the users of coal of $3,000,000 in the former case and not less than $11,000,000 in the latter. This enormous saving would have its effect in cheapening production, or making possible the payment of higher wages. At all events, the amount is such that all effort towards the saving of the same should be made by the manufacturing interests of the country.

SEASONABLE SUGGESTIONS.

In storing left-over Summer goods care should be taken to guard against rust.

* * *

Dealers who make a specialty of sporting goods should display footballs, fire arms, ammunition, camping outfits, and other similar goods in their windows.

* * *

The few days of cool weather we have had have started the sale of lanterns, coal scuttles, ash sifters and other winter goods. Dealers who haven't stocked up should do so now.

BUSINESS AND SPORTS.

ON another page is given a record of the games played by the Toronto Master Plumbers and Steamfitters Baseball Team during the past season, the record being published not only for its value as a news item but also because it draws attention to one of the most important and valuable features in connection with the organization of Master Plumbers' Associations.

Too often men of one calling who gather together at business meetings of an association find the strain of competition affecting their relations. One hot word leads to another until a critical situation exists and the organization is in danger of disruption. Where intelligent men meet and discuss business matters there is bound to be controversy as all men are not so constituted as to think alike. The difficulty is to bring about a fraternal feeling of give and take, where arguments can be weighed without being biased by the recollection that the speaker is a competitor for business.

The good fellowship resulting from association with business competitors at picnics and banquets is the force required to overcome the differences spoken of. When men get away from business on a Saturday afternoon to watch a ball game, or go out to some resort for a day's picnic, they are likely to forget their business troubles and by getting together in groups participating in or watching the various sports acquaintanceships become more intimate and a spirit of comradeship is engendered which is not soon forgotten. The experience in Toronto is that the periodical good times conducted under the auspices of the Master Plumbers' Association have been the means of cementing together in bonds of friendship the supply men, the journeymen and the members of the association. So strong is this feeling that despite what differences may arise in business affairs, there is no danger of the various organizations getting very far apart. If one body, through any cause, became disorganized a new association would spring into existence immediately.

The ball and hockey teams of the wholesale houses do an equally valuable work and the time given for recreation on Saturday afternoons by jobbing houses is not lost. By learning to work together on the ball field the employes learn to work together when at work. Supply houses and retailers alike can profit by encouraging the growth of a fraternal feeling between their employes and their competitors. There is a distinct connection between business and sport.

THE CENTRAL CANADA EXHIBITION AT OTTAWA

THE eighteenth year of the Ottawa Central Canada Fair has been concluded and the Exhibition had prosperity unfolded to it in every way. The weather was fine and the best days of the Fair were perfect Autumn specials—clear and cool, and just enough of the radiant September air in them to stimulate everyone. The Fair again accentuated the growth of the manufacturing and commercial interests of the Dominion, and especially did it illustrate the importance of Canada's capital as a centre of activity growing in importance from year to year.

Ottawans are justly proud of their exposition. They are, to begin with, proud of their city as a political centre, and there is, in addition, a tone about Ottawa that is peculiarly its own. For instance, there are the traditions of Confederation, the distinct atmosphere of Federal politics, the life of a capital—like Washington—a little world within itself; in fact Ottawa has fashion and memories entirely its own. All these elements combine to give the place a tone, and all this is more or less interlaced with the Exposition.

The beauty of the city is remarkable, with the Parliament buildings and the magnificent Chaudiere Falls, all with their incidental attractions, shaded by the development of man-made accessories.

When it is remembered that on the best Fair day 45,000 people passed the turnstiles, a small city in itself as far as numbers are concerned, Ottawa and its Fair may be said to be hand in hand in their drawing powers.

Never has Ottawa seen a better Fair, and never have the results vindicated it so strongly by the sheckels in the exchequer. Secretary McMahon and all the officials are again worthy of congratulation, for the different departments were most creditably managed.

Shurly & Dietrich Fine Saws.

Admirably placed at the right hand side of the main entrance was the exhibit of saws of all descriptions made by the well-known Canadian manufacturers, Shurly & Dietrich of Galt. This firm need no introduction to the public for their saws are a credit to the country and to the firm who make them. The display was similar exactly to the one which won the gold medal and high honors at the World's Fair and to describe it would require much space. It took the form of a handsome cabinet or arch pillared on each side by massive bannister-like posts which gave the appearance of a vacant arch. Filling up the space in the face of the arch were saws of all sizes and kinds including the huge circular saws, the finest band saws for big saw mills and all the varieties known to mills and men. The smallest hand and meat saws were there also and all so beautifully shining and attractive that the visitor was simply amazed at every look. Mr. Persie G. Dietrich was in charge of the exhibit and most carefully attended to the explanation of the merits of the saws to all inquirers. The excellence of the quality of the saws needs no dilating upon here, for their long list of satisfied customers all over the Dominion is the living testimony of success.

The Gurney-Tilden Co.

Located in the east side of the Main Building was the fine stove exhibit of the Gurney-Tilden Co. of Hamilton. So fine was the arrangement of Souvenir heaters and ranges that a diploma for the finest stove display was awarded. The stoves with fine burnished silver and steel mounts were most attractively arranged and capable attendants under the direction of Mr. J. E. Bennet detailed the merits of these stoves. The Art Souvenir heater with the fire pot receptacle for coal moveable and its duplex grates was a strong drawing card and is one of the finest stoves on the market. The fire pot can be drawn out with ease and the fuel-saving advantages are manifold.

Then the range is the only one made which has a removable cast-iron reservoir without any bolts. This pleased hundreds of visitors and many orders for all lines were placed. All the products of this factory are not only durable and useful but are ornaments for any home. The "New Idea" furnaces have won favor all over the country and are winners.

At one end of the exhibit there was a fine assortment of builders' hardware, door knobs, latches, and fixtures, which lent a nice finishing touch to a display of great credit.

Copious literature and fine catalogues regarding the Souvenir stoves may be had on application. Mr. Bennet, who arranged the exhibit, was warmly congratulated.

Diamond Fire Extinguisher.

One of the many attractions of the Central Canada Fair was the famous Diamond Fire Extinguisher owned and controlled for the district of Ottawa by Mr. C. D. Graham, of Wilson Bros. & Co., Queen street.

This powder is very popular and the display was located in the Machinery Hall. There Mr. Graham made a specialty of explaining the merits of his goods. The powder is a dry powdered chemical (every grain of which is a powerful fire destroying quantity). The powder is nicely put up in handy decorated metal tubes, 22 inches long, 2 inches in diameter, with press cap cover, with a strong ring in the same, by which the tube is suspended from a nail or a hook driven in the wall.

Mr. Graham stated that the powder is guaranteed to keep in all climates, and positively will not deteriorate with time. Neither the powder nor the gas generated from it are in any way harmful to either flesh or fabric.

Mr. Graham made several tests before the grand stand at the Fair which were eye-openers to the masses assembled. Great applause greeted the prompt squelching of dangerous flames. These were convincing tests and many congratulations were extended.

The great value of the Diamond Extinguisher is that it is instantaneous; it can be handled by any person, young or old, without any mechanical aid, and the price of it is so reasonable that every man can have it.

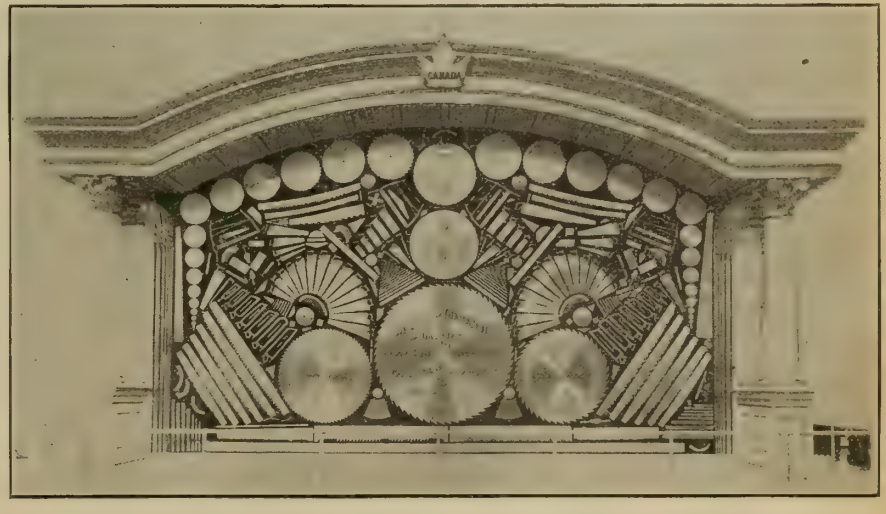


Exhibit of Saws made by Shurly & Dietrich, Galt, at the Central Canada Exhibition, Ottawa.

Intercolonial Railway

The exhibit of the Intercolonial Railway occupied over a thousand square feet of wall space at the east of the main building. Among the large photographs which have won the admiration

of thousands of people since they were installed were pictures of hunting and fishing scenes at Murray Bay, Bic the Beautiful, Cacouna and Matapedia Valley. There was also a handsome photograph of Canada's train, the Maritime Express. This train runs daily except Saturday between Montreal, St. John, Halifax, and the Sydneys. Too much cannot be said about the excellence of the sleeping and dining car service along this route. The stream of tourist traffic is increasing rapidly and patrons of the Government railway are always accommodated in the most excellent fashion. People who love to hunt are able to find abundance of moose, caribou and deer, while the streams abound in salmon and trout. These valuable resources of the hunting arena were represented by a tastefully arranged gallery of pictures. The large black bear and cub was one of the strong attractions of the Intercolonial exhibit. The exhibition goods were in charge of Mr. A. E. Barton, of Moncton, who was appointed nearly ten years ago. He distributed plenty of literature about the fishing, hunting and Summer resorts of the territory served by the Government railway. Lately the I.C.R. has been gaining greatly in popularity. Its passenger and freight service has been wonderfully improved and its trade noticeably increasing. It is one of the best of the roads to the sea and passes through a country where the scenery is unsurpassed. Every mile reveals to the passenger new scenic beauties and a journey over this popular road in its comfortable coaches cannot but be a source of pleasure and delight.

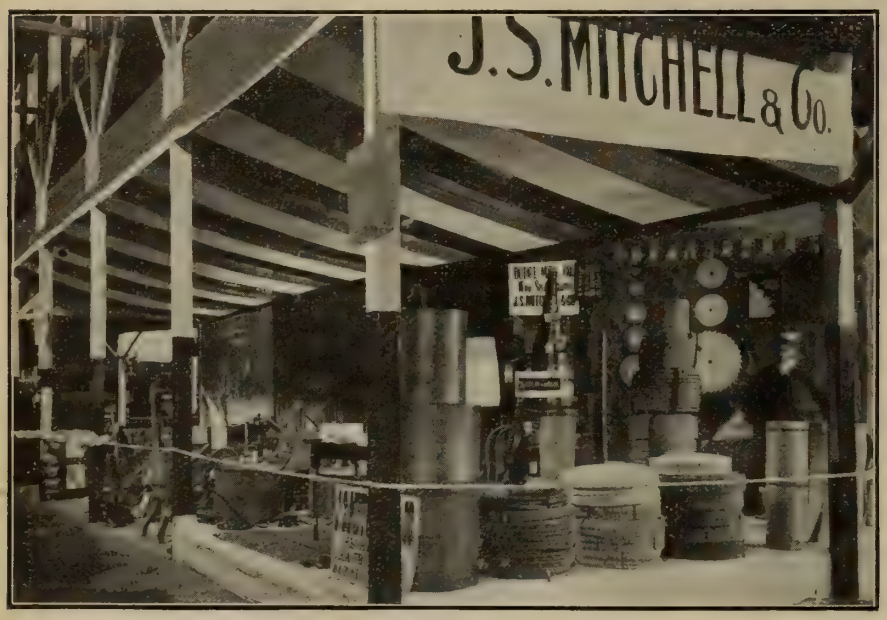


Exhibit of J. S. Mitchell & Co., at the Sherbrooke Exhibition.

The stove exhibits were the finest ever seen in Ottawa. The Moffatt Stove Company had a fine display near the front door and the Enterprise Company of the Maritime Provinces represented by the Ottawa Hardware Company also were well equipped.

J. H. Connor & Son had a fine display of washing machines and they particularly dwelt upon one that is entirely new and will be brought before the public shortly.

Caverhill, Learmont & Co.'s sample room at 104 Sparks street was well patronized by the visiting merchants of the Ottawa Valley, where they found a full line of shelf hardware. The sample room was in charge of Mr. John H. Meikle, ably assisted by Mr. J. Richard Terrill of Montreal. Mr. Meikle also had Mr. W. B. Leslie and Mr. J. R. Mackay assisting him. They report a full measure of business though generally speaking buyers do not attend exhibitions with their want lists in their pockets.

CANADA'S GREAT EASTERN EXHIBITION

NOTWITHSTANDING four days of rainy, unsettled weather, Canada's 21st annual Great Eastern Exhibition at Sherbrooke, Que., Sept. 2 to 9, was more than a qualified success from every point of view. A splendid array of exhibits in all departments did credit to the progressiveness of the Eastern Townships and practically assured a successful Fair. The following were some of the notable exhibits :

J. S. Mitchell & Co.

This well-known and popular Sherbrooke wholesale and retail hardware firm occupied an extensive space in a prominent position in the Main Building and surpassed splendid former efforts in a range of exhibits which proved of untold interest to many visitors. Really three large booths were well utilized to show plumbing goods, blacksmiths' supplies, and mechanical lines in manifold details. It is difficult to judge which proved more attractive, as the arrangement was all that could be desired, and established this display as one of the most interesting in the building.

The display included plumbing fixtures, mining and mill supplies, showing a special range of mechanical rubber goods, various beltings, among which was a 40-inch oak tanned leather belt valued at $1,250, valves, fittings, steam specialties, blacksmiths' supplies and tools in an endless range, Buffalo blowers, Buffalo combined punch and shears, drills, etc., etc. They also had an interesting exhibit of guns, rifles and kindred lines. Building materials did not lack representation either. There was no confusion in the multitudinous array and the divisions were such as to raise each department to the dignity of a separate show. They reflected credit upon the care and attention to details. The illustration is self-explanatory, although the plumbing supplies are not clearly shown.

A good deal of credit must be given to Mr. Geo. W. Murphy, one of their popular Eastern Townships representatives, in charge of the exhibit, for his courteous attention to all interested. He welcomed many business friends and his order book was often in request. This exhibit but further established this firm as a leader in the Eastern Townships and district, which territory they so well serve. The continuous growth during thirty years of existence presages an enlarged field of activity. They represent the pick of domestic and foreign manufacturers for the eastern ground.

During the week their establishment on Wellington street and their large warehouses were thrown open to visitors.

"Fenix" Cream Separator.

Among the exhibits in the Main Building of interest to the hardware trade was that of the Fenix Cream Separator by J. de L. Tache, St. Hyacinthe, Que., who is sole agent for Canada for this line. Two styles in many sizes were shown and the operation was interesting in the extreme. Quality is maintained but price is within the reach of all. These separators are built on common sense lines. Prices start at $15 for their H.S. of 90 lbs. capacity, suitable for owners of one to three cows. Size K1, skimming capacity 155 lbs per hour, is shown at $30, and the various prices range as high as $550 when for creamery use. Hardware stores having inquiries for these lines or desirous of securing an agency should communicate with Mr. Tache, Courrier building, St. Anne street, St. Hyacinthe, Que.

Notes.

Kerr & Foss, Sherbrooke, had a thorough exhibit of stoves manufactured by the Moffatt Stove Co., Weston, Ont. A full line was shown and Mr. S. G. White of Montreal, assisted by Mr. Kerr, made many new friends by their courteous, careful attention.

* * *

The Dunlop Tire Co., Toronto, showed every utensil of their large range, in good style. Mr. F. I. Fox, Montreal, was in charge.

* * *

The William Buck Stove Co., Brantford and Montreal, showed a representative array of the "Happy Thought" Range and many others of their manufasture. Mr. J. H. Hanson, Montreal, proved a capable and energetic manager.

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The many exhibitors of cream separators criticized hardware dealers for their lack of co-operation in pushing their sale, thereby losing a generous source of profit.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 29, 1905.

VERY little change in market conditions has been shown during the past week, and the only change in price to note is that of bar iron, which has advanced five cents. The city trade is not nearly so lively as that from the country and, as usual, the real Fall business will scarcely open up till October. Next week is expected to show much greater activity so far as the city trade is concerned.

All staple lines are maintaining their prices very steadily; and it is noticed that business in the country districts is much brisker now that the Fall fairs are over.

Local jobbers report that horse blankets are now the goods most in demand. Large orders are being received and shipped daily.

Axes—A good turnover is manifest in the business which is being done by all the wholesale houses. We quote: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—We quote as follows: Axe handles No. 3, $1.25; No. [illegible] No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—There is no feature in this trade, which, however, is first-class. We quote as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Fall shipments are going forward with great regularity. Trade seems to have picked up well. We quote: Cold blast, $4.50; No. 0 Safety, $5.50.

Rivets and Burrs—In company with all hardware staples these lines are moving steadily. Our quotations are: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—We quote: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—Trade is featureless, but quite as active as usual. Our quotations are: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails — Very little strength is shown on this market, and the price remains $2.20 per keg, f.o.b. Montreal.

Horseshoes—This is one of the best selling lines at present, and the following prices are firm. P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—This continues to be one of the features of the market, ammunition being especially in demand.

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Bar iron has stiffened, and is now quoted five cents higher. Pig lead shows an advance of five cents per hundred pounds. Some grades of pig iron are quoted higher this week.

In merchant steel, sleigh shoes have advanced to $1.94½, and machinery iron finish to $2.07½.

Antimony has declined one cent, being quoted at 15c.

Ingot zinc is stronger, showing quotations at 6¼c. to 7c.

Sheet zinc has also advanced to 7½c. in cask lots.

Linseed oil shows a falling off of two cents.

TORONTO.

Bar iron has advanced $1 per ton.

Galvanized sheets are quoted fifteen cents higher.

Tin is stiffening in price, and higher prices are likely.

In old materials advances have been made in tea lead and old rubbers.

Bolts and nuts have advanced 5 per cent. in the United States, and a rise is looked for here.

Turpentine is stiffening, and most dealers have advanced prices from one to three cents.

Linseed oil has had a decided drop, quotations being five cents lower.

Our prices are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Trade is picking up fairly well. Building operations seem to be pretty well distributed all over the country, though, of course, the new districts are taking larger quantities of building paper than any other. Quotations are as given in the back of this issue.

Cordage—A good demand is reported for all lines. Prices are unchanged.

Cement and Firebrick—This is the quiet season and orders of good size are few and far between. We quote: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—The usual demand is shown at this time of year. The following are our quotations: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—This has been the poorest season in many years. Our prices are: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—As the season advances the demand for these goods is increasing rapidly. Prices vary from 25c. to $2.50, according to quality.

Sleigh Bells—This is among the best lines just now; shipments going forward every day. We give prices: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—This is possibly the feature of the market at the present time. Orders are in good volume and show a splendid demand for the better lines. Our quotations: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—With the advance of the season inquiries are more frequent. Prices range from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Sept. 29, 1905.

BOLTS and nuts have advanced five per cent. in the United States, and indications point to a similar movement on this side. It is certain that a corner has been turned and the specifications made by producers indicate a rise shortly.

General business continues very satisfactory, and after the first of the month a rush is looked for. Winter goods are in more active demand, and orders for cutlery, especially case goods and plated ware, are very large. Sporting goods and builders' supplies are the other features of the trade at present.

Sporting Goods—Rifles and shotguns

are selling well and ammunition is moving actively despite the difficulty in securing imported shells there is no scarcity.

Washing Machines—This line is moving more freely.

Chain—Fall trade is beginning to pick up. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders— Step ladders are in strong demand and a large business is looked for next month. We quote as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—A fair business is being done, but not so large as a month ago.

Wire Nails—Trade is very large, but stocks are ample for all demands. Prices are the same.

Cut Nails—There is a very satisfactory trade being done. Quotations are: $2.40 per keg f.o.b. Toronto.

Horseshoes—Good business is being done and a large Fall trade is looked for. Our quotations are: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Axes—Trade is good, but next month will see more activity.

Cutlery—Trade is increasing and case goods particularly are in demand.

Skates and Sleigh Bells—Large orders are booked for future shipment, an increased trade being indicated by the orders in hand.

Lanterns—Many good sized orders are being received for early shipment.

Apple Parers—Trade in this line continues active.

Horse Nails—Trade is active at unchanged prices.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts— An increase is looked for by some on account of the advancing prices for iron and the upward jump on bolts and nuts in the States. Mills have plenty of business.

Cordage—Sorting orders are coming in. Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Our quotations continue as follows: Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—A scarcity exists owing to the heavy demands of the past season, and prices are very firm in consequence. We quote: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—Demand is expected to pick up during the coming month. Prices continue unchanged. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A good business has been done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—The market in these lines continues in a steady position, and is showing a much more healthy front. Present prices are ruling firm, and as the demand is keeping well balanced with the supply coming to hand, no immediate change is contemplated. We quote.

Hides, inspected, No. 1 per lb.	0 12	
" " " 2 "	0 11	
Country hides. flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected	0 14	
" " No. 2	0 12	
Lamb skins and pelt, best city slaughter	0 85	
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 29, 1905.

PERHAPS the most active week in several months is that which has just passed. Metals of all kinds have been booming and higher prices in many lines are the result.

Tin, after its recent weakness, is again showing strength, and it is expected that prices will go higher in the immediate future. The late weakness of tin is almost inexplicable, as there was no over supply and no cessation in demand. The anxiety of the holders to sell cannot be explained on ordinary grounds.

Copper sagged somewhat in the early part of the week, but has recovered and is now firming up again.

The pig iron market is particularly strong and Scotch pig is almost impossible to get. There is a heavy demand in the Old Country, and as the Canadian buyers also show activity it has been found necessary to advance the prices on some of the Old Country lines. The strength of the market may be judged from the fact that several orders ranging from 500 to 1,000 tons have been booked on import pig iron during the past ten days.

Antimony has gone off another cent and is not so scarce as it was a few weeks ago. But it is still considered too high in price and buyers are merely placing hand-to-mouth orders.

There is also a good demand for bar iron, which has shown an advance of five cents during the week.

Zinc is exceptionally strong, and we are quoting advances in spelter, sheet zinc, and zinc oxide. These are all very firm, and further advances are to be expected.

A great boom is reported in Canada plates and there will likely be an early advance in the galvanized plates, which are being extensively used by firms manufacturing metal roofings.

Canada Plates—The strength of this market is remarkable; demand for galvanized being especially so. We quote: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—A slight weakness occurred early in the week, but the market has well recovered and is firm at our last week's prices. We give quotations: Ingot copper, 17 1-2c.; sheet copper, 24 3-4c.

Ingot Tin—Firmer conditions now prevail and a complete recovery has been effected from the recent depression. This is in accordance with our last week's prediction, and we quote the following prices as being very strong: 35 1-2c. to 36c. per lb.

Pig Lead—We have to again report a boom in pig lead which comes as quite a surprise to the trade, as it was expected that the signing of peace between Russia and Japan would send prices down. We now quote: $3.75 to $3.85 per hundred pounds, and as importers are now being asked ten cents more per hundred pounds than formerly it will be seen that these prices will be maintained.

Boiler Tubes—Our quotations are as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—This has been a big week in pig iron. The scarcity of Scotch pig due to the heavy demand across the ocean has compelled dealers to raise the price on certain lines. We quote:

"Disc," No. 1	$16.50	delivered Montreal.	
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered Montreal.	
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	20.00	"	"
" (special)	18.50	"	"
Ayresome No. 1	18.75	"	"
" No. 3	17.75	"	"
Summerlee	18.75 to 19.25	"	"
Clarence No. 1	18.50	"	"
" No. 3	17.25	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel—We give prices: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—We are showing an advance in both sleigh shoe and machinery iron finish, and there is every likelihood of a new price being held steady. We quote: Sleigh shoes, $1.94 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.07 1-2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—Our quotations are: Cold rolled shafting, 3-4

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS.
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LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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MIDLAND, ONT Limited

Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc.

inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Two advances have been made in the U. S. during the past week, and Canadian dealers are likely to follow suit. No change, however, has yet been made in our last week's prices, which are as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—Owing to the strength of the whole metal markets black sheets are considered cheap at the ruling prices and an advance is imminent. We quote: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—Another falling off of one cent. per pound has taken place, but the price is still too high to encourage buying. We are now quoting 15c. per pound.

Tin Plates—Importers are now paying more than they did last week, but jobbers have not yet advanced their prices, which are as follows: Cakes, $3.75; charcoal, $4.

Ingot Zinc—This is another metal which has advanced and is showing phenomenal strength at the present time. We are quoting 6 3-4c. to 7c.

Sheet Zinc—The price has advanced and is likely to go higher, but the demand is rather quiet. We quote: No. 8 and No. 9, cask lots, 7 1-2c.; less than cask lots, 7 3-4c.

Bar Iron—Mills report a brisk demand, and have made an advance in their prices of five cents. Present quotations are: $1.82 1-2 base, f.o.b. Montreal.

Scrap Metal—Quotations are the same as last week, but indications are that the undoubted firmness of the market will create higher prices in some lines. Rubber is scarce and another advance may soon occur. We quote as follows: Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed scrap, 75c. to 90c. per 100 lbs.; old rubbers, 6c. to 6 1-4c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street east,
Toronto, September 29, 1905.

NEARLY every metal listed shows a stronger condition than existed a week ago, and higher prices are the rule on most lines. Antimony is almost alone in remaining unchanged, but the scarcity on the local market has prevented its weakening.

General business is good, and the rapidly advancing prices in Great Britain have caused the pessimism existing amongst the trade there to be replaced

"DOMINION"
The hall mark of quality on
Bar and Hoop Iron
Polished Steel Sheets
Polished Canada Plates
Charcoal Tin Plates

A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen
handle our
ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited
GALT, ONTARIO.

B.C. BRAND
DRILL STEEL
The best steel for you to carry. The miner's choice.
MANUFACTURED BY
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NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.
Contractions count as one word, but five figures (as $1.000) are allowed as one word.
Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.
Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED by young man with thorough knowledge of the hardware business, position as travelling salesman, best of references given. Address Box F, HARDWARE AND METAL, Montreal. [38]

ENGINE LATHE WANTED.

SECOND-HAND engine lathe, 24-inch swing by 10, 12 or 14 foot bed ; state make. Full particulars and best prices to Box 4, Ohawa. [39]

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list ; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. [tf]

TENDERS will be received by the undersigned executors of the late James M. Martin for the purchase of the good-will and stock in trade of the hardware business of the firm of Martin Bros., of the city of Rossland. An inventory may be seen and particulars obtained from the executors.

Wm. Martin,
W. M. Wood,
Executors. [39]

FOR SALE.

FOR SALE—A good set of tinsmith's tools cheap. J. E. Pedlow, Vienna, Ont. [38]

A FIRST-CLASS set of tinners' and pipe fitters' tools for sale. Several of tools are just new and hardly used. W. T. McGibbon & Co., Brighton, Ontario. [39]

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house ; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. [38]

SITUATION WANTED.

BY cutlery man, with fourteen years' experience in the wholesale and retail cutlery business; could take charge of cutlery department in either wholesale or retail store ; Western Canada preferred ; references given. Box 275, HARDWARE AND METAL. [41]

WHOLESALE AGENTS WANTED.

ONE of the largest and oldest European manufacturers of Cream Separators and Dairy Machinery is desirous to arrange with one large and first-class firm for each of the Provinces in Canada for the sale of their goods. Send particulars and references to A. B. C., c/o HARDWARE AND METAL Toronto. [41]

AGENTS WANTED.

ADVERTISING novelties and calendars with merit are supplied by the Cranston Novelty Co., 167 Bay Street, Toronto; also rubber stamps, clothing hangers and store fixtures. Write for catalogue. Agents wanted. [39]

by a more confident feeling. Particularly in black and galvanized sheets are the advances made.

Bar iron has advanced five cents and the base is now at $1.90 on the local market. In old material higher prices are noted for tea lead and rubbers.

Whether the general advances made are speculative or are warranted by trade conditions is uncertain, but it is certain that the market is stronger this week than for some time past.

Coal will advance again on the first of the month.

Pig Iron—The market is very strong and some mills are out of the market completely. Quotations continue as follows :

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace		18 50
" No. 2, "		18 00
Midland, No. 1, "		18 50
" No. 2, "		18 00
Radnor, at furnace		21 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—An advance of 5c. is reported this week, the market being especially active. We quote as follows : $1.90 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—The market is active and demand very keen. Prices are looking upward.

Tin Plates—Demand is active with prices unchanged.

Galvanized Sheets — The demand is very strong. Prices have advanced 15c.

Brass — Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—General activity rules. Stocks are light, and many dealers short. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Higher prices are quoted on outside markets, the demand locally being very active. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—The market is quiet. Prices continue very firm. Our quotations are as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Conditions are improving and the market is more active, stocks being very light.

Old Material—Business is quite active and much iron is being sold to foundries. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.50 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $7.50 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 1-4c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Anthracite is meeting with an increased demand. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, September 28, 1905.

THE past week has carried further the remarkable buying movement that burst upon the iron market two weeks ago, and the September tonnage is easily the greatest for a single month in the history of the trade. While there are evidences of excitement here and there, business for the most part has been done in an orderly way, and veterans in the trade refer to the present market as the greatest in which they have participated.

The United States Steel Corporation has bought 40,000 tons of Bessemer iron at $15 at furnace for delivery in September and October. Further iron will be required for October and the corporation is expected to be a buyer of Bessemer at the rate of 40,000 tons a month well into next year. The total of its purchases in September is 80,000 tons. Bessemer iron is now squarely $15.50 at Valley furnace. In the foundry iron trade a prodigious business has been rounded up and leading Southern sellers have booked a record tonnage in September. The largest seller is reported to have taken orders for 100,000 tons last week. Northern sellers have been exceedingly busy also, particularly in the East and the Central West. The movement has given strong proof that foundries are at last getting a fair share in the general prosperity.

Three Alabama sellers of foundry iron are out of the market temporarily, but inquiries of large aggregate for the first quarter and first half of 1906 are pending and $12.50 for No. 2 foundry iron at Birmingham is now quoted. Eastern Pennsylvania furnaces now have their prices 50c to $1 a ton above those of two weeks ago. In the Central West the minimum has advanced from $14.50 to $15 at furnace for No. 2 foundry.

Eastern buyers of basic iron have taken 60,000 tons additional and the market is very firm at $16, delivered.

Coke manufacturers have advanced prices and are chary of long commitments. Contracts for Connellsville furnace coke have been made at $2.50 for the first half of 1906 and other contracts at $2.60 are pending. The possibilities of an anthracite strike and the pinch of car shortage are both influential factors in the coke situation, which is particularly strong.

Lake Superior ore interests are already discussing higher prices for next year and sales are expected before the close of 1905.

Sales of English hematite for Atlantic coast delivery in this country have been erroneously reported. In early September 30,000 tons were arranged for in addition to the purchases of last spring, and it is understood that a deal for 30,000 tons additional is pending, deliveries extending into next year. Prices on the other side have advanced to 58 shillings for East Coast hematite. Quite heavy buying of foreign Spiegeleisen and Ferromanganese for Pennsylvania steel makers in reported, 30,000 to 40,000 tons being taken in the past week. Ferro

has advanced $4 to $5 a ton in the past fortnight.

Rail buying and railroad equipment demand are still the backbone of finished material markets. Fully 125,000 tons of rails have been booked in the week, including 10,000 tons for the Central of Georgia, 8,000 tons for the Des Moines & Fort Dodge, 30,000 tons for the Northern Pacific, 40,000 tons for Rock Island, 10,000 tons for Central of New Jersey, and 25,000 tons, in addition to the earlier order, for Norfolk & Western. More rails than ever for the Southwest and Northwest will be rolled in Pennsylvania next year, the Chicago mill being filled up to November 1, 1906.

The stringency in structural material is more marked and Chicago jobbers are now shipping far afield, reaching both coasts. Plate mills are a close second to shape mills in the matter of congestion and an advance in the plate base is considered imminent.

It is only mildly stating the case to say that in important finished lines September sales have exceeded all records. Steel bar business is very heavy, the advances in bar iron now making steel the cheaper material. No advance in steel bars has been made nor do leading manufacturers expect an advance. Wrought pipe has been in excellent demand, albeit prices do not advance. Sheets have improved steadily. Tin plate lags, though some large business has been done with the Pacific coast canning trade. September has always been active in the wire trade and this month has emphasized the record.

Modern builders realize that this is the metallic age of architecture.

Dealers in fine Sheet Metal goods should be prepared to supply "Metallic" Cornices which we make in so many artistic and beautiful designs.

"Metallic" Cornices portray in rigid fireproof metal any art conception possible in wood, avoiding its combustibility, outwearing wood by many years and reducing insurance charges.

While the metal, the workmanship and the art quality of our Cornice work is superior to anything made, its cost is comparatively low.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
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(Established Twenty Years)
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We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
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"Metallic" Sheet Metal Fronts.
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Cresting and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.
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LONDON METAL MARKETS.

From Metal Market Report, September 27, 1905.

Pig Iron — Middleboro No. 3 foundry is quoted at 49s. 9d, and Glasgow standard foundry at 48s. 4d, making prices as compared with last week 1s. 6d higher for Middleboro and 1s. 7d higher for Glasgow foundry.

Tin—Spot tin opened firm at £147, futures at £145 12s. 6d, and after sales of 50 tons of spot and 200 tons of futures closed quiet at £147 for spot and £145 12s. 6d for futures, making price as compared with last week £1 higher on spot and 7s. 6d higher on futures.

Copper—Spot copper opened firm at £70 17s 6d, futures £70, and after sales of 200 tons of spot and 700 tons of futures closed firm at £71 for spot and £70 for futures, making price as compared with last week £1 15s. higher on spot and 15s. higher on futures.

Lead—The market closed at £14 2s. 6d, making price as compared with last week 7s. 6d higher.

Spelter—The market closed at £27 5s., making price as compared with last week 15s. higher.

Nova Scotia Trade News

Halifax, N.S., Sept. 27.

THE hardware trade is looking up a little, but it is far below what it should be for this season of the year. Orders from outside points are coming in very slowly, and the orders to hand are only small. Outside of good sales of guns and ammunition, all other lines remain inactive, and prices are unchanged.

The lumbermen have not yet commenced to order their goods. Several firms have been asked for quotations on certain lines, but so far no orders have been placed. The lumbermen say that they have lots of logs in the rivers but cannot get them down to saw, owing to the scarcity of water. This is quite a serious drawback, especially at this season of the year.

The mines throughout the Province are unusually quiet and they are not ordering any supplies. Some dealers express the hope that trade will improve about the first week in October. Jobbers are not yet booking their orders. The price of wire nails seems to be the drawback in this respect.

Wire nails are quoted in St. John at $2 f.o.b., and in Halifax at $2.10 f.o.b. Dealers here are offering them at $2.15, and say that it is impossible for them to put the price any lower. One dealer in referring to wire nails said the price was practically open. On the price of nails depends very largely the orders for other goods.

One of the most attractive features of the Nova Scotia Exhibition just closed was the mineral exhibit, to which an entire building was devoted. The majority of the exhibits were contributed by Cape Breton industries—the Dominion Coal Co., the Dominion Iron & Steel Co., the Nova Scotia Steel & Coal Co., Dominion Tar & Chemical Co., and the Sydney Cement Co. This is the first year of this department, which will be made a permanent feature of the Halifax Fair, but it is probable that the premises will have to be enlarged, as there was evidence of overcrowding. The first credit of this exhibit is due to the Sydney Board of Trade, who were the originators of the idea of a permanent mineral exhibit.

Prices quoted here follow :

Lead pipe	$ 4 99
Sheet zinc, in casks	7¼c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3¾ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 10
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 00
Black sheet iron	2 25
Pick axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94 to 96
Boiled oil	54
Raw oil	51

MINES AND METALS

Ore from a quartz mine near Dawson and from the New Windy Arm district, is being brought down for treatment at the smelter at Ladysmith, B.C.

* * *

Deputations of persons interested in mining at Cobalt are urging changes in the Ontario mining regulations covering that district.

* * *

The Dominion Coal Co. and the Nova Scotia Steel & Coal Co. have increased their shipments to the St. Lawrence, during the past four years, in similar ratio. The increase for each is about 40 per cent. It is fortunate for Nova Scotia that the Montreal market is a continually expanding one. It took over a million and a half tons of Nova Scotia coal last year, and it will take considerably more this year.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Sept. 29, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

ROBERT MUNRO, of Montreal, managing director of the Canada Paint Co., was in Winnipeg last week completing arrangements for the transfer to his company of the linseed oil mills of this city. Mr. Munro stated to Hardware and Metal that a paint factory will be built in Winnipeg early next year in order to meet the growing western demand, and that in the meantime the oil mill will be conducted as usual. Arrangements were being made for the purchase of seed. Mr. Munro left Winnipeg for Montreal on the night of the 22nd inst.

* * *

The additional two storeys to the warehouse of Tilden, Gurney & Co., Limited, are now completed and a large striking sign has been painted on the east wall.

* * *

Wholesale trade continues very active, but there are few changes in price, an advance of 1c. per lb. in solder being the only quotable change.

* * *

Lanterns—Wholesale prices are steady in spite of some severe competition in the retail prices, and quotations are still as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Prices are quoted as follows:

Barbed wire, 100 lb	$2 85
Plain galvanized 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. Large orders are coming in from the east before the close of navigation. The price quoted is $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is very active at following unchanged prices:

Anchor, plain	55c.
" tarred	65c
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—Sorting orders are numerous since the opening of the hunting season. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
E.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder— The price has been advanced 1 cent per lb. Solder is selling now at 21 cents, with concessions for large quantities.

Iron and Steel— Prices are quoted as follows :

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¾ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum— The price is steady at the advance noted last week. We quote:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74 76	27c.

(In barrels f.o.b. Winnipeg.)

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for



Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

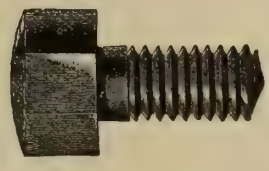
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs. Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

Paints and Oils — Business continues very active in all general lines. Linseed oil is steady since the decline noted last week. We quote :

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure in barrels	0 96
Less than barrel lots	1 01
Linseed oil, raw	0 60
Boiled	0 63

Window Glass — Since the decline noted last week the price has been steady. We quote :

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.00
26 to 40 "	2.25
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.00
41 to 50 "	4.50
51 to 60 "	5.00
61 to 70 "	5.50
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

CHANGE IN AGENCY.

Mr. G. S. Pelton, of Montreal, who for the past twenty-four years has represented the old established firm of John Shaw & Sons, Ltd., Wolverhampton, Eng., has resigned this branch of the business and will hereafter devote his entire time to cutlery and hardware specialties. Mr. J. Roper, who was formerly associated with John Shaw & Sons for nine years, has now been appointed their agent for Canada and will in future make the usual trips in their interests. Mr. Roper is well known to the trade and it is positive that the agency has been placed in good hands. He leaves soon for Wolverhampton to complete arrangements, and he expects to spend about a month in the Old Country.

British Columbia Trade News

Vancouver, B.C., Sept. 22, 1905.

AT yesterday's session of the Railway Commission, held in this city, a most interesting point with respect to a proposed revival of the mixed carload privilege was argued at length. The Canadian Manufacturers' Association, represented by John R. Marlow, manager of the Transportation Department, pressed the case for the restoration of the old Rule No. 2, governing such shipments. He claimed that it would tend to expansion of trade as it would enable western consumers to get goods at lower prices. Explaining the proposal he said it was not intended that half a dozen eastern merchants should be permitted to join hands in hiring a car to ship mixed carloads to Pacific Coast points. The privilege would only apply to individual shippers.

Mr. B. W. Greer, Assistant General Freight Agent, C.P.R., said that the application was intended to revive the old order whereby mixed shipments of hardware and groceries in one car were permitted. Several representative wholesalers put in strong objections, among them being Mr. C. A. Godson of the Robertson-Godson Co., who represented the wholesale hardware, metal and iron pipe people, Mr. W. H. Malkin, representing the wholesale grocers, Mr. H. T. Lockyer, representing the Trade and Commerce Committee of the Board of Trade. These gentlemen all strongly urged that the proposal would seriously affect the trade of Vancouver and Victoria wholesale houses and that it would give eastern wholesale houses and manufacturers an unfair advantage. It would also permit eastern dealers to ship direct to interior points, while Vancouver wholesalers would have to pay the local rate from the coast back to interior points. The arguments pro and con were very full and the commissioners reserved an opinion.

A point on which both the Canadian Manufacturers' Association and Vancouver Board of Trade agree is with reference to the demand that through rates from the east to the coast be equalized as between Canadian and United States transportation lines. Mr. H. McDowell presented the views of the Vancouver Board of Trade, referring to rates from Montreal to Vancouver as compared with New York to Seattle.

For the C.P.R. Freight Traffic Manager Greer argued that the lower rates on United States lines were due to competition via Cape Horn and Panama, and were not fairly comparable with the Canadian rates. Some criticism was made on the part of the commissioners of the dilatoriness of the C.P.R. in putting in their defence on this point, though they had been instructed to do so a year ago. Mr. Greer promised to get it in and also to hand the Canadian Manufacturers' Association and the Vancouver Board of Trade, parties to the application, copies of their defence in due time so that they could deal with it in reply.

The chairman of the Board of Commissioners asked for criticism of the car service rules submitted for approval, with respect to loading and unloading of cars. Superintendent Beasley and Car Service Agent Miller for the C. P. R. asked for some modifications, as in some cases unless cars were loaded rapidly the company would lose money. There was a shortage of cars on this division. Mr. R. Marpole pointed out that the idea of demurrage on cars not unloaded was not for revenue so much as to hurry up shippers to get the cars emptied. The matter was by arrangement left for private discussion and modification between the railway company and the business men of the coast cities, with the approval of the commissioners.

* * *

Northern freight shipments have dropped off practically for the season so far as Dawson is concerned, the bulk of the goods having gone forward a fortnight ago and before. At present advices indicate that the water in the Yukon is continuing to drop, indicating a close of navigation before very long. Most of the heavy goods for the winter supply have been got down river safely, very little being hung up at White Horse as was the experience last season.

* * *

An important lumber deal is announced whereby the mills and timber limits of Mr. W. C. Wells, a former member of the local Government and now a member of the Legislature, have gone into the hands of the Dickason-Goodman Lumber Co., of Kansas City, Mo. The principal mills are located at Palliser on the main line of the C.P.R. some distance east of Golden. Mr. Wells has been in the Province since the C.P.R. ran its first train through the mountains, and in all that time he has conducted a successful lumber manufacturing business. He proposes to reside in Vancouver after he has closed up the details of the transfer.

* * *

Assignee J. F. Helliwell has made the disappointing report to the creditors of the N. Thompson Engineering Co. that no dividend to the creditors, preferred or common, will be forthcoming after satisfying the secured claims of the Molsons Bank, which were in shape of real and chattel mortgages and amounted to $45,053.30. In addition to this the bank at the request of the committee of creditors advanced a further sum to pay the first assignee and 50 per cent. of the wages claims, which totalled several thousands of dollars. Then bids for the property were called for and but one bid, that from the Molsons Bank, was received. It was for less than the amounts advanced, but the inspectors decided to accept it.

* * *

Shipbuilding develops satisfactorily in British Columbia. Recently it was announced that the British Columbia Marine Railway had been awarded a contract by the C.P.R. Co. to build a fine passenger steamer but little smaller in dimensions than the crack liner Princess Victoria, which was built in the Old Country. Now the keel of the new vessel has been laid at the Victoria yards of the contractors. She is to be of wood, of course, British Columbia shipbuilding not having got to the length of building such large steamers of steel. The new Princess will be 50 feet shorter than the Victoria, or 250 feet over all. She will have 40 feet breadth of beam, and 25.62 feet depth of hold, while her machinery, which will be built in Scotland, will be capable of developing 2,500 horsepower. Her upper works and cabin accommodation will resemble those of the handsomely fitted Princess Victoria and the vessel, which is designed to alternate with the former, will be ready for next year.

* * *

Shagway reports indicate that the freight piled up there awaiting transportation down the Yukon before the Winter sets in, is as great in bulk as that piled up at White Horse. The ocean steamers arriving from B.C. and Puget Sound ports tie up two deep awaiting room to discharge their cargoes and not only are the wharf warehouses filled, but there are great piles of goods on the open wharf. The White Pass & Yukon Railway Co. is working day and night rushing freight across to the Yukon, and river steamers are taking full cargoes and towing large barges as well, in the rush to get the stocks in before the freeze-up.

LAST MINUTE PAINT MARKETS

Office of
HARDWARE AND METAL
Montreal, Sept. 29, 1905.

The paint manufacturers are moving to increase the cost of mixed paints ten cents a gallon, to meet the increased cost of labor and raw material. It is understood that circulars are being issued to this effect by the manufacturers.

Turpentine is much firmer, and it is probable that an advance will be declared before this is in print.

NICKEL STEEL POPULAR.

In our special edition for Maritime Provinces when noting individual firms we referred to Estey & Co., St. John, N.B., as sellers of nipple steel. While they do sell steel which can be made into nipples and also sell pipe nipples, we should have said that they were sellers of nickel steel. This form of steel is now coming into use as being of great tensile strength for shafts, pistons, axles, etc., etc. They supply nickel steel in bars or finished to sketch as well as make castings. Their wheels for street car use are giving best mileage under hard conditions. This firm make a specialty of mill, railroad and foundry and mining supplies of all kinds.

LAWN MOWERS IN 1906.

Canadian manufacturers of lawn mowers have failed to come to any understanding on prices for the coming season. In an open market, which this really means, the jobbers will no doubt quote most interesting prices.

LIVED HAPPY EVER AFTER.

Mr. John Davidson, of the office staff of Caverhill, Learmont & Co., Montreal, was married on Wednesday, the 27th inst., to Miss Edna Gowdy, in St. Martin's Church. The happy couple left for Toronto, Niagara and other western points, to spend their honeymoon. Among the wedding gifts none will be more prized by Mr. and Mrs. Davidson than a fine cabinet of Community silverware presented by "the boys" in the office.

The J. Stevens Arms & Tool Co., Chicopee Falls, Mass., is adding a two-storey addition to the No. 2 mill at its power plant. This will mean an increase of 25,000 square feet of floor space.

PERSONAL MENTION

Quebec.

Mr. Baume, of Hawkesbury, paid a flying business visit to Montreal during the week.

A. G. Robb, of the Robb Engineering Co., Amherst, N.S., was in Montreal this week.

T. A. Cantlie, manager of the Nova Scotia Steel Co., was a visitor in Montreal this week.

Mr. Lefebvre, of Lefebvre & Lariviere, St. Hyacinthe, was a visitor in Montreal this week.

C. M. Robertson, of James Robertson Co., Limited, Montreal, has returned from his holidays.

D. McAllister, dealer in hardware, of Chute au Blondeau, visited Montreal jobbers during the week.

W. H. Nolan, proprietor of the Canada Machinery Agency, Montreal, has returned from a brief vacation.

Mr. Harcourt, representing the Canada Bobbin Factory, Walkerton, Ont., was in Montreal on business this week.

A. Limoges, tinsmith, of Beauharnois, was in Montreal this week, in connection with a big heating contract he has on hand.

J. J. Sophus, of McLean & Sophus, mechanical engineers and machinery agents, Montreal, is spending the week in Boston.

Madame Wm. Gravel, of Terrebonne, paid a visit to Montreal during the week on matters in connection with her husband's business.

Mr. Bradfield, of Bradfield Bros., hardware merchants, Morrisburg, Ont., was one of the out-of-town buyers in Montreal this week.

Messrs. Robert and Emile Mond, who have extensive nickel holdings in New Ontario, were in Montreal last Tuesday, registered at the Windsor.

S. Bourgeois, of S. Bourgeois & Cie., wholesale and retail hardware merchants, St. Hyacinthe, called on the Montreal trade during the week.

James Stevenson, of the Riordan Paper Mills, Hawkesbury, spent part of the week in Montreal, calling on the manufacturers and jobbers of building paper.

W. C. Butler, vice-president of the Simplex Car Co., New York, was at the Windsor, Montreal, for a few days this week, in connection with the company's new plant in that city.

T. W. Boyd & Son, Montreal, have taken the Canadian agency for ?guns made by J. P. Sauer & Son, Suhl, Germany. This firm has been in business since 1751, making a specialty of sporting shot guns.

Mr. John, who has just formed a partnership with Mr. Hubert, of Waterloo, Quebec, to enter into the hardware business there called on the Montreal wholesale houses, making preliminary arrangements.

Two clerks who have been in the employ of Watts & Mailhot, hardware merchants, Montreal, have been convicted of robbing their employers. The culprits were discovered by means of marked money which was traced to them.

Norman J. Dineen, now with the Hobbs Hardware Company, London, Ont., has accepted a position on the staff of Lewis Bros., Limited, Montreal, and will arrive early in October to assume the duties of assistant buyer.

Walter Pierce, of Parry Harbor, shook hands with some of his old friends in the Montreal trade this week. This was his first visit to the metropolis in twenty-five years, and he noticed many improvements. Mr. Pierce will return to his home via Toronto.

John Millen & Sons, who have been in the hardware business in Montreal for upwards of forty years, have decided to give their undivided attention to the sale of some special lines which they have been developing of late, and they are now advertising their hardware stock for sale. The special lines to be taken up include Shelby steel tubing, automobile and gas engine supplies and bicycle sundries.

Blanchard Fowler, of the firm Josiah Fowler & Son, St. John, N.B., axe and tool makers, was a caller at the Montreal office of Hardware and Metal this week. He had just returned from a trip to Toronto Exhibition and Western Ontario. Trade possibilities, he believes, are excellent. The Fowler firm are represented in Montreal by the Messrs. Canavan, two brothers who are hustling the local trade along in a most satisfactory manner.

S. S. Swazey, general manager of the Creamery Package Co., Limited, of Cowansville, Quebec, was in Montreal last week. Mr. Swazey stated that his company had been very busy this year, and that orders ahead were plentiful. Cheesemaking and factory work is going ahead apace all over the Dominion. He further stated that in the matter of trade development it was noticeable that the hardware men in different parts were handling the manufactured products of his firm.

Ontario.

Paul Chappelle, stove merchant, Brantford, visited Toronto this week.

Mr. Shurly, of Shurly & Dietrich, Galt, was a visitor in Toronto this week.

T. B. Lee, of Rice Lewis & Son, returned this week from a business trip to New York.

Mr. Thompson, hardware merchant, Elmvale, spent a few days in Toronto this week.

George Elliot, Jr., stove merchant, Brantford, has moved into a handsome new store.

Mr. Martindale, hardware merchant, Alliston, called on hardware jobbers in Toronto this week.

President Louden of the Louden Manufacturing Co., Guelph, has returned from a business trip to Winnipeg.

Mr. Woolley, representing John H. Graham & Co., manufacturers' agents, New York, visited Toronto this week.

Mr. H. B. Coleman, of the Russell-Erwin Company, New York, has been a visitor in Toronto during the past week.

Robt. Munro, of the Canada Paint Co., Montreal, passed through Toronto on Thursday on his return from a trip to Winnipeg.

A. McMichael, manager of the Toronto branch of the James Robertson Company, is spending a vacation at Mount Clemens, Mich.

A. E. Staefer, manager of the general sales department of the Sherwin-Williams Paint Co., Cleveland, was a visitor in Toronto during the last week.

Frank Alfred, chief engineer of the Pere Marquette Railway, has resigned to accept an important position with the Canadian White Lead Co. His headquarters will be in Montreal, to which city he will remove his family shortly.

Work on the foundation of R. J. Walkem's new hardware store at Tottenham has been commenced, and the work of construction will be pushed energetically.

J. M. Taylor, president of Taylor-Forbes Company, Guelph, passed through Toronto a few days ago on his return from the Manufacturers' Convention at Quebec.

Mr. Terry, representing Sargeant & Co., New York, one of the largest manufacturers of hardware specialties in the world, called on Toronto wholesalers this week.

T. S. Hobbs, London, of the Plymouth Binder Twine Co., Welland, was in Toronto on Friday. Several changes in the company's staff are being made. Mr. W. R. Hobbs, who has been manager of the Toronto branch of the Plymouth Company has resigned his position, and will probably devote his entire attention to the Consolidated Plate Glass Co., Toronto.

L. B. Graham, director of the firm of W. R. Humphries, cutlery manufacturers, Sheffield, Eng., visited Toronto and Hamilton during the past week. Mr. Graham had a very fine display of samples of all classes of cutlery and flat ware. He states that the popular selling lines both in England and Canada this season are the pearl handled fish and fruit knives and case goods of all kinds. One handsome line shown by him was a case of polished wood both inside and outside, no plush being used to decorate the interior of this case.

Western Canada.

Henry Wilcox, a plumber, of Calgary, committed suicide last week by taking a dose of strychnine.

W. F. Cockshutt, of the Cockshutt Plow Co., Brantford, is making a business trip through Manitoba and the Northwest.

W. C. Perry, assistant manager of Geo. D. Wood & Co., Winnipeg, is holidaying in the Dauphin country, a section where good shooting is always to be had.

The Canadian Fairbanks Co., Limited, Vancouver, B.C., have shipped a complete machine shop equipment consisting of power steam hammers, punch and shears, lathes, drill presses, and full equipment of small tools, to the Fiji Islands.

Jas. Simmons, proprietor of the Iron Rolling Mill, Dartmouth, N.S., is making a trip through Western Canada.

Maritime Provinces.

Robt. M. McGregor, M.P.P. for Pictou, N.S., and secretary of Munroe Wire Works, Limited, was married last week and is now making a tour of the Western States and Canada. On his return he will inspect the company's new plant at Winnipeg.

Charles A. Treen, of Sackville, N.B., has resigned his position as traveler for the Charles Fawcett Manufacturing Co., Sackville, to accept a position as assistant manager and general sales agent for the A. C. Thompson Co., North Sydney, N.S. Mr. Treen is one of the best known men in the stove and furnace business in the Maritime Provinces.

PAINT, OIL AND BRUSH TRADES

HIGHER PRICES FOR OIL.

THE advance in the price of oil in Canada will hardly as yet have an appreciable, to say nothing of a serious effect on the consumers, amounting as it does to only three or four cents a barrel, but it shows, says the Montreal Herald, how much one part of the world is dependent upon another when one sees trade conditions affected even to that extent by troubles in a region so remote as the Russian oil fields. The condition is governed, of course, by the Standard Oil Company, which is followed in the upward and downward movements by the smaller producers and the middlemen who compete with it, and that astutely managed concern may be trusted to operate the law of supply and demand so as to obtain the highest possible prices for the product.

The advance in refined oil for export is already attracting considerable attention as it is held to be the result of the removal of Russian competition and the opening of the field to the control of the American oil men. On the western shore of the Caspian Sea south of the great mountain range that separates Europe from Asia is an oil region which yields more crude petroleum than all the American fields. This Caspian Sea oil field whose product is of inferior quality to that of some districts on this continent and superior to others, divides the natural markets of the world with American oil. That is why the news that five thousand oil towers were burning in the Baku district sent up the price of Standard Oil stock. If the riots should rise to the magnitude of a revolt the oil situation will be still further unsettled for the large amount of property in the Caspian oil region already destroyed is likely to greatly reduce the production and this will assuredly mean that the oil will cost more here.

DON'T SELL POOR PAINTS.

IN the Western States there is a large amount of poor paint on the market and Government inspectors have been forced to take action to protect the public. Hardware dealers are interested in the fight and their interests certainly lie with the well-known manufacturers whose goods have become standard because of their excellence and the high quality of the ingredients used. A bulletin recently issued by the Dairy and Food Commissioner of Minnesota calls attention to the analysis of a sample of paint which was purchased with the understanding that it was of good quality, and for which a high price was paid. The chemist's report says: "Sample is composed of plaster, lead sulphate, iron silicate, fish oil and petroleum oil." This chemist's analysis indicates the paint to be of very poor quality. The Commissioner says he found paint on the market which is worthless, and fraud is being perpetrated upon the people of the State through the manufacture and sale of that commodity. The price paid for it is lost, the labor and cost of spreading it on the buildings is lost, and even after it has been spread over a building there is no body to protect the wood.

OIL IN WESTERN CANADA.

A NEW oil field has been located in Beaver Valley near Harper's Ferry, B.C. From surface indications oil can be had in paying quantities at 600 to 800 feet.

It is estimated that the daily capacity of the new oil fields of Pincher Creek, Alberta, is close on a million gallons. The big gusher just discovered is within five miles of the Montana boundary, and shows every prospect of increasing in volume. Surveyors are already running lines for branches of the Great Northern and Canadian Pacific railways to the oil fields. The Standard Oil Company are heavily interested in this district. Mr. Daly of the Dominion Geological Department, is quite sanguine as to the result of the operations now being carried on, and says the geological conditions in the district were of such a nature that he would not be surprised if large wells, producing from 8,000 to 10,000 barrels a day, were discovered.

NEW WOOD STAIN.

A new wood stain patented in France is intended to enable the ordinary staining dyes to penetrate further into the pores of the wood, so as to stand wear without rubbing off. Natschak and Wanecek employ as the solvent ordinary commercial acetone or other ketone, either alone or associated with alcohol, mineral oil distillates, turps, or light resin oils. The wood should be thoroughly dried before staining, and the solvent may be either allowed to evaporate spontaneously, or expelled by heat in a drying stove fitted with a condenser.

TO INCREASE BRUSH SALES.

Good mechanics require good tools and the finer the work the finer the tool must be. Painters are always on the alert for a good brush and dealers who can supply them need have no fear of competition. Look up the house, sign and carriage painters, varnishers and polishers in piano and furniture factories, and prove to them that the line carried in stock is the best they can secure. Go out after the business, supply good goods and sales are bound to continue to increase.

ELASTILITE VARNISH

has a quality all its own which commands the respect of our competitors who know it is the strongest recommendation for their own goods to say they can give you something just as good.

Be not deceived, get the genuine, the kind that builds up trade and holds it. For outside or inside.

Manufactured only by

The Imperial Varnish & Color Co. Limited

TORONTO, ONTARIO, CANADA.

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey

VANCOUVER, B.C., care Durand Merchandise Company



RETURNED NOV 1905
Y & Drawer
Cut Book
Page 59
A. W.



Can Your Business Pay Without The Right Goods?

Our

ARCHITECTURAL VARNISHES

have proved to be the right goods for many Hardwaremen. Doesn't that entitle them to **your** trial order? Secure particulars from

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

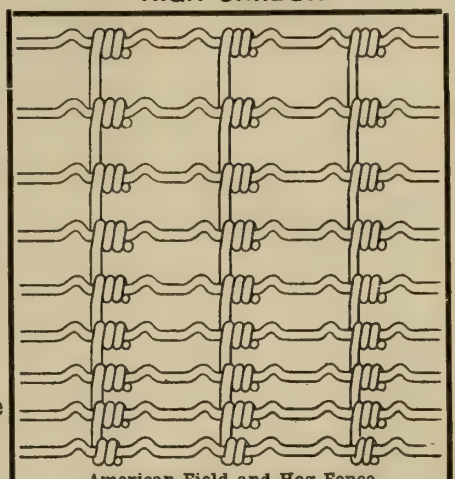
BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

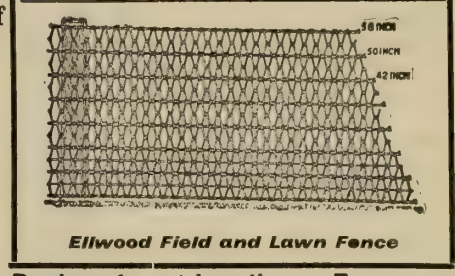
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



Ellwood Field and Lawn Fence

We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us

THE CANADIAN STEEL AND WIRE CO., LIMITED

WINNIPEG, MAN HAMILTON ONT.

"LET THERE BE LIGHT!"

"Let there be Light!" and let it come from **MAXIMUM LIGHT GLASS** and you will then be assured of its quantity and its continuity.

MAXIMUM LIGHT GLASS

has no equal anywhere for radiance-shedding. It is not to be confused with ordinary corrugated or prismatic glass. It is a daylight-increasing Window Glass, combining Lenses and Prisms.

We will be pleased to send samples and also our booklet.

SOLE CANADIAN AGENTS:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

"Anchor
AND
English
Liquid
Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

We know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B B. GENUINE.

BRANDRAM BROS & CO
BRANDRAM'S B. B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, September 29, 1905.

TRADE is looking up and orders are coming in much more freely than at any time during the last fortnight. Manufacturers have every reason to expect that Fall trade will now begin in earnest. White lead is unstable at the present moment, but the best brands are still being held at full prices. Many firms are short in their supply of white lead ordered from the Old Country before the recent advance in duty, and as the supply of raw material which arrived in time to take advantage of the old duty is being rapidly exhausted, stiffer prices in ground white lead cannot be much longer delayed.

Through an error we recorded in our last issue that red lead was active as a result of the new duty. As a matter of fact there is at present no duty on red lead, the activity being purely in sympathy with the primary markets. It is expected, however, that the next revision of the tariff will show an increase in the duty on this product. Linseed oil has been decidedly weakened, but authentic reports show that the English market is strong, which would check any tendency towards a further drop in this country.

Owing to the advance in spelter and sheet zinc it is felt that dry white zinc must soon go up in sympathy.

Turpentine—Prices given last week have held steadily and we quote: Single barrel 91c. per gallon. Two barrels or over, 90c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Another period of weakness has been experienced this week with the result that our quotations are now two cents lower than last week. We give prices: Raw, one to four barrels, 45c.; 5 to 9 barrels, 44c.; boiled, 1 to 4 barrels, 48c.; 5 to 9 barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—In this market further advances are prevented by the fact that some firms who are still holding supplies of lead imported at the old duty refuse to put up the price, and it becomes simply a question of how long these quantities will last. In the meantime our prices are as follows: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc — The strength of spelter and sheet zinc on the market give us ground to expect that the price in this article will soon be advanced. We quote the following prices: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (Ground in Oil)—We still give the following prices: Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Prices are unchanged but strong. We quote: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—As pig lead has again advanced, added strength has been given to the following prices: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—We are still able to quote: Pure white in barrels, $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—A satisfactory business is being done, with prices ranging from $1.20 to $1.40 per gallon.

Castor Oil—An exceptionally strong demand is shown owing to the fact that buyers wish to get sufficient stock on hand before the close of navigation. We quote: 8 1-2c. to 9 1-2c., according to lots.

Refined Petroleum—The market is stronger than it has been for some time, and the price of refined petroleum has already been advanced by the Standard Oil Co. in the United States. The Canadian prices, however, remain unchanged, although crude oil has jumped up on the local markets.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 29, 1905.

LINSEED oil is the sensational feature of the market this week. Canadian producers have entered the market and are offering the home product about five cents less than the English oil. As oil is firmer in Great Britain the present move is a peculiar one, but the object is to stop importations and encourage the sale of Canadian oil. If the importations fall off prices will certainly increase again, and a week or two will likely see the present low figures advanced. The Canadian crushers state that they intend producing sufficient to supply the Canadian demand.

Turpentine continues to advance, and has seldom been higher in the south than it is at present. The quotations vary from 92c. to 95c.

The glass and petroleum conditions are unchanged. Business continues active in all lines.

White Lead — Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb.

Waggon and Implement Paint

This line is ready for use, easily applied, will dry quickly, and with an exceedingly durable gloss finish. It is the most economical on the market for the class of work for which it is prepared.

Specially adapted for painting and re-painting Agricultural Implements, Waggons, Trucks, Heavy Vehicles and Implements of every description. Blue, Red, Green, Yellow, Black. Gals., ½s, qts., pts. Send for prices.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.



COVERT MFG. CO.,
TROY, N.Y.
DERBY SNAP
With Plated Rust Proof and Guarded Springs
"The Latest and Best."
For Sale by all Jobbers at Manufacturers' Price

Subscribe to the
OIL AND COLOURMAN'S JOURNAL
for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**
Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.
SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

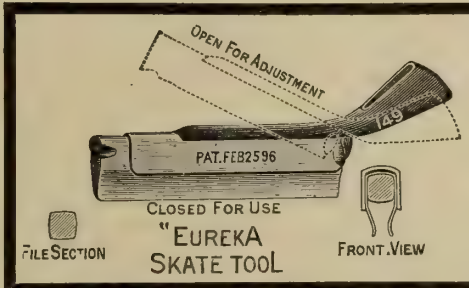


Iron Roof Cresting
Finials
Iron Fencing

DENNIS WIRE AND IRON CO.
Send for Catalogue. LONDON, ONT.

McCaskill, Dougall & Co.
Manufacturers
RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

ABOUT GLUES
What kinds do you handle ? Are you and your customers satisfied ? Perhaps we can give you a better article at a fairer figure. Our SCOTCH GLUES will be found of exceptional strength, and equal to many glues for which much higher prices are charged. Let us send samples.
GROVE CHEMICAL CO. Ltd, Appley Bridge, Lancashire, Eng.



EUREKA SKATE SHARPENERS
Simple, Quickly Adjusted and Accurate. Will Sharpen any Skates.
Place your Orders Now, Before the Rush
Ask your Dealer or Jobber or write for Green Book.
SMITH & HEMENWAY CO.
296 Broadway, New York. Dept. 149
Canadian Sample Room :
215 Coristine Bldg., Montreal, Can.

"ISLAND CITY" SUPREMACY

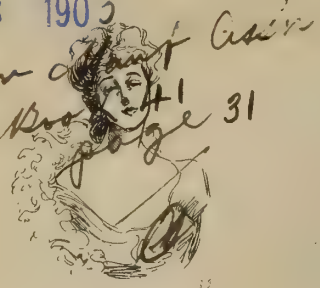
No other maker is offering you "just as good" varnishes and paints as

"ISLAND CITY" BRAND

We are sure of that. Our house and floor paints dry in eight hours, and we guarantee them not to crack or blister. We are just as sure, too, that our terms will be as satisfactory to you as our goods to your customers. It is worth your trying, isn't it ? Write for a quotation to-day.

P. D. DODS & CO. **Toronto, Montreal, Vancouver, Winnipeg**

RETURNED
OCT 6 1905



Ambition

She blushed because he kissed her;
His ardent eye on her was bent,
"Your color is so fine" he cried
"I'd like to make it permanent!"

(*Tom Massen in "Munsey's"*)

The color could be made permanent with

THE CANADA PAINT CO.'S CONSTANT RED

A useful and reliable color for SHOP FRONTS, BORDERS, TRIMMING and ORNAMENTAL WORK.

Constant Red is a high-class Paint possessing a good body and stylish appearance. It is sold in liquid form and works freely under the brush.

For Sale by all

Hardware and Paint Dealers

For color cards see our travellers or address the

CANADA PAINT COMPANY

TORONTO. MONTREAL.

packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 46c.; boiled, 49c.; 5 to 9 barrels, raw, 45c.; boiled, 48c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 92c.; to 95c.; over one barrel, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Canadian crude oil has advanced 5c. and an increase in refined is expected. We quote: Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c.; 18 1-2c. ex warehouse.

Crude Petroleum — Conditions are unchanged. We quote: Pennsylvania, $1.36; Ohio, 92c.; Canadian, $1.32.

Glass—See current market quotations.

WINDOW GLASS—MONTREAL.

Conditions remain about the same as at our last report. The Leyland Co. are said to be rescuing some part of the Virginian's cargo, and some of her glass may yet be available for the trade. The brisk demand for window glass is steadily maintained, and as arrivals are still slow the advance made a couple of weeks ago holds good at time of writing. We quote prices: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

ADULTERATION IN SOUTH AFRICA

THE forty-fourth annual report of the Cape Town Chamber of Commerce for the year 1904 contains the following paragraph: "It has come to the notice of your committee that importations took place of white and red lead, white zinc, linseed oil, and turpentine, and that the trade description in a considerable number of such instances was irregular, calculated to prejudicially affect the higher grades of such articles, while at the same time perpetrating a deception upon the ultimate purchaser in this country. With the cooperation of the London Chamber of Commerce and the local Hardware Association, representations were made with the object of making illegal such erroneous trade-descriptions, and the Cape Government has accordingly issued instructions that all importations of white lead, white zinc, red lead and similar compositions, linseed oil, and turpentine, shall only be passed by the Customs authorities when marked 'reduced,' 'mixed,' 'boiled,' or 'mineral'; but that if adulterated to the extent of 50 per cent. or more the actual percentage of such adulteration must also be conspicuously marked. Your committee understands that this regulation will effectually prevent the undesirable proceeding complained of."

WILL DO THE WORK.

THE tedious and unpleasant system of removing old paint by "burning off," with its objectionable odors, can now be obviated by means of a chemical fluid, known as "Pintoff," manufactured by Holzapfel's Compositions Company, Limited, Newcastle-on-Tyne, England. In a recent test on paint, enamel and varnish it was first applied by means of an ordinary painting brush to two coats of white paint seven years old, being laid on freely and both ways, and then allowed to stand for five minutes, the result being that the paint became soft, and was easily and completely scraped with a knife from the deal beneath. Enamel paint twelve years old was removed with the same success after the "Pintoff" had been applied about ten minutes; and the result was equally good when put over ten year varnish. In each case no injury or stain was caused to the wood the grain of which remains intact, and having been wiped clean with a cloth saturated with turpentine, is ready to receive a fresh coat of paint. No caustic or corrosive action is noticeable in "Pintoff," which does not therefore injure the hands or brushes. It acts entirely as a powerful solvent on the hard dry substances into which fluid paints and enamels are converted by the action of the atmosphere, temperature, etc.

REPRESENTATIVE WANTED.

A United States firm, manufacturers of high grade iron and brass pumps for hand, windmill and power use, also of sanitary porcelain and enameled ware, are anxious to secure a representative in Toronto, Montreal and Quebec. Exclusive agency will be given to good reliable party. A fair connection among Canadian jobbers has already been established. For further information address Hardware and Metal, Toronto.

OLD COUNTRY VISITOR DELIGHTED.

Mr. Ackerman Jopp, who has extensive business interests in Glasgow, Scotland, is visiting in Montreal, the guest of his father-in-law, Mr. Robt. Munro, managing director of the Canada Paint Co. Mr. Jopp has shown especial interest in the improvements noticeable around the Board of Trade and Bank of Montreal building, and expresses himself as being delighted with these evidences of Canada's prosperity. Many advances have been made in Montreal since his last visit, and Mr. Jopp is very keen to appreciate them.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for addition to Drill Hall, Toronto, Ont.," will be received at this office until Saturday, October 14th, 1905, inclusively, for the construction of an addition to Drill Hall for cavalry, artillery, &c.

Plans and specifications can be seen and forms of tender obtained at th s Department and at the office of S. G. Curry, Esq., Architect, 90 Yonge St., Toronto.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p.c.) of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, September 16, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (40

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Indian Head Breakwater," will be received at this office until Saturday, October 14th, 1905, inclusively, for the construction of a breakwater at Indian Head, Summerside Harbour, Prince County, P.E.I., according to a plan and specification to be seen at the office of J. B. Hegan, Esq., Resident Engineer, Charlottetown, P.E.I., on application to the Postmaster of Summerside, P.E.I., and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for fifteen thousand dollars ($15,000.00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, Sept. 16, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (40)

TO ARMS! TO ARMS!

No ! You haven't seen your jobber yet about

THE HAMILTON RIFLE

MODEL No. 23.

and your trade is being "rifled." We are not going to give you up just the same. We know you are hesitating because you doubt our ability to make a rifle—reliable in every respect—which you can sell to a man for $3.50. It seems absurd, doesn't it? But we **do it** and **guarantee** the rifles, too. Write that word **HAMILTON** across your memory ; it spells **Dollars** for **you**. And your jobber, see him right away.

THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**

"THE VIOLET"

—A MASTERPIECE IN THE FRENCH GRAY FINISH—



RETURNED
OCT 2 1905

Manufactured by 25 Pieces now ready

The SIMEON L. & GEORGE H. ROGERS CO.

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The G. WEETON MFG. CO., 110 Adelaide Street West, TORONTO,

SELLING AGENTS, BRINGS NEW CATALOGUE No. 10.

TRADE MARK

This design a guarantee of quality.

Heavy Red-Brown Wrapping

FOR EXPRESS PARCELS. STRONG, TOUCH AND STIFF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.

TORONTO LIMITED MONTREAL



The Standard Ideal Sanitary Co., Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

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Write us at once if you want to secure

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of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

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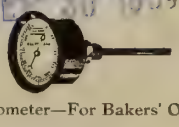
Sales Office:
50 Colborne St., Toronto.


Asbestos Packed Cocks

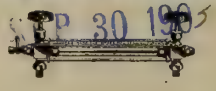

The ***JMT*** Cushion Check Valve—it can't "hammer." Try one where you have trouble


Improved Double Sight Feed Lubricator


Iron Body Valves—all kinds


Pyrometer—For Bakers' Ovens




Water Guage Mt'gs—all styles


Safety Valves—For Stationary Boilers


Reducing Pressure Valves


Hose Gate Valves


Hose Racks—For Fire Protection

We make and handle a full line of

Engineers' and Steamfitters' Supplies

STEAM SPECIALTIES.

Iron Pipe and Fittings
Pipe Cutting—to sketch
Brass and Iron Goods
Tools, Pumps, Hose Goods

The James Morrison Brass Mfg. Co. Limited

89-97 West Adelaide Street, - TORONTO

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

Article XVI.

HEATING SYSTEM OF SCHOOL OF SCIENCE BUILDING, TORONTO

IN article 12 the question of the ventilation of the new School of Science Building at Toronto was discussed and, as promised, the system of heating adopted is now outlined.

The steam heating system adopted for use in the building is of the over-head, single pipe, gravity type, and the general plan of piping carried out is very well illustrated in Fig. 6, which shows the relative position of the boiler house to the main building, but not the pumps, receiver, etc., an elevation of which is shown in Fig. 7, and a plan in Fig. 8.

It will be seen that there are two boilers which are of the "Heine" type, and are run at a pressure of 80 pounds to the square inch, this pressure being necessary for the operation of the electrical generator, fan engine, etc.

From the boilers is run a 7 inch steam main to a point within the main building, where it rises directly to the attic, and is there divided into several branches, each supplying a number of drops or "main risers."

This division is not shown in Fig. 6 for, as was said in the beginning of these articles, it is not intended to give an exact description of the detail of this plant, but rather an accurate idea of the system which is in operation.

The branches from the steam main in the attic are all "swivel" connected to the "main risers," so that ample provision is made in this way for expansion.

Under the ceiling of the various flats, except the top flat, are taken branches from the main risers of a size suitable for the amount of surface to be supplied. and from each branch is run out horizontally a pipe 3 feet long, having on its outer end a "T" with openings looking each way.

From these openings is run in either direction a horizontal of ample capacity, gradually falling to the distal ends, from which points are taken "reliefs" $\frac{3}{4}$ inch. in diameter, these reliefs being in every instance carried directly to the main return pipe, which is run along the floor line of the sub-cellar, and is about 3 feet below an artificial water line (which will later be described) so that in every relief there is a perfect water seal.

From the horizontal branches referred to are taken connections to the various radiators which are sufficiently large to allow of the free flow of the necessary steam to the radiation and the return of all condensation therefrom. but for the reason that, as will be obvious, these two elements are traveling in opposite directions, these connections are somewhat longer in proportion than the balance of the system, where the level of both steam and condensation is concurrent.

It will readily be seen that with such a system of piping there is practically no possibility of water being pocketed in any portion of it, and hence the danger of "water-hammer," with all the trouble and annoyance that that implies, is reduced to a minimum.

The radiators used in connection with the system are almost without exception of the two "loop" variety, 26 in. high, standing on legs 6 in. long. They are of the hot water type—that is with the sections connected together both top and bottom—and have a grade toward the inlet of about one-half inch in the length of the radiator.

The air valve is placed at about one-third the distance from the end opposite the inlet, and about in the centre between the top and bottom of the loop—this arrangement being found by experiment to effect the most rapid expulsion of air.

Each radiator has a Jenkins angle valve of the high lift offset pattern, fitted on top with a diaphram actuated by compressed air, which is controlled by an electrically operated thermostatic arrangement, so that the temperature may be kept at any desired point, in any appartment, without regard to the re-

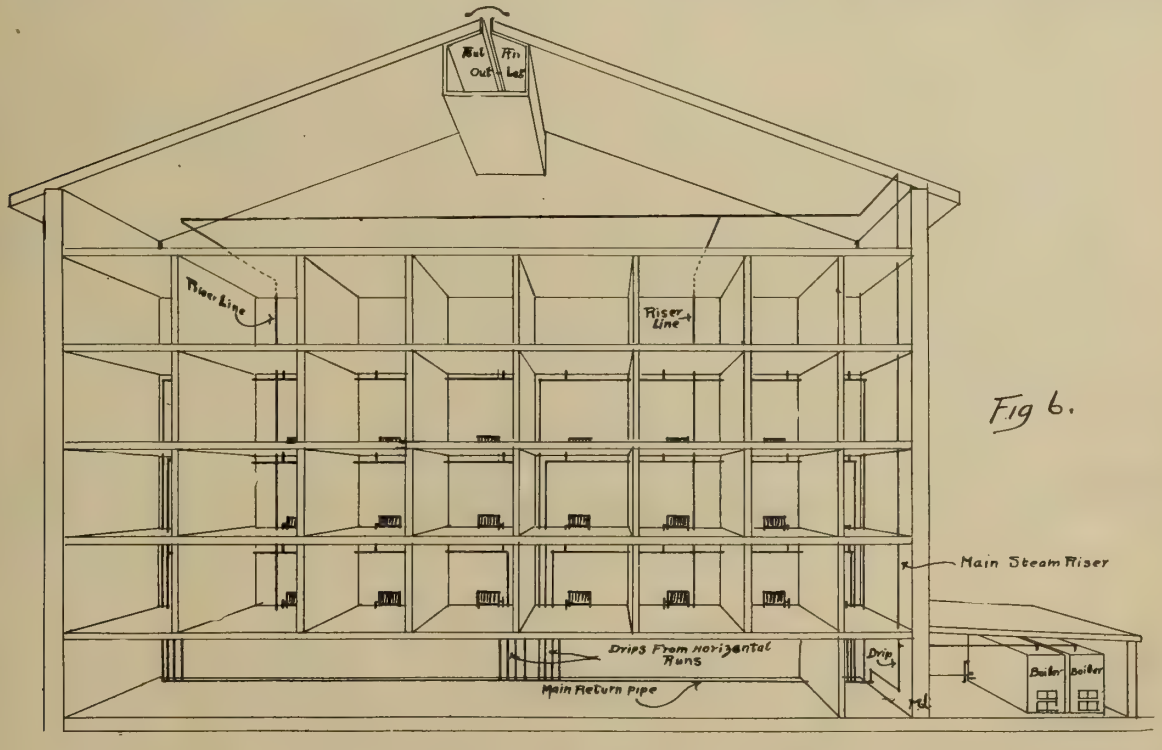


Fig 6.

quirements of any other portion of the building.

The whole system of heating, including the main tempering coil, is so connected to the exhaust pipe from the different engines as to permit of the use of exhaust steam for heating purposes, but as it is intended that a future article shall deal with this system of heating exclusively, it is thought wise to refrain from any lengthy reference to it on this occasion.

The pressure on the boilers, as before stated, will range around 80 pounds, and as not more than 5 pounds will at any time be kept in the heating system, the reduction being made by the use of pressure reducing valves, it will be apparent that condensation could not pass back to the boiler by gravity, hence the necessity of using a pump, and a reference to Fig. 7 will give a good idea of the arrangement in use.

The pipe at ground, to the left, marked "main return," is the pipe which collects all of the condensation from the whole direct radiating surface throughout the building. At the point mentioned it turns up about three feet to the steam trap, and in that way causes the water to fill up in all the "reliefs" to the same height, forming the artificial water line referred to before.

From the trap it is continuously discharged, under normal conditions, to the "receiver," from which it passes by gravity to the pumps at either side thereof, and thence to the boilers.

The pumps are automatically governed by a "Legg" controller (not shown). This controller has within it a counterpoised float, which rises when the water level attains a certain pre-determined level, and automatically opens a steam valve through which the steam enters the pumps, which continue to discharge water to the boiler until the level has fallen to a point where the float in the controller falling with it automatically closes the said steam valve again, when the pumps cease working until the operation is repeated.

The "by-pass" shown is used for the purpose of allowing water from the return to enter the receiver direct, when the trap for any reason is not in operation.

The "separator" is used for separating from the water any oil which may find its way into the system when the exhaust from the engines is being used. In such a case the condensation from the system, instead of passing direct from the trap to the receiver, as shown in Fig. 7, would pass first through the "separator" and thence to the "receiver."

Fig. 8, which is a plan of all connections shown in Fig. 7, shows how this is accomplished.

The operation of the "oil separator" is as follows:

The return pipe from the trap is brought in at the top and passed down through the water, which is always maintained at about the level shown.

The connection from the separator is taken out at a low point, and in consequence any oil passing across between these two pipes will naturally pass upward to the surface, from where it is drawn off through the "blow-off" into the "oil collector," the latter being provided with two valves, one to discharge any contained water to the drain, and the other to remove the oil for future use.

Of course a great deal might yet be said about the hundred and one small details of the whole plant, but a sufficient discription has perhaps been given to convey to the reader a fairly accurate idea of the principles adopted in what is undoubtedly a first-class system of heating and ventilation.

No figures as to quantities of heating surface and air supplied have been given, for the reason that it is the intention to deal with that phase of the business in another manner at a future time.

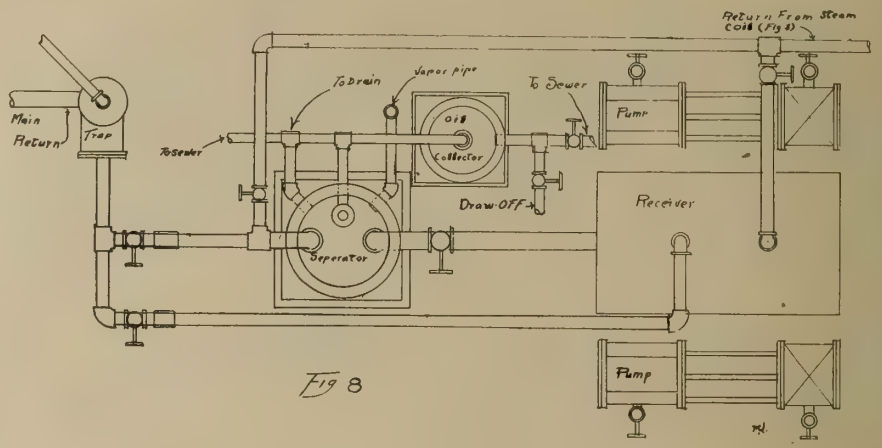


Fig 8

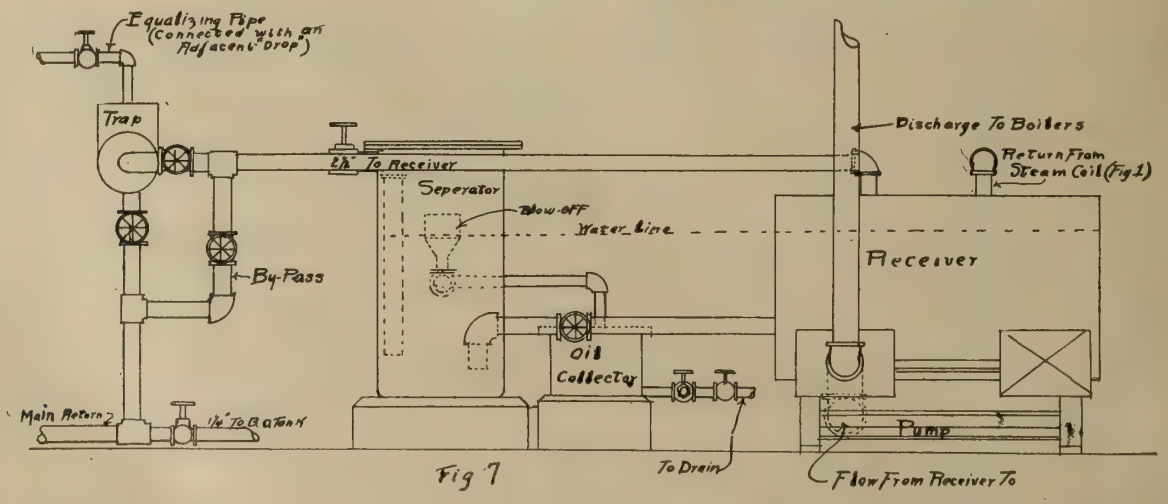


Fig 7

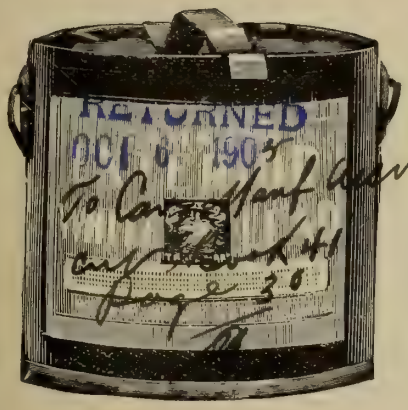
DON'T GO TO PANAMA.

Liberal inducements were recently offered to plumbers and steamfitters who would undertake to go to Panama and do work on the dwellings in connection with the big ditch under construction on the Isthmus. According to recent developments the liberal inducements were necessary as the place is a veritable hell hole for disease. The Springfield Republican states that it may be found necessary to call for volunteers to work on the canal as both Chinese and Japanese laborers refuse to undertake the work and the Italian ambassador to the United States advises Italian laborers to keep away from Panama on account of the unhealthy conditions prevailing there.

A FINE WINDOW DISPLAY.

No finer window has been seen in Montreal for many a day than that fitted up by W. J. Wall, local representative for the J. L. Mott Iron Works, of New York City. The window is a part of his place of business on Bleury street, and embraces a type of a modern bath room, equipped with Imperial porcelain. The bath, the shower, the stand and the accessories of a modern mansion are to be seen. Curtains and towels add daintiness to the picture, and crowds have been attracted by it. To those who contemplate building or re-

RAMSAY'S



This is the lead for business and profit. Better than pure lead, and for less money.

Have You Sold

Ramsay's Exterior Lead?

If not, let us send you a booklet and tell you about it. Don't confuse it with any other lead under a similar name. They have nothing in common.

A. RAMSAY & SON COMPANY

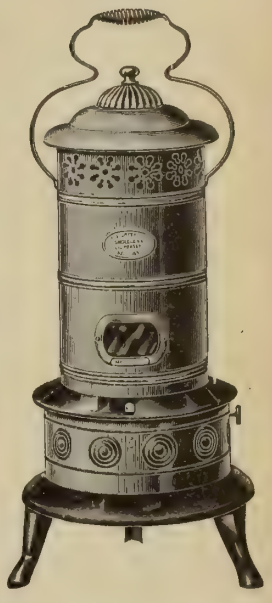
Est. 1842 MONTREAL THE LEAD GRINDERS

DO YOU SELL LAMPS?

Better order now a full stock. You will want them **badly** and **in a hurry later.**

We can supply you.

FOR BURNING GAS or OIL.
FOR HOUSE or STORE.
FOR FACTORY or SHOP.
FOR ANY AND ALL PURPOSES.



Mantles, Lamps AND Glassware

Now is the time to sell

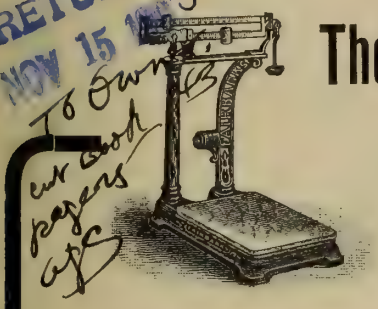
PARLOR OIL HEATERS.

We have the **PURITAN SMOKELESS**—the best of all, and perfectly safe.

THE ROCHESTER LAMP CO.

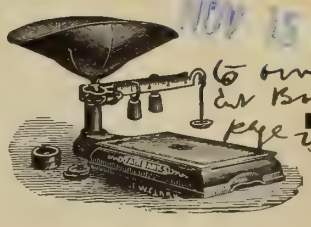
TORONTO, CANADA

RETURNED NOV 15 1905



The Canadian Fairbanks Co., LIMITED

will use this space in our following issues to tell and prove to dealers and users of scales that



FAIRBANKS STANDARD SCALES

are **the best Scales in the world.** They are sold and used in every part of the world, and are everywhere recognized as "The Standard."

WATCH THIS SPACE.

Have You Our Scale Catalogue?

THE CANADIAN FAIRBANKS CO., Limited,

Montreal Toronto Vancouver Winnipeg

modelling the plumbing in their houses, Mr. Wall has a valuable booklet on modern plumbing that will certainly prove instructive and entertaining. The claim for the Mott equipments is that they have kept in view the idea that modern plumbing must not only be of a high standard from a sanitary standpoint, but also artistic in design and construction. The bath room exemplified in the window is but one that is now regularly installed in the home-beautiful of modern life. Mr. Wall is a hustler and represents also the Crane Co. of Chicago and the National Tile Co.

TORONTO M. P. A. BALL TEAM.

FOURTEEN games played and none lost is the splendid record of the Toronto Master Plumbers' and Steam Fitters' Baseball Team for 1905, the season just finished being one of the most successful since the formation of the association back in the eighties.

Manager Jack Wright is justly proud of his bunch of sportsmen and has kept an accurate record of the members' doings all season, 451 being the total

The officers of the club are: Honorary president, George Clapperton; president, K. J. Allison; vice-president, E. Larter; second vice-president, Geo. Cooper; captains, A. F. McPherson and W. Clewes; treasurer, D. Menzies; secretary, J. E. Fullerton; manager, John M. Wright; scorer, T. F. Nixon; umpire, W. Copping; stockholder, J. E. Knott; and managing committee of Messrs. D. McMullen, R. Wright, R. W. Harrison and A. Richardson.

Photos of both the Buffalo and Toronto teams are reproduced this week, the names of the Toronto team reading from left to right being as follows: Top row, Messrs. Harrison, Robertson, Nott, John Wright (manager), Nixon, Copping (umpire), Cooper; middle row, Clewes, J. Fullerton, K. J. Allison, R. Wright, Adams, Menzies, Brown; and bottom row, Benson and Elliott.

NATURAL GAS AT GALT.

Galt is to burn natural gas from the Welland district in future, the pipe line via Brantford and St. George being practically completed. The power of natural

boys went in a body to the principal and stated their determination not to attend school under the circumstances, afterwards parading the streets. The school authorities, who, it is said, have long known of the conditions, have secured an expert from Toronto to report upon them.

PLUMBING GOSSIP.

The Buffalo Forge Company through its London branch has secured the contract for heating and ventilating the buildings of His Majesty's dockyards, Portsmouth, England.

Guelph proposes to install a new system of filtration at the waterworks and is negotiating with the Roberts Filter Manufacturing Company of Philadelphia.

Rice Lewis & Son, Toronto, showed a neat window of plumbers' tools last week, in the window being pipe cutting and threading machines, hot blast torches, solder and soldering tools, pipe wrenches, saws, stocks and dies, pliers, gasoline torches and other tools necessary to the working plumber and steamfitter.



Toronto Master Plumbers' Baseball Team.



Buffalo Master Plumbers' Baseball Team.

turnout of the boys at the games during the season. It is pleasing to see the "old boys" of 30 to 50 years forgetting their business troubles and entering into the game as lively as they played on the corner lots years ago. The members of the association have become better acquainted with each other at the ball games and enduring friendships have been made which will weather the storms of business differences and association controversies. If the Toronto Master Plumbers' Association were to fall to pieces to-morrow the influence of the ball team friendships would cause it to be reorganized the day after.

The season's record is as follows: June 17, defeated Buffalo M.P.A. at Grand Island, 5 to 2; June 28, defeated Liederkrantz, 10 to 9; July 8, defeated Journeymen, 9 to 6; July 21, defeated Manufacturers and Supply Houses at Lorne Park, 25 to 23; July 29, tied with Swankey Bicycle Club, 9 to 9; August 3, defeated Buffalo M.P.A. at Toronto Island, 6 to 3; August 19, defeated Journeymen at St. Catharines, 6 to 0.

gas is fully a third greater than artificial gas and for illuminating purposes mantles are necessary. The proposed rates are such as to cause a tremendous volume to be used and the sale of gas stoves and fixtures should be very large this fall. The figures are: For lighting only, 70c per 1,000 feet, 10c discount, net 60 cents. For cooking and lighting, 70c per 1,000 feet, 30c discount, net 40c. For heating and cooking, 70c per 1,000 feet, 35c discount, net 35c. This would be the winter rate, October to May, 1906.

BOYS OBJECT TO BAD SANITATION

Twenty boy pupils in the Central school at Peterboro went on strike last Friday. They refused to go into the room which they had usually occupied, giving as a reason unsanitary conditions of the apartment, which, it is alleged, has existed for nearly a year, on account of defective plumbing. On Thursday the pupils held a meeting and a strike was ordered till such time as the necessary repairs may be made. The

The International Gas Appliance Co., Toronto, intend to erect a new factory to cost $6,500.

Ladysmith, B.C., is figuring on establishing an electric light plant.

Thos. Hammell, Beeton, is calling for tenders for the erection of a brick residence at Beeton. The tenders are to include the work of plumbing and heating and must be in by October 7th.

The work of installing their own electric light system by the C.P.R. at Brandon is well advanced. The plant will be located at the yards at the east of Brandon city and will be ready for use some time next month.

The electric bell is a little thing that ought to sell wherever a house is being built. And possibly in some old houses there is a chance for you to put in a bell or two.

Mr. J. O. Carslake, of Carslake & Lockerby, Collingwood, was in town again this week. His firm has been doing business for two years and devote the greater part of their attention to steamboat work. Business is said to be very good in his district.



Pertinent Facts about the NATURO Closet & Seat of interest to YOU

They are simply constructed—nothing to get out of order. There are three special features about their design which render them preferable to all other Water Closets, viz :

The bowl is lower—convenient to children. The seat slopes slightly from front to back, which, coupled with the lowness, does away entirely with the unnatural and unhealthy position caused by the old style Closets. The slight ridge at the rear of the Seat prevents soiling and wetting.

It is readily seen therefore that they will sell quickly. Architects have recognized these merits and are calling for them ; the public welfare demands them and they are daily increasing in popularity.

Their price is profitable and we furnish all advertising matter free, besides sending all inquiries from your locality to you.

The NATURO Company

C. H. MUCKENHIRN,
President

Salem, N. J.

GOOD ADVERTISING

PLUMBERS generally do not advertise as liberally as they might. In large cities there is tenable ground for conservatism, as the business being largely individualistic is divided into two classes—the firm looking for contracts bigger than can be secured through newspaper publicity; the small man with limited resources and banking on local trade. But in the towns and smaller cities, where the plumbing and hardware business usually go hand in hand, there is no adequate reason why one end should be advertised extensively and the other only spasmodically. With some dealers the discrimination can be attributed to a belief that people mostly negotiate with the nearest plumber when they have work to be done in this line, so why advertise? You get the job anyway. This is true of the "emergency" part of the plumbing business; but what about new outfits—that portion of the business where estimates are sought and the man who advertises gets consideration, and, if he has the "figures" and "stock," gets the contract? This transaction is not local. Its very importance demands inquiry, and "plumbing inquiry" does not stop at territory. There is no reason, then, why a dealer should not call into prominence the plumbing end of his business as well as the hardware end—push the two. In one of the advertisements reproduced on this page a trace of this plan of campaign is to be seen.

* * *

J. W. Barnes has a good conception of the elements which compose a telling advertisement. In the first place, his remarks are pertinent—extremely timely. Mr. Barnes conducts a plumbing business. He lets his readers know this—makes no bones about his superior workmanship and then—solicits business. This advertisement is a first-class specimen of the follow-up idea. The class of business is at the commencement, then the reason, then the grade of work, and last—"about your trade."

* * *

Peter & Sylvester have a different mode of making the same appeal as Barnes. They presuppose your plumbing is unsanitary and they inform you they can "help you out of that death-trap." Barnes alludes to the fact of his having skilled workmen. Peter & Sylvester, in their case, allow you to infer it. They paint the dark picture to make the contrast more complete. Altogether this is a striking advertisement, both because of its being unusual and finished in treatment—effective in a small space.

* * *

G. K. Smith believes in the fact that he is known and will be known. Consequently in his advertisements he draws attention to "G. K. Smith" and naturally you associate the name with plumbing and heating. This advertisement commences with silent argument, but shortly a line of reasoning is adduced. A new supervisor has been engaged by Mr. Smith. This, of course, deserves prominence and it is coupled with a note about "extra facilities" to make a twofold impression.

* * *

Typographically, Mr. Barnes' is the best advertisement. There is more uniformity of style and the composition shows the most taste. Mr. Smith's advertisement is fairly well designed, but the chief display line is too large—not from Smith's "business" point of view, though. Peter & Sylvester's advertisement is catchy, but there might have been more harmony in the choice of fonts.

* * *

Taken all in all, these three advertisements are safe models for any dealer to emulate. They stand for the most popular and seemingly the most valuable styles of newspaper publicity, while being totally dissimilar phases of it. They show in common a freedom from slang, a commendable business sagacity and alertness.

ADLETS.

You can get along without advertising; so can a wagon without grease—but it grinds.

* * *

Decide to be "one-sided" when writing your copy. There is no other side—to the question.

* * *

Don't try to hypnotize your readers with flashlight statements. Truth need not glitter.

PLUMBING! PLUMBING!! PLUMBING!!!

NOW IS THE TIME FOR PLUMBING

The finest, largest and best assorted stock of plumbing ever shown in Western Canada. Come and see my show room. I have none but the best plumbers, and guarantee you first-class work.

HOT WATER HEATING a specialty, inspection of work invited. Estimates will be cheerfully given. : : : : : :

J. W. BARNES 'PHONE 262 **PARK STREET, PORT ARTHUR**

G. K. SMITH

PLUMBING

AND

HEATING

We have extra facilities for handling all orders for this class of work. : : : :

This department is under the supervision of Mr. A. Henrich, who gained his experience in Toronto, Detroit and other large eastern cities.

A Complete Stock of Shelf and Heavy Hardware.

G. K. SMITH

LET US

help you out of that death-trap. Have us

EXAMINE YOUR PLUMBING

and do not allow it to remain in that unsanitary condition if you value your health.

PETER & SYLVESTER

Sanitary Plumbing

Steam and Hot Water Heating.

Phone No.
Parkdale 1809

Post Office and Telegraph Address
Swansea,

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

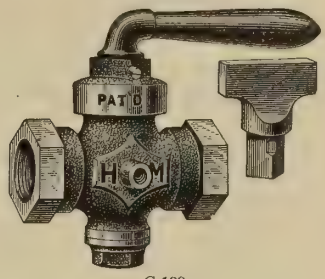
in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

MUELLER GROUND KEY WORK

No. 49 Stop and Waste Cock



C-139

A cock may completely serve its purpose as a stop but not fully answer it when open because of unmatched water-ways.

The stop lugs in Mueller Stop Cocks are milled true, so that when the cock is opened they cause the key to stop turning with the water-ways in exact line. They serve both uses equally well.

All Mueller Stop Cocks are given a 200 pound hydraulic pressure test as near like actual service use as possible, bear the Mueller trade mark and are *unconditionally guaranteed.*

We also make compression work and fuller work for plumbers' use. Catalogs on request.

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 29, 1905

PREVAILING conditions this week show very little change from those chronicled in our last report. If there is a feature to be noted it is the great impetus that has been given to the heating side of the business by the cold snap of the past few days. Plumbers, both in Montreal and outside points are ordering a great many furnaces and boilers, as well as the other equipment necessary to the carrying out of good big heating contracts.

A surprising thing to the jobbers has been another awakening in lead. It was generally supposed that the end of the war would knock the bottom out of the lead boom, but this proved to have been an incorrect prediction, and we are at a loss to explain how this latest jump has been effected.

Iron pipe fittings are coming in for a good share of the trade this week, and the market in iron pipe is also very fine. Soil pipe is being shipped in large quantities, and is one of the most active articles on a very strong market.

Range Boilers—A splendid demand is keeping manufacturers and jobbers busy. Our quotations are unchanged and are as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The price quoted last week is unchanged, but is much firmer, in view of an advance in pig lead to the dealers of about ten cents per hundred pounds. Our quotations: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c per hundred lbs. extra.

Iron Pipe Fittings—An especially good demand is keeping the prices very strong. Many big jobs requiring iron pipe and fittings are now on the tapis. We quote: Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—An upward tendency is noticed in the prices. Good sales are being made daily, and the trade may be said to be in a most flourishing condition. We quote as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—Large shipments are the order of the week. There has been no change in prices during the seven days since our last report Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—No change is reported in solder, though the strength of both tin and lead during the past week has had a tendency to stiffen the market to some extent. Our prices are as follows: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, September 29, 1905.

A TREMENDOUS business is being done in all lines of plumbing and heating goods, and most contractors are working their hardest in order to finish the work now in hand before cold weather puts a stop to work. The large number of buildings which are well advanced towards completion has created an active demand for finishing goods and enamelware, boilers and lead pipes are included, very large shipments being made in all directions.

The supply houses which deal more particularly in boilers, furnaces, radiators, etc., as well as those which make a specialty of steam heating supplies, are all loaded up with as much work as they can handle satisfactorily, some being in fact so busy that orders are about a week behind in being shipped. The manufacturers report that the demand for the new Sovereign boilers is especially brisk, while the orders for Daisy boilers are greater than the dealers are able to ship with promptitude.

Last week's prices still rule, no changes having occurred. Lead and brass continue very strong, while the active demand for goods prevents any of the other lines from weakening in any way.

Lead Pipe—Prices are very firm and there is a possibility of an advance. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings.—The recent scarcity of goods is not as apparent. The manufacturers are able to ship in larger quantities. Demand is active and prices steady. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—There is a strong demand for both iron pipe and fittings, and while stocks are not so large as they should be, manufacturers are able to hold the business in their hands. We quote as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers—A large business is being done, the discount remaining at 15 per cent.

Galvanized Iron Range Boilers—Large sales are reported owing to the completion of contracts in dwelling houses. Prices continue strong. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—Buying is fairly active at the prices quoted last week. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 1-2 inch, $15.75; 3 in. $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—A fair demand exists and the firmness in the lead market prevents any decrease in price. Our quotations are as follows: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware—A tremendous volume of business is being done owing to the demand caused by contractors finishing work on houses which have been under construction. The Canadian producers are well able, however, to handle the orders being received. Prices continue unchanged. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50; special, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality, $19; special, $17; 3 inch rim, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.

BETTER SANITATION AT COBALT.

Dr. Bell, Inspector of the Board of Health, has returned to Toronto from Cobalt, where he spent five days making arrangements for placing the sanitary conditions of the famous mining town on a satisfactory basis. He found things in bad shape, from a sanitary standpoint, the whole town being dependent upon one well for its water supply. A sanitary inspector has been appointed to look after the proper disposal of garbage and rubbish.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

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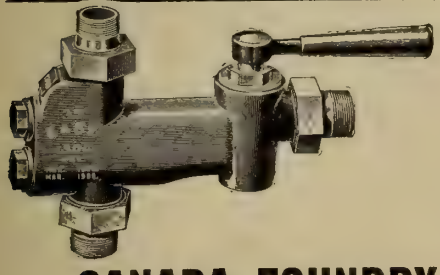
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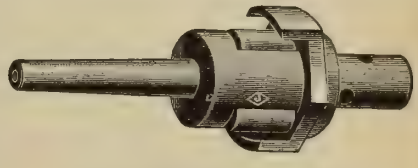
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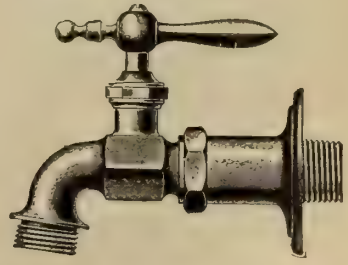


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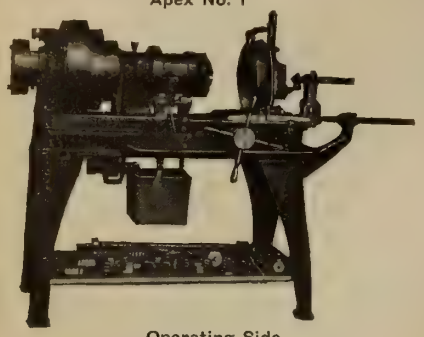
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THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



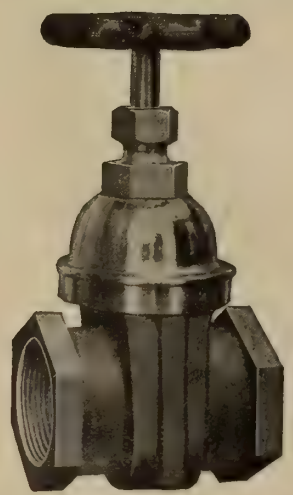
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have many imitations, but none equal the "real" article made by us. Be sure you get "Kerr's." Every valve made of the best red metal, and beautifully finished.

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PIONEER PLUMBER DEAD.

Neil McNeil, one of the oldest residents of Kingston and probably the oldest plumber in Canada, died last week at the ripe age of 80 years after an eight months illness.

The late Neil McNeil was born at Glasgow, Scotland, in the year 1825. He received a public school education and afterwards became apprentice to a plumber for a term of seven years. He remained in Glasgow four years longer, but at the age of twenty-five started for Pittsburg, Penn. On the way out he stopped at Carleton Place to visit his sister, intending to come to Kingston by way of the Rideau canal, and thence across to Cape Vincent. While in Kingston he became acquainted with the head of the firm of Allen & Matthews, who

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Neil McNeil, Kingston.

advised him strongly to remain in the Limestone City. At this time the water works system was just being installed, and for five years the deceased acted as foreman thereof. In the year 1851 he opened a shop of his own and for many years was the only practical plumber between Toronto and Montreal, continuing in business until 1898.

During his business career he assisted in roofing the county court house and Royal Military College buildings. He also installed the heating and plumbing at Queen's University. One of his sons, Alexander, is a plumber in Chicago.

If any reader of Hardware and Metal is aware of a plumber having done plumbing work in Canada prior to 1850 the editor would be pleased to have a letter from him. It is by comparing the work done half a century ago with that done to-day that a proper appreciation of the advances made in sanitation can be secured.

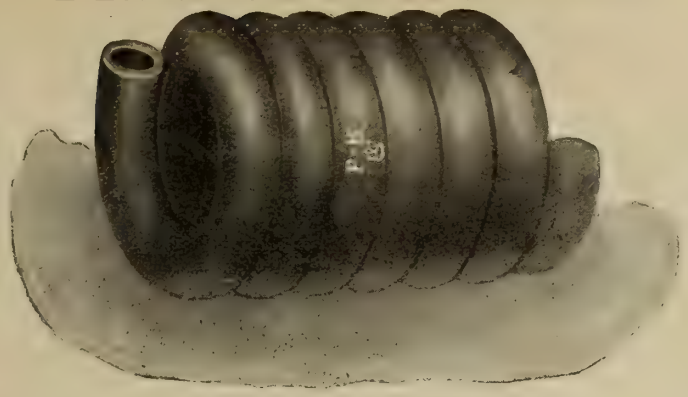
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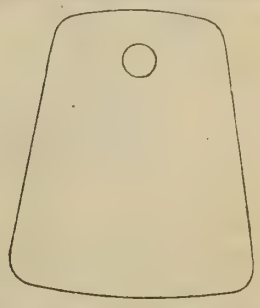
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You Want It.

See that You Get It.



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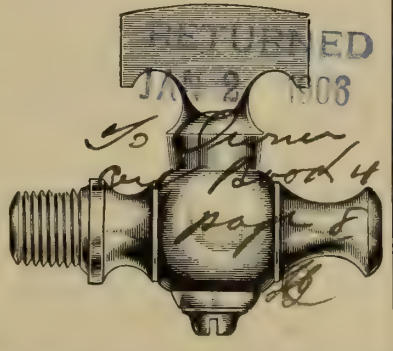
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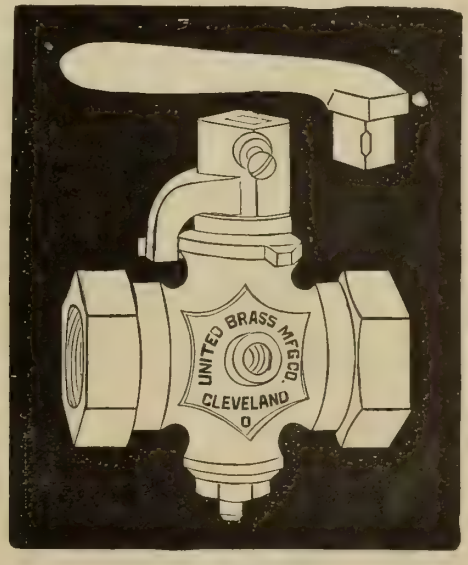
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All kinds and sizes of everything in this department.

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We make Electric Fixtures, Sockets, and Cut-Outs

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Electrical Supplies of all kinds. MONTREAL.

CARRY STOCKS OF ELECTRICAL SUPPLIES.

MOST hardware houses in the smaller towns carry fixtures for both gas and electricity. They also should, if they do not already, carry batteries, bells, etc. These goods can be sold to the consumer, when handled in connection with the plumbing goods, at a fair profit and still be sold for less than the small dealer can possibly afford to sell them.

The lighting in almost all towns and cities is done by a central lighting station and the isolated plant must carry a stock of electrical supplies to meet their requirements or depend upon some local dealer in electrical supplies. There is not, as a general thing, enough business to justify a local dealer in carrying anything but the smallest possible line while, as a matter of fact, the demands of the consumer are varied greatly.

The small dealer in electrical supplies, doing wiring, must have a store in the main part of the town and must have some one constantly in attendance at the store while the owner is probably out working on contract work. This makes it necessary to make the rent and the clerk hire off of the very limited quantity of supplies that is sold.

Another matter that should be considered is that in a great many towns there is no one handling supplies except the central lighting station and when a customer desires to purchase a few lamps to replace those that have burned out he must go to the lighting plant, which is usually situated in some out of the way place, and when he gets there he frequently finds that during the day time there is no one in attendance. The location of the plant itself is such that it is hardly safe to send children as it is almost always along the railroad tracks and in an undesirable quarter of the town.

The inconvenience is as great to the lighting plant as it is to the customer and the lighting station as a general thing prefers to turn the lamp business over to some one who is in a store in the town. In some instances they have turned it over to the drug store, in other instances to groceries. Neither of these people carry wire, bells or batteries or any other kind of electrical supplies, while the hardware dealer almost always carries a number of things which are electrical supplies as well as builders' supplies. In other words, the plumber or retail hardware dealer is the logical person to distribute electrical supplies.

In some of the towns the lighting station has been following the practice of furnishing free renewals of incandescent lamps. This practice is gradually dying out and we think that within two or three years at the outside there will be no one furnishing lamps free.

A large hardware firm who have made a specialty of electrical supplies writes as follows: "Electrical supplies enter so largely into the matter of new buildings and housefurnishings (which lines of goods generally the retail hardwareman handles) that it seems as though an electrical supply department would be almost a necessary part of his establishment. In addition take the special lines of electric light lamps, with the various accessories which are liable to be bought by the average householder for his daily use; he is in the habit of going to the retail store for his housefurnishing supplies, and as the hardware stores are generally conveniently situated it makes it a most natural place for him to go."

A few years ago the hardware merchant started in the electrical business by carrying a stock of dry batteries, push buttons, bell wire, and other supplies needed for door bell work. After carrying this stock, he found that the public began to look to him for electrical incandescent lamps, and other necessary supplies for electrical repairing. Then, too, they had him furnish builders' hardware for houses, and he naturally drifted into furnishing gas chandeliers, and where houses were wired for electrical work, he began furnishing electrical fixtures, and then the combination gas and electrical fixtures, one thing

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Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

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Hardware Store Business Methods

Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

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This book is descriptive of the best methods of accommodating and displaying the large variety of goods which are carried in stock in representative American and Canadian hardware stores. Copiously illustrated, and worth many times its cost to every progressive hardware dealer.

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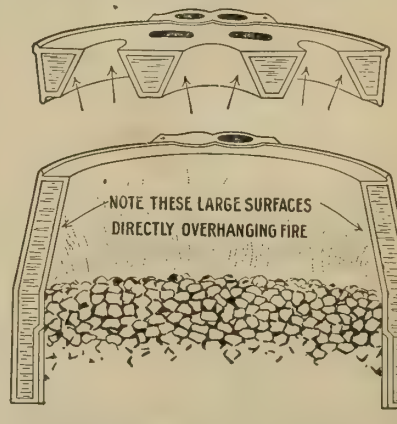
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Handle Only The Best There is more profit to the dealer in installing the best system. You have to live and do business in the same town with the customer for whom you install a heating system If what you have put in for him proves unsatisfactory, it does not tend to increase your trade with him and his friends in other lines. On the other hand, if you install a perfectly satisfactory heating system it remains for years as an advertisement of your business, which brings ever-increasing trade and consequent profits.

The Oxford System For 60 years we have studied to produce the best possible heating system. We have always led. At no time in all those years has there been offered to the Canadian public heating apparatus superior to what we were offering in our Oxford lines. Our Oxford Steam and Hot Water Heating System of 1905 has no equal. You may add our reputation to yours by handling the Oxford system.



Over-Hanging Fire Pot Perhaps the most striking feature of the Oxford Hot Water Heater is the improved fire pot construction. The walls of the fire pot above the fire incline slightly so as to overhang the fire. The effect of this is obvious. The heat does not **pass** as in a straight wall but is forced to **strike** or **impinge** before passing upward. This improvement greatly increases the heating capacity of the boiler. The first water section above the fire is made double the depth of any other section, and has bell-shaped flues, wider at the bottom than at the top. Here again the rising heat is forced to impinge on an enlarged surface, thus increasing its power.

No Gaskets or Washers All connections are made by our Oxford Steel Push Nipple, which makes a metal to metal joint, doing away entirely with the use of all Gaskets or Washers and preventing the possibility of a leak. As a practical man, this advantage need not be explained to you.

Other Points There are many other points of superiority in the Oxford Boiler which make it easy to recommend, easy to sell and perfectly satisfactory when sold.

Oxford Hot Water and Steam Radiators

used with the Oxford Steam or Hot Water Boilers form the most perfect heating system.

Every connection in the Oxford Radiators is made with the Oxford Steel Push Nipple, doing away with all gaskets, washers and leaks. They convey the heat to every part without waste and with admirable evenness.

AN INTERESTING BOOK

We have prepared a large, handsomely printed, and beautifully illustrated book on Steam and Hot Water Heating, which we will send free to any dealer.

Write for the Gurney Oxford book of Steam and Hot Water Heating Apparatus.

We also manufacture coal and wood stoves and ranges, gas stoves, ranges and heaters, hotel ranges, warm air furnaces, all kinds of cooking and heating apparatus, plumbers' supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que.

The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street, MONTREAL — 29 Melinda Street, TORONTO

North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO.
TORONTO, ONT. LIMITED

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

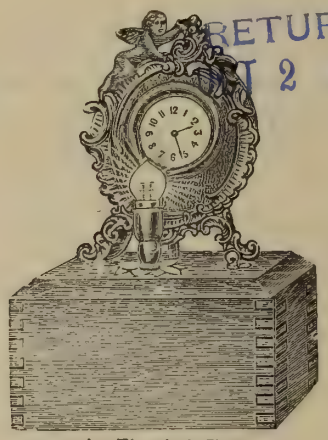
R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

leading to another, until to-day a goodly number of hardware merchants can take a contract for not only furnishing builders' hardware, but can also contract for electrical wiring, furnishing fixtures, etc. Then the customer can confine his Electrical — Pages 62 and 64. — 2 Cuts account to a lesser number of people. We also find the plumber and steam fitter taking up this line of work.—Hardware.

TWO ELECTRICAL NOVELTIES.

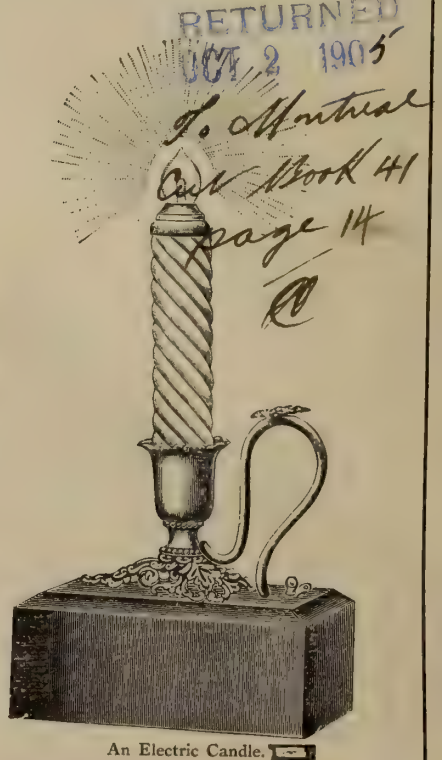
Amongst the many electrical novelties being put on the market two which appear to have considerable merit are



RETURNED
OCT 2 1905

An Electrical Clock.

those shown in the accompnaying illustration, one being an electrical clock and the other an electric candle. The former would be a decided convenience in a bed-

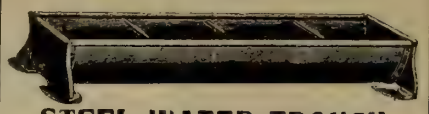


RETURNED
OCT 2 1905
P. Montreal
Cash Book 41
page 14

An Electric Candle.

room where it is necessary to know the time at any hour of the night. Both lines are stocked by the Sayer Electric Co., of Montreal.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co.
TWEED, Ontario Limited



Dark days are coming. Buy the best **Light Producers.** We make twelve different styles of Lanterns. For sale by all prominent dealers.

ONTARIO LANTERN & LAMP CO.
LIMITED
Hamilton, Ont.

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

PRICE and QUALITY

are two vital elements in

GILBERTSON'S

COMET

GALVANIZED SHEETS

That means they are soft, smooth, and easily worked, that they are flat, well galvanized and that they are lower in price than other high grade brands.

MAKERS:

W. GILBERTSON & CO. Limited.
PONTARDAWE, SOUTH WALES.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

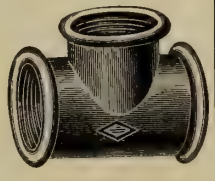
We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.
LLANELLY, WALES



TRADE MARK REGISTERED



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

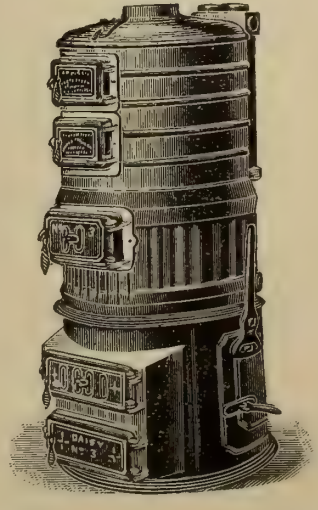
SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.
Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.
50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

Five Good Selling Lines

BUILDING PAPER
WRAPPING PAPER



TARRED FELTS
READY ROOFING
SHEATHING

Do you carry these goods ? Do you get this trade ? Secure our prices, figure it out, and see if there isn't a profit for ***you.***

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

CURRENT MARKET QUOTATIONS.

Sept. 29, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. } " 14x60, " }	7 00
" 14x65, " }	

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 85
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality, best warranted	....	0 18
"I" " warranted	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.			7 00 10 00
" ¼ "			5 60
" 5-16 "			4 45
" ⅜ "			3 85
" 7-16 "			3 70
" ½ "			3 55
" 9-16 "			3 45
" ⅝ "			3 35
" ¾ "			3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
Cut " round and square, 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	....	21 00
Plain, 14 oz.	....	22 00
Tinned copper sheet	....	24 00
Planished	....	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	....	0 22
" 35 to 45 " "	....	0 21
" 50-lb. and above "	....	0 20

BOILER AND T.K. PITTS.

Plain tinned } 47½ per cent. off list.
Spun }

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 25
Part casks	....	7 50

LEAD.

Imported Pig, per 100 lb	....	4 00
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06½
Sheets, 3 to 6 lb. "	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft. lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00	16 00	
5 feet "	19 00	17 00	
5½ " "	20 50	18 50	
6 " "	23 25	21 25	
Plate E II			
4½ feet 2½ in.	16 75	14 75	
5 " 2½ "	17 50	15 50	
5½ " 2½ "	19 00	17 00	
Plate 123 E, lavatories	1st quality	....	8 90
" 123 E, "	2nd "	....	7 50
" 127 E, "	1st "	....	5 70
" 127 E, "	2nd "	....	4 80
" 128 E, "	1st "	....	5 60
" 128 E, "	2nd "	....	4 70
" 129 E, "	1st "	....	5 40
" 129 E, "	2nd "	....	4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

	Per 100 feet.
Black pipe—	
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " " "	1 75
No. 7 Fuller's "	2 10
No. 4½, " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND LADIES' SCISSORS

Fully Warranted



Our Eastern Pattern Ladies' Scissors. This is an exceptional scissor, adapted for clean-cutting work where stiffness of blade is required. Hand forged from finest steel. Ask for discounts.

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	..	4 12½
No. 4	..	4 05
Munro's Select Flake White	..	5 65
Elephant and Decorators' Pure	..	5 50
Tiger brand, pure	..	5 75
Decorators' Special for exterior use	..	5 00
Monarch	..	5 75
Decorator's Pure	..	5 50
Essex Genuine	..	5 00
Sterling Pure	..	5 75
Island City Pure	..	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent.
American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes. 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Roof Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50	50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Balky Customer

is harder to manage than a *Balky Horse.* Your customers *won't Balk* if you offer them Paterson's Building Papers and Wire-Edged Ready Roofing, because these goods never fail to please the user.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	1 65
English	"	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10		per cent.
Arcade	70	" 10	"
Kearney & Foot	70	" 10	"
Disston's	70	" 10	"
American	70	" 10	"
J. Barton Smith	70	" 10	"
McClellan	70	" 10	"
Eagle	70	" 10	"
Nicholson, 60 and 10 to 60, 10 and 5			"
Royal	80		"
Globe	70 to 75		"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	8 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb	0 06½
" 5-in., "	0 06½
" 6-in., "	0 06
" " 8-in., "	0 05¾
" " 10-in., "	0 05½

Light T and strap, discount 65 and 5 per cent
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up		3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in.	" 6 00 to	6 50
Daisy, 8 -in.	" 5 25 to	5 75
Philadelphia, 7½-in.	" 6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem .... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	10 00
Davidson oilers, discount 40 per cent.	
Zinc and tin, discount 50, 50 and 10 per cent	
Copper per doz.	1 25 3 50
Brass "	1 50 3 50
Malleable, discount 25 per cent	

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

½ pint in tins	per gross	7 80
½ " "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers

HART & COOLEY.
NEW BRITAIN, Conn., U.S.A.



H. & C. No. 100.

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid..... per set	....	0 72
" hollow..... per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ¼ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's....per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 30 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb.....	0 28	0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz.	0 65	1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, iscount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net.....	6 00	9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	...	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'.....	4 50	11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	...	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian ..... per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	....	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

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Galvanized, plain twist	2 50	2 75

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" No. 11	3 25
" No. 12	2 85

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Terms, 2 per cent. off 30 days.

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Connor Improved.....	33 00
Daisy.....	48 00

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Weeton, G., Mfg. Co., Toronto.

Skates, Etc.
Starr Mfg. Co., Dartmouth, N.S.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co., Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
James & Reid, Perth, Ont.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
McLean, Holt & Co., St. John, N.B.
Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Stauntons Limited, Toronto.

Washing Machines, etc
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
Waggoner Ladder Co., London, Ont.

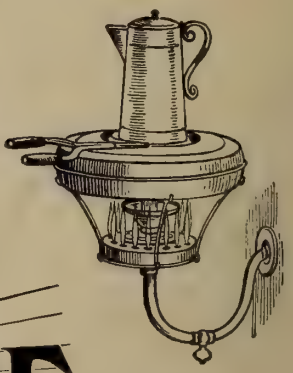
Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.

HEAT and LIGHT

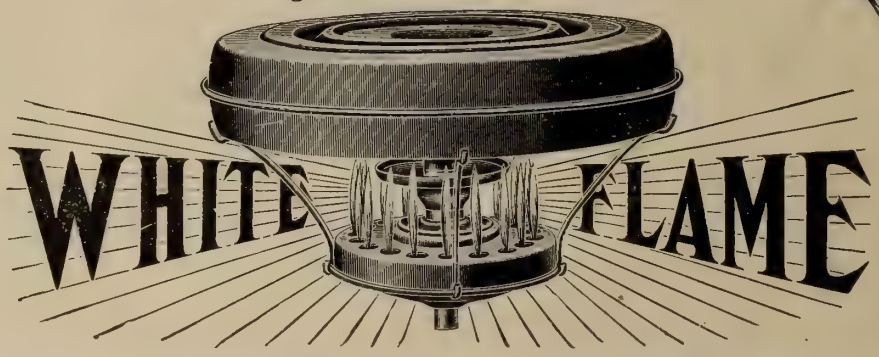
At cost of Light only.

SPECIAL TO WHOLESALERS

This being a seasonable article causes heavy demand all in a short space of time and necessitates advance orders to insure delivery when wanted, and especially being NEW, there are no old stocks on hand to draw from.

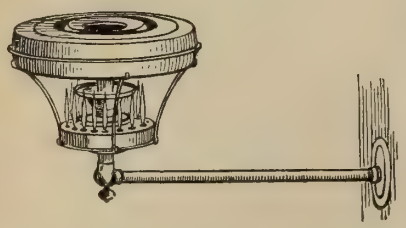


20TH Century



A Combination Gas Burner

Attaches to any chandelier, wall bracket or portable stand



GIVES GREAT **HEAT** AND BRIGHT **LIGHT** AT COST OF LIGHT ONLY

NO SMOKE, NO ODOR. NO DIRT

HYGIENIC AND ECONOMICAL

Retails at $1.25. The discounts to both jobbers and retailers show excellent profits in handling.

Must not be confused with any other heater

The 20th Century White Flame
HEAT & LIGHT IN ONE

The only one giving both HEAT and LIGHT

Made in Canada

WALTER GROSE

Sales Agent for the Dominion

To whom all communications should be addressed

MONTREAL

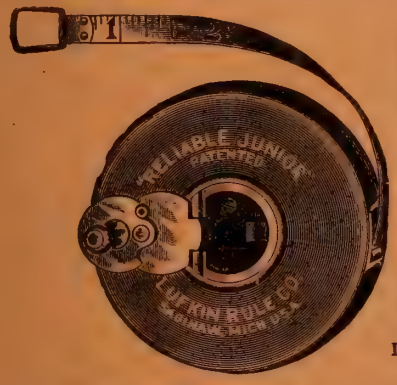
P.S.—Show Cards, Circulars, Envelope Stuffers furnished the trade.

IRON

Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

London Rolling Mill Co.
Limited,
LONDON, CANADA.

STEEL



LUFKIN MEASURING TAPES

Steel, Metallic, Linen, Pocket, Ass Skin, Pat. Leather, Bend Leather, Etc.

ARE THE BEST AND MOST POPULAR TAPES IN THE WORLD.
YOUR STOCK IS NOT COMPLETE WITHOUT THEM.

LUFKIN RULE CO., Saginaw, Mich, U.S.A.

London Office and Warehouse—48 Lime St. New York City Branch—280 Broadway.

For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.

NIAGARA COW TIES

(Ohio Pattern)



"Dekol Butter Boy Prince"
Registered Holstein-Freisan Bull, No. 30369

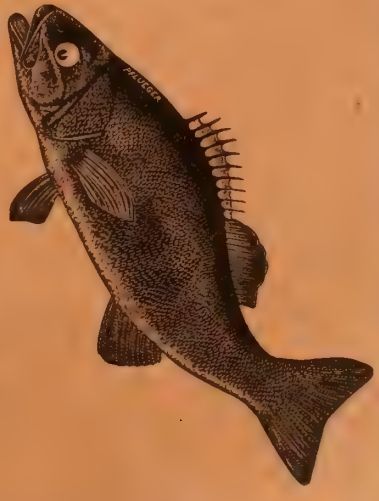
NIAGARA COW TIES

are an indispensable necessity in all first-class dairies, as they provide not only for an attractive appearance, but also for the actual security and welfare of the animals.

ONEIDA COMMUNITY, Ltd., NIAGARA FALLS, ONT.

PFLUEGER'S Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines. Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio



Est. 1868. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve  Medals

Awarded

By **JURORS** at

International Expositions

Special Prize

Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

"Redstone"

High Pressure

Sheet Packing

A packing that will hold. For use in highest pressures for steam, hot or cold water and air. Packs equally well for all.

From actual tests, we believe that this packing is the most durable and satisfactory of any on the market. Try a sample lot and see for yourself.

Manufactured Solely by

THE GUTTA PERCHA & RUBBER MFG. CO.

of TORONTO, LIMITED

HEAD OFFICES.

47 Yonge Street, Toronto.

Branches: Montreal, Winnipeg, Vancouver.

"H.O.M." BRAND

BRITISH MANUFACTURED

CASTOR OIL

Guaranteed Absolutely Pure

PHARMACEUTICAL
FIRST PRESSURE
SECOND PRESSURE

in barrels and cases

We can quote lowest prices for immediate delivery from Stock or to import in quantities.

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

SADLER & HAWORTH

"Extra" *"Standard"*

HIGH-CLASS LEATHER BELTING

Expert experience selects the hides from which our belting is made. It is unbeatable.

"Diamond" *"Agricultural"*

WAREHOUSES & FACTORIES AT MONTREAL and TORONTO.

CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, OCTOBER 7, 1905 NO. 40

BUTCHERS' KNIVES
JOHN WILSONS
CELEBRATED
"PEPPERCORN AND DIAMOND"
BRAND CUTLERY.
TRADE MARK
BUTCHERS' STEELS
Canadian Agents: DORKEN BROS. & CO., Montreal

J L B L CANADA
MORE POPULAR THAN EVER
after forty years' trial.
WHY?
JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Lawn Mower Prices for 1906

Place your orders for Taylor-Forbes Machines, the best Mower in the world. We hold a place by ourselves.

Only One Grade of Steel for Cylinders, and that of the best and most expensive.

All Castings are Machine-made, and therefore of one size and uniform.

All Labor Used is Thoroughly Skilled. We do not use any cheap labor.

PRICES TO SUIT THE MOST FASTIDIOUS

Orders should be booked NOW for 1906

SOLD THROUGH THE JOBBING TRADE

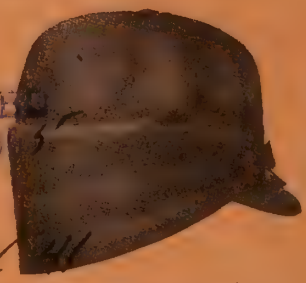
Taylor-Forbes Company,
LIMITED.
Montreal Branch:
9 De Bresoles St.
The Largest Manufacturers of Lawn Mowers in Canada.
GUELPH, CANADA.

See Classified List of Advertisements on Page 71.

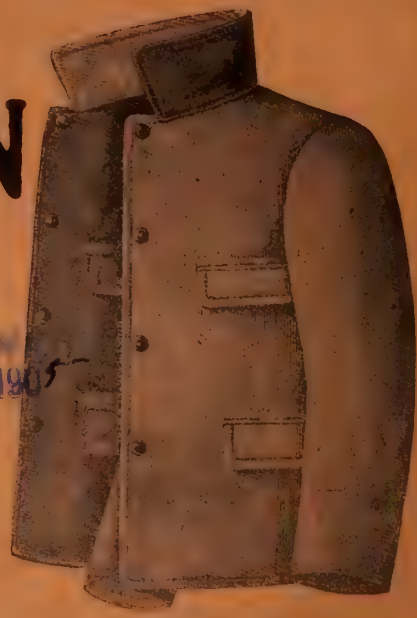
SPORTING SUPPLIES AND AMMUNITION



SHOOTING BOOTS



SHOOTING CAPS



SHOOTING COATS

AMMUNITION

We can ship promptly all sizes and loads of Shells, also all kind of Rifle Cartridges, Smokeless Powder and Shot.



SHELLS



WINCHESTER CARBINE



SHELLS



SAVAGE RIFLES

Write for prices.

RICE LEWIS & SON

LIMITED

TORONTO.

ALWAYS READY FOR USE



Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2.50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

No Smarting after Shaving. With ordinary careful use will

KEEP AN EDGE FOR YEARS WITHOUT HONING.

Booklet coming—if you will ask for a copy, with trade discount.

FOR SALE BY LEADING JOBBERS.

FIRM OF
A. L. SILBERSTEIN, MAKERS OF "Griffon" Cutlery

459-461 BROADWAY, NEW YORK.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.

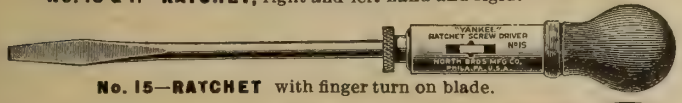
Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

SCREW DRIVERS



No. 10 & 11—**RATCHET,** right and left hand and rigid.



No. 15—**RATCHET** with finger turn on blade.



No. 30—**SPIRAL RATCHET**—right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " " right hand only.



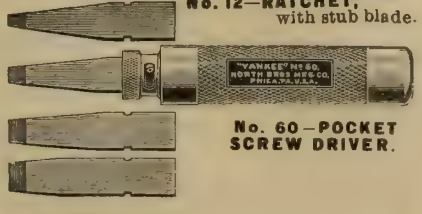
Chuck and 8 Drill Points, for spiral ratchet screw driver.



No. 12—**RATCHET,** with stub blade.

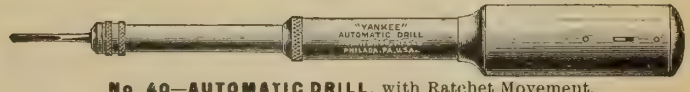


Countersink, for spiral ratchet screw driver.



No. 60—**POCKET SCREW DRIVER.**

DRILLS



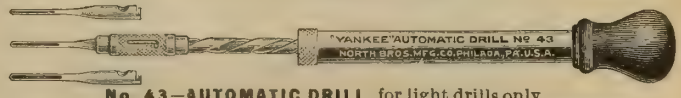
No. 40—**AUTOMATIC DRILL,** with Ratchet Movement.



No. 41—**AUTOMATIC DRILL.**



No. 42—**AUTOMATIC DRILL.**



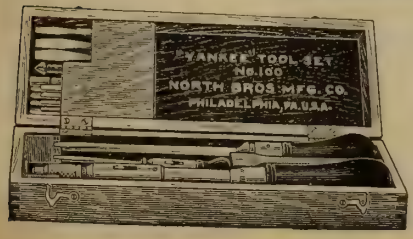
No. 43—**AUTOMATIC DRILL,** for light drills only.



No. 44—**AUTOMATIC DRILL,** with adjustable tension on spring.



No 50—**RECIPROCATING DRILL,** for wood or metals.



SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.



No. 10—**"New Process."** Design attractive. Construction first-class.

No. 21—**"Standard."** Cheaper in quality, but well proportioned and handsome in appearance, and a strictly up-to-date heater.

New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

Write for Prices.

The Thos. Davidson Mfg. Co., Limited

MONTREAL.

Copper Sheets

HOT ROLLED COLD ROLLED

Plain, Tinned, and Planished.

We Solicit your Enquiries.

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

FRONT DOOR SETS

INSIDE DOOR SETS

SASH FASTS

BUTTS

SASH LIFTS

DOOR BELLS

Some

UP-TO-DATE LINES

without which

YOUR STOCK IS INCOMPLETE

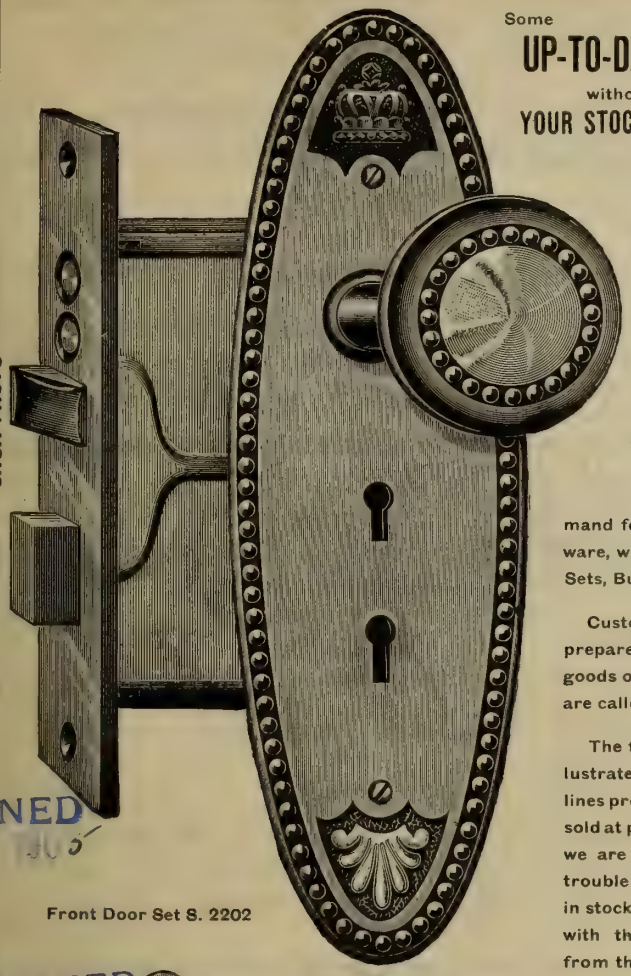
This year Canada and the United States are having the biggest boom in their history. There are more building operations going on at the present time than for years past, naturally there is a big demand for Builders' Hardware, which takes in Lock Sets, Butts, etc.

Customers want to be prepared, and have these goods on hand when they are called for.

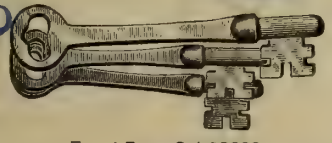
The four designs we illustrate are the newest lines produced. These are sold at popular prices and we are having a deal of trouble in keeping them in stock, as they have met with the greatest favor from the buying public.

Everything to match, including Door Bells, Butts, Sash Lifts, Sash Locks, etc.

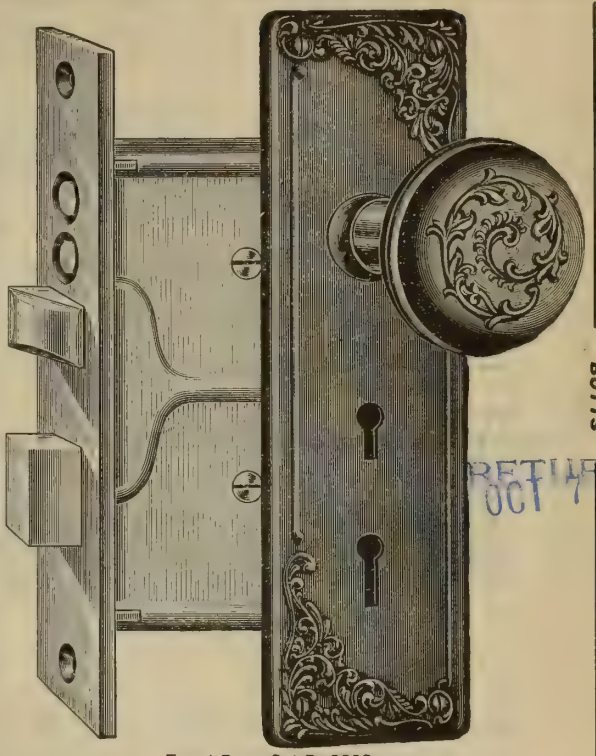
WRITE FOR PRICES



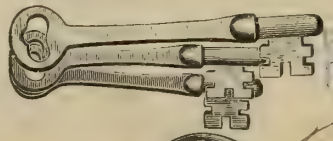
Front Door Set S. 2202

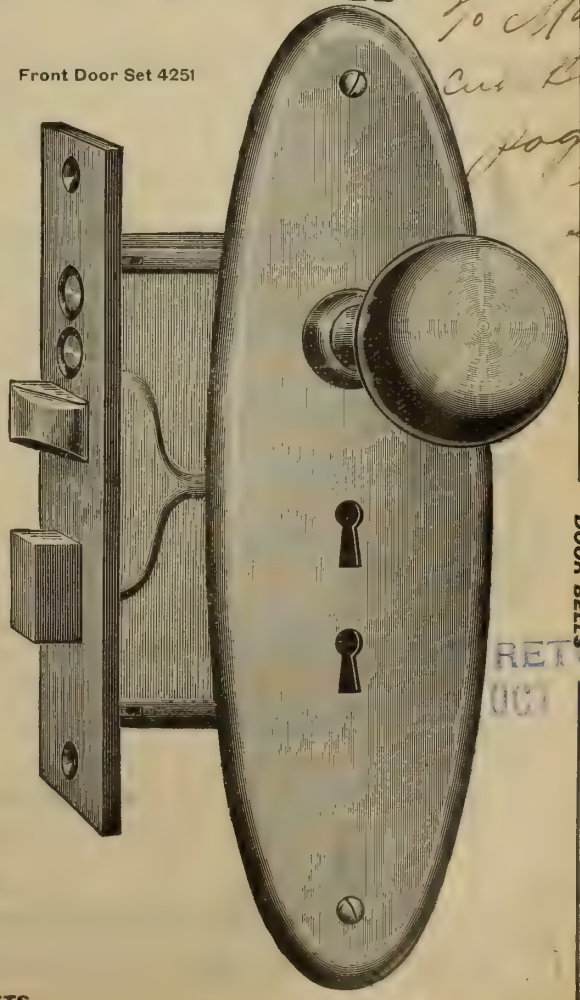


Front Door Set 02299

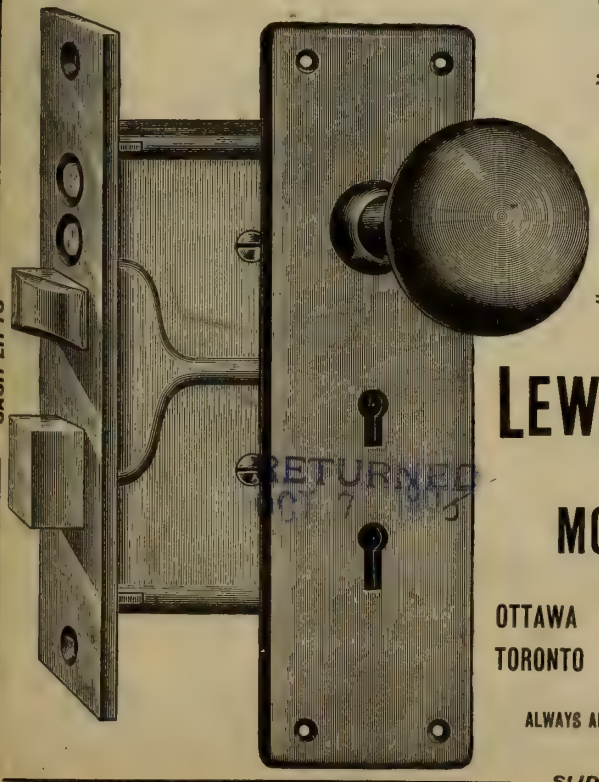


Front Door Set D. 2288





Front Door Set 4251



PROMPT MAIL ORDER SHIPPERS

LEWIS BROS.

LIMITED

MONTREAL

OTTAWA VANCOUVER

TORONTO CALGARY

ALWAYS ADDRESS THE HEAD OFFICE

SLIDING DOOR LATCH SETS

The Browning Automatic Shot Gun

12 GAUGE ONLY



Single Trigger Automatic Repeater 5 Shot

The Sportsman's Favorite

IMMEDIATE SHIPMENT

WRITE FOR PRICES AND CATALOGUE

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

DOMINION WIRE MANUFACTURING CO.

MONTREAL AND TORONTO LIMITED

ANNEALED WIRES

FOR BALING

HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

FLAT HEAD
ROUND and OVAL HEAD

SCREWS

BRIGHT—BRASS
BRIGHT and BRASS

TINNED WIRE for Mattress, Broom, Bolting and Binding

STEEL WIRE HOOP

COPPER WIRE—ALL—BRASS WIRE

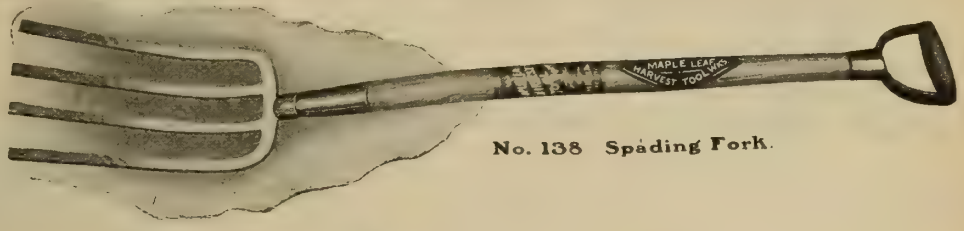
MADE IN CANADA

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork.



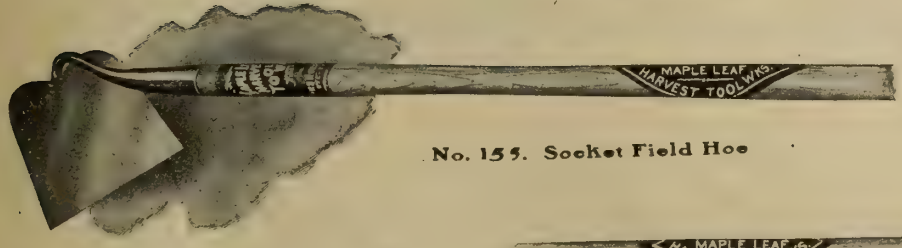
No. 138 Spading Fork.



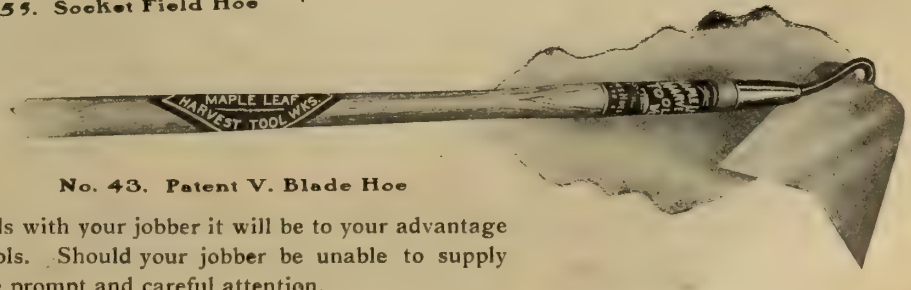
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe

TO THE HARDWARE TRADE:-

When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.

GOLD MEDAL AWARDED 1904

WILKINSON CUTLERY

MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

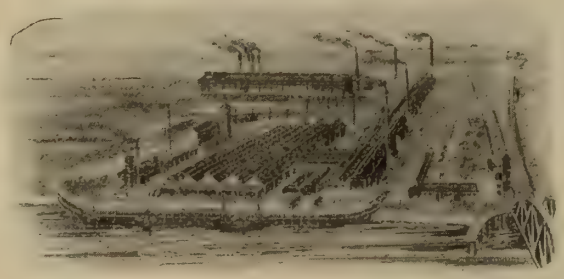
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



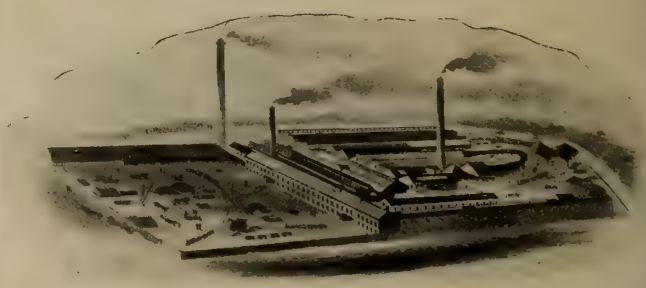
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

Agent: F. Hankin, Montreal

RETURNED OCT 7 1905

Do It To-day!



Round Bellied Pots, 1 gal. to 16 gal.



Oval Bellied Pots, 2½ gals. to 12 gals.

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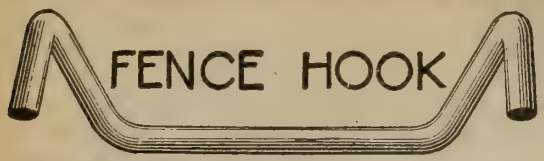
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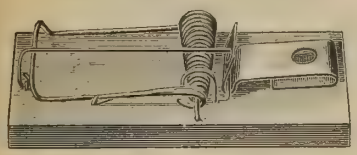
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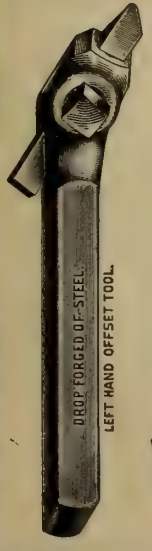


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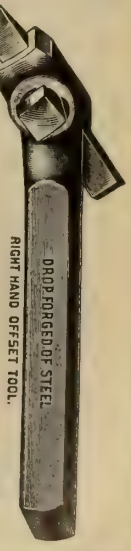


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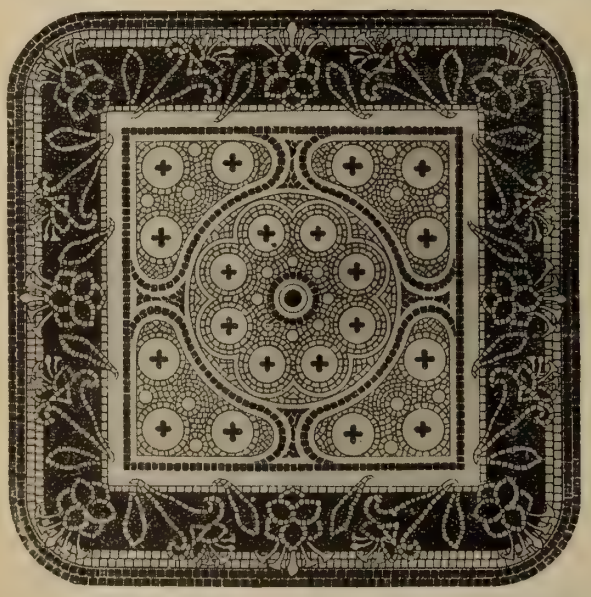
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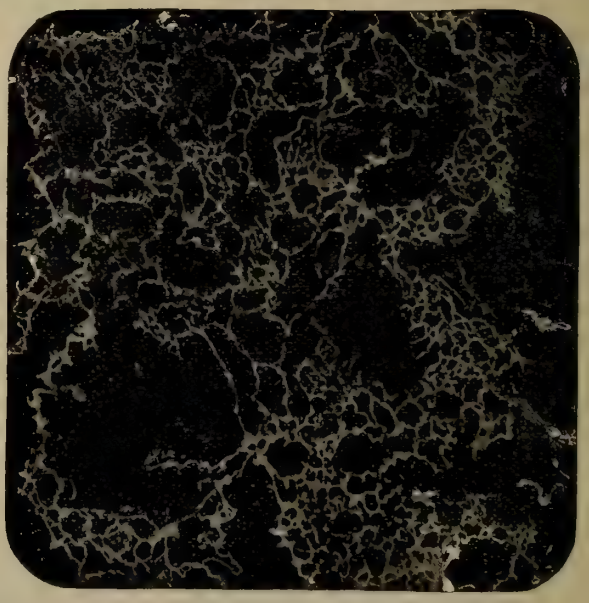
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Will please your customers and bear you a good profit. Elite boards are made both wood and paper-lined ; 12 sizes. Onyx wood-lined ; 12 sizes. Prompt shipment.

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HARDWARE DEALERS MUTUAL INSURANCE

MUTUAL insurance amongst hardwaremen has proved a successful enterprise in the United States and is now being looked into with a view to adopting a similar plan under the auspices of the Retail Hardware Dealers' Association in Manitoba and the Northwest. The following comprehensive paper by Mr. W. P. Lewis, New Albany, Indiana, read before the recent convention of the Michigan Retail Hardware Dealers' Association, is therefore reproduced on account of its interest to a large number of our readers :

My purpose here is to urge the members of this association to carry policies in the National Hardware Mutual Fire Insurance Company of Huntingdon, Pa. Michigan has an association membership of 550. If every member had a policy in our company for the limit, namely, $3,000, we would have in force in Michigan alone $1,650,000. But what are the facts ? Michigan with 550 members has thirty policy holders in the National Insurance Company, or about 6 per cent. of her membership. Michigan with a possible total risk of $1,650,000 in the National Insurance Company has a total risk of $47,000, or about 3 per cent. of the amount they are entitled to carry. What is a fair inference from this condition of affairs ? There are two negative views. First, the mutual fire insurance is of little value, or second, that 94 per cent. of the Michigan membership are slow. I shall combat the first proposition and leave the second for the members to combat. In presenting, therefore, the reasons which have been sufficient to warrant the organization of a National Mutual Fire Insurance Company, I shall ask a bit of forbearance.

Encourages Membership.

In the growth of all State associations it was found that members demanded material evidence of the value of membership. It was pointed out, however, to them that they were making common cause ; that they were learning to know each other better, thus developing the fraternal spirit ; that there was the exchange of valuable ideas, and the acquirement of money-making information ; that manufacturers and jobbers by reason of magnificent displays and personal attendance, contributed greatly to the interest ; that there was at every convention most attractive entertainments and outings. Any one of these, and certainly all of them should be reason enough for every hardware merchant in the State to apply for membership and to attend the conventions. But there were many merchants who when solicited for their application, said it cost $4 to join. It cost railroad fare. It cost hotel bills. They could see no advantage and so declined. I feel sure, however, that this unworthy argument was never used freely in Michigan, but that class who would not recognize the more "spirituelle" reasons for acquiring membership in their respective State associations. The co-operative or mutual fire insurance idea came with distinct force. Here was a tangible advantage in membership. Every merchant must have fire insurance, and in the Mutual Company he could get $50 worth for, say, $30. The difference, $20, being sufficient to pay not only his dues, but possibly railroad fare and hotel bills, with all "spirituelle" influence thrown in. If it were inconvenient or impossible to attend, he would positively make $16 on a $4 investment in one year. But the rule was inexorable that he must be a member of the hardware association to have the advantage of the insurance. It thus developed that mutual fire insurance was a power, because those who were in could make a little money on their insurance premiums and those who were out were interested sufficiently to come in, that they too might participate.

The first view, therefore, that mutual fire insurance is of little value is highly erroneous. The second postulate is safe in the hands of the membership. Public opinion has been defined as the "stupidity of one multiplied by the stupidity of many." I quote this epigram but decline to indorse the sentiment. Personally I have the greatest respect for public opinion. Jumping to conclusions and haste may sometimes be charged against it, and sometimes it errs, but when it does it is chiefly because all the facts are not presented ; but given all the facts, public opinion is as straight as an arrow to the mark. When the Michigan membership understand all the facts, understand the underlying principles, have the fullest confidence in the management, comprehend the possibilities of the plan and become men of action as it is in them to be, as their ancestors were, the result will be beyond criticism.

Pennsylvania with a membership of 206 in the State Hardware Association has 182 policy holders in the National Company, or about 90 per cent. The National Mutual Fire Insurance Company is the child of the National Retail Hardware Association. The following resolution was unanimously adopted at the national convention in Indianapolis, March 22 to 24, 1905 :

"Resolved, that a vote of thanks is due and is hereby tendered to the officers and the executive committee of the National Hardware Mutual Fire Insurance Company for their untiring and successful efforts in launching the National Insurance Company, and we respectfully recommend this company to all association members as offering safe and reliable insurance at a minimum cost."

National Company's Growth.

It has been said that people who have done nothing themselves are most active in claiming relationship with persons of note. The National Insurance Company is proud of its parentage and appreciates fully the temper of the foregoing resolution, but the National Insurance Company solicits business on its merits. No policy holder who has suffered fire loss has any but sentiments of the warmest approval for its methods of business. These officers are deeply interested in the company's welfare. They are ambitious for the company's future. They are keenly alive to every opportunity of development, and they have succeeded wonderfully. The company was formally organized in August, 1903, just two years ago. The first policy was written in November, 1903. The business to date is about $1,000,000. There is absolutely no "graft" of any kind, large or small, and the salaries are petty. But the management is encouraged to believe that while some of the expected benefits from hardware association effort may fade, grow dim and pass away, mutual fire insurance will loom larger and larger on the horizon of permanent achievement. Why should there be any hesitation in buying a policy in the National Company ? Are you fearful of mutual insurance ? The best flat insurance on earth to-day is that written on a class risk, with a limited policy, and hardware is probably the best class risk. Are you fearful of the mutual liability ? The extreme mutual liability of a policy holder in the National Company is an amount equal to the original deposit or premium. It would take a conflagration that would sweep the State to call for the limit of this mutual liability. Are you fearful of the officers ? They are under ample bond in the best guaranty companies. The National Mutual Insurance Company is organized on the best mutual plan known.

Advantages of Mutual Insurance.

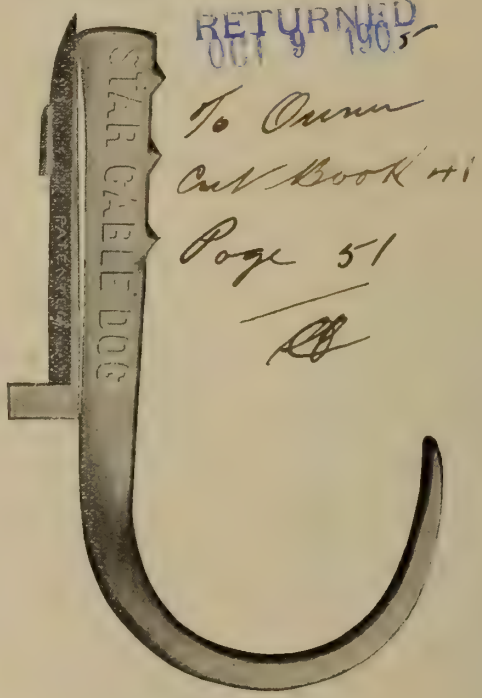
Fire insurance has been a world institution for 350 years. 'Tis now a habit grafted on our civilization. 'Tis a good habit, in fact, an absolutely essential habit to commercial success. The figures from the stock companies show that there is one fire loss to every 27 policy holders, but keep clearly in mind that these stock companies insure every class of merchandise and by reason of this fact their ratio of fires to policy holders is 1 to 27. The National Mutual Hardware Company has had seven fires. Two of these are not worthy of note, as the aggregate loss was under $10. Five of them, however, were normal fires, the loss ranging from $300 to $2,800. The National Insurance Company has 568 policy holders. The ratio of fire loss to policy holders in the National Company is one fire to 114 policy holders. Why this great difference in ratio in favor of the Hardware Mutual Company ? The answer is ready. Ours is class insurance. We do not have more than 2, 3 or 4 risks in any given community and these in all likelihood widely separated. Your chance of being called upon to help pay for fire losses in the stock companies is 425 per cent. greater than in our Hardware Mutuals. There may be in your mind this question : How can the hardware mutuals safely declare such dividends ? The answer is plain. In the

stock company you are co-insured with dry goods, boots and shoes, groceries, drug stores, general stores, confectioneries, car barns, factories, machine shops, railroad shops, manufacturing establishments of countless variety, also dwelling houses and personal property. The losses on these lines are great. Our company takes no risks on any of these lines, hence you do not help to pay for any of these losses in our mutual companies. Another point: In the stock companies you are co-insured with every nationality under the sun, but without reflection on any foreign-born citizen, the moral hazard in my opinion in our hardware mutuals is 500 per cent. better than any stock company. Again, in the stock companies you are co-insured with policy holders whose policies may be ten times as large as yours. If such a policy holder has a total loss he calls on you for ten times as much as you could call upon him for if you had a total loss. And lastly, while the stock companies make an effort to separate their risks as much as possible, it is still the fact that risks in a stock company are "bunched" many times more than in our mutual companies. And yet nine-tenths of the men here are carrying all of their insurance in stock companies when it is quite clear that Hardware Mutual Fire Insurance is based on the most ideal and the most rational plan of insurance known.

Six thousand hardwaremen, members of the National Association, voluntarily subscribing to its constitution, constitute a power which when acting in unison can accomplish ends of tremendous importance. If each of these 6,000 members carried a full limited policy in the National Insurance Company, the total risk would be $18,000,000. Averaging this at a rate of $1.50 the annual premium would be $270,000. The interest our company would receive from the investment and depositing of such premiums as this would far more than pay all the salaries and expenses of management. If managerial expenses can be made out of interest from investments and deposits, thus leaving the original premium chargeable with fire losses only the dividends under these conditions would be large. Figuring on a basis of 35 per cent. the dividend on this sum would be $94,500 per annum. That these 6,000 members carry insurance greatly in excess of $18,000,000 with stock companies is beyond question; that these 6,000 members do not carry anything like $18,000,000 with our mutual companies is equally true; that these 6,000 members lose therefore annually $100,000 in insurance premiums is a simple sum in arithmetic.

Other Advantages.

If a fraction of this sum so freely abandoned by the national membership was contributed annually to the treasury of the National Hardware Association, there is no reasonable trade adjustment in the interests of the hardware dealer that could not be accomplished. In no field of association effort would concert of action produce such visible results. I believe a working plan can be developed whereby a revenue from the business of the National Insurance Company could be set apart for the National Hardware treasury. This can only be done, however, by heavy concentration of business in the National Insurance Company. If the National Insurance treasury had the premium or deposit required on $18,000,000 insurance, the income from this deposit at 4 per cent. would be $10,800 per annum; all operating expenses being paid out of this there would remain a surplus of several thousand dollars which by agreement could be paid to the treasury of the National Hardware Association. Under this arrangement the policy holders' expectations of mutual dividends are in no wise abridged, but on the contrary are enhanced because operating expenses would be met out of the income from deposits, whereas now operating expenses are taken bodily from the deposits. Under this arrangement the sinews of war could be placed where there is the greatest need and also where the greatest good is accomplished. Under this arrangement the dynamic power of 6,000 hardware merchants is applied for their personal and associated interests. That this is not done is a regretable loss. Why this loss? Because of hesitation and prejudice. Throw them to the winds; the first marks the timid and weak, the second the narrow and small; walk squarely into the sunlight of optimism, opportunity and success. When the annals of the National Hardware Association are graven on the page of history, the most enduring institution recorded will be the Mutual Fire Insurance Company.



STAR CABLE DOG.

A NEW patent dog for fastening cables or small pipes, has been put on the market by the Star Expansion Bolt Co., 147 Cedar street, New York. It is made of malleable iron, galvanized to stand the A. T. & T. test, and the maker states that the hook can be bent snug over the cable without cracking or chipping. In setting it is only necessary to drill a hole just large enough to insert the shank and then hammer in the wedge. The principle is such that this causes a positive expansion at the inner end so that any subsequent strain on the hook will only cause it to become more firmly imbedded in the wall. In the maintenance of telephone, telegraph and electric lines a material saving in renewal and repair expense can be effected if the original fastenings are absolutely secure and permanent. Therefore, a decided advantage is claimed for the Star cable dog, as it will eliminate the use of all wood and other rotting and easily destroyed substances. At the same time it can easily be taken down without injury, as the wedge may be loosened by pressure of a hammer or chisel, thus releasing the hold. It is made in four sizes to carry cable from 1-2 to 2 1-4 inches in diameter. Shanks vary in length from 1 1-2 to 2 1-4 inches, according to the size.

LIQUID METAL POLISH.

Take eight ounces of Spanish whiting, which must be perfectly free from grit, and put in one quart of gasoline. Shake up the whiting and gasoline thoroughly. You will notice the whiting settles immediately, leaving the liquid as clear as water. To remedy this and, further, to make it a better polishing agent, add to each quart of the mixture 32 drops of oleic acid—no more, no less; shake again and the whiting will not settle. Apply to gold, silver, nickel, brass, glass or any kind of metallic surface with a piece of cotton flannel, rubbing well. Polish with a piece of same cloth.

NEW INVENTIONS.

E. F. ATKINSON, Battle Creek, Mich. has invented a wrench which belongs to that class having a fixed jaw and a movable jaw. The inventor's object is to provide novel details of construction for a wrench which adapt it for convenient adjustment to engage cylindrical or angular objects between its jaws and afford means for reliable holding the movable jaw at a desired distance from the fixed jaw.

C. Dilks, Alloway, N.J., has invented an improvement in saws, capable of application to band or circular saws, as desired. In practice the application of the bits and keys will not interefere in any appreciable degree with the tension of the saw at the rim thereof; nor will it detract to any material extent from the ring of the saw-blade in operation.

E. C. Springer, Mason City, Iowa, has invented an apparatus for sharpening

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mowers, the machine being secured in place and the crank member clamped upon one of its driving wheels, some fine abrasive material such as flour of emery, is mixed with oil and applied to the ledger-blade, whereupon by rotating the working blade in the opposite direction to that in which they rotate in use, by means of the crank member, their edges will be sharpened. It is particularly applicable to "lawn-mowers."

W. H. Brock, Seaford, N.Y., has an improvement on pipe wrenches which relates to the manner of mounting the lugs. Means are provided to replace the plates when broken or worn out and to greatly cheapen the construction of the wrench. The plates may be made of fine and hard metal, whereas the handle may be constructed of comparatively cheap material.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

983. A London firm who are exporters of a well-known anti-friction metal, and who are also able to manufacture anti-friction metals to any given specification, desire to correspond with a responsible house in Canada, with a view to having their products thoroughly marketed in this country.

984. Inquiry is made by a London firm for the names of Canadian firms manufacturing binder twine and rope.

992. A commission agent in Birmingham would like to hear from firms in Canada in a position to supply veneer seatings, fancy roofing, etc., used in connection with the building of electric cars and railway carriages.

996. A firm in West Bromwich is open to appoint an agent for the sale of builders' hardware.

997. A Birmingham firm wishes to find a market for builders' hardware.

998. A London firm would like to be put in communication with Canadian firms open to purchase gas fittings and accessories.

999. A Birmingham firm is open to appoint an agent for the sale of their paints, varnishes, etc.

1002. A large Birmingham firm wishes to place brass and copper tubes on the Canadian market.

1008. A Birmingham firm inquires for Canadian buyers of castors and hinges.

1009. A Birmingham firm is in a position to supply Canadian buyers with coach brass foundry.

1010. A Birmingham firm would like to be put in touch with handlers of brass socket and screw castors.

1011. A large Birmingham firm is in a position to place cast and stamped brass foundry.

1012. A West Bromwich firm wishes to find a market in Canada for all kinds of springs.

1019. A Lancashire firm manufacturing a special boiler fluid and other specialties, wishes to get into touch with Canadian importers who can handle the material.

1021. A Midlands manufacturer of fish hooks and tackle would like to do business in British Columbia, and is prepared to appoint suitable resident agent.

ENAMELOID
A GLOSS PAINT FOR INTERIOR FINISHING

We want *you* to put ***Sherwin-Williams Enameloid*** on your shelves and get a share of the profits which dealers are making everywhere through its sale.

For years it has been the favorite article of its kind all over the Dominion. It's a specialty that enlarges a dealer's trade and profits.

S-W. Enameloid is for interior decoration of walls, ceilings, and woodwork. It is brighter and easier to keep clean than wall paper, and gives a glossy finish which stands scrubbing and cleaning. For this reason it is especially adaptable in places where absolute cleanliness is a requisite. On account of the high quality of its ingredients and the skill of its makers. Enameloid keeps its color and lustre for the longest time. S-W. Enameloid will please your customers and bring them to your store for other lines you sell.

The reputation and extensive advertising of our goods will be behind you. Write today to our nearest office for information.

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre St., Montreal, Que.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg.
1489

REDUCED PRICES.

On another page of this issue will be found the announcement of United Factories, Limited, to the effect that many lines of Boeckh's and Bryan's paint brushes will be lower in price for the coming season. This reduction we understand is brought about principally owing to their securing some very large stocks of bristles and other raw materials at exceptionally favorable prices, and this should be specially interesting to the hardware dealer as the general tendency on brushes has been for a gradual increase, owing to the fluctuating market price of bristles which are becoming scarcer and dearer and which will in all probability lead to higher levies in the Spring of the year when the great demand for, and consumption of bristles is on.

JAPAN'S FOREIGN TRADE.

Japan's export trade for July, 1905, amounted to $12,124,196, showing an increase of $37,367 compared with the corresponding month of 1904, while the imports totalled $83,508,173, an increase of $3,588,493 compared with the same term last year.

The principal articles imported in which readers of Hardware and Metal are interested are as follows :

	July '05	July '04
Iron nails	89,484	55,709
Rails	31,567	151,902
Iron, bar and rod	312,169	184,898
Iron pipes and tubes	96,139	55,189
Other iron and steel	816,842	314,263
Machinery and engines	979,827	428,137
Locomotive engines	240,307	149,967
Steam vessels	118,376	342,762
Kerosene oil	64,270	870,703

An idea of the amount of railway construction under way and proposed in the west by the Canadian Pacific may be gleaned from the fact that the amount of steel received at Fort William this year is more than three times as great as that of last year. Since the opening of navigation, 50,000 tons of rails have been unloaded, as compared with 15,000 tons for the entire season of 1904. It is estimated that 10,000 tons more will be received before the close of navigation. The entire 50,000 tons are the product of the mills at the Canadian Soo. The steel that is yet to come is of American manufacture.

CATALOGUES, BOOKLETS, ETC.

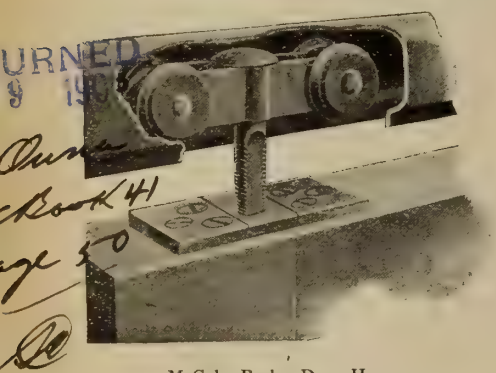
When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Sash Pulleys.

A VERY neat and well printed booklet has been issued by the Grand Rapids Hardware Co., Grand Rapids, Mich., manufacturers of Patent All-Steel Sash Pulleys. The booklet comprises sixteen pages, exceptionally well illustrated and a neat cover printed in gold. Amongst the new improvements illustrated are ball-bearing and roller-bearing wheels. The latter are used for the highest grade of buildings, where windows are heavy and frequently opened. The dealers interested in builders' hardware should send for a copy of the booklet, mentioning Hardware and Metal when asking for a copy.

Door Hangers.

McCabe Hanger & Manufacturing Co., 425-427 W. 25th street, New York, have issued an elaborate catalogue describing the McCabe ball bearing and tubular hangers to be used on parlor doors, car doors, barn doors, etc. The mechanism is well illustrated by a series of cuts



McCabe Parlor Door Hanger.

and full descriptions are also given. The thirty-six pages which comprise the book are replete with valuable information, such as any dealer in builders' hardware should have. If Hardware and Metal is mentioned the McCabe Co. will forward a copy of the catalogue to any of our readers.

Paroid Roofing.

F. W. Bird & Son, Hamilton, Ont., have issued a booklet describing the good qualities of Paroid Roofing and giving a large number of illustrations of buildings and factories covered on both walls and roofs with the Bird Company's product. In addition to being a roofing paper Paroid is especially recommended for barns and poultry buildings where it is fast taking the place of shingles and clapboards. Paroid Roofing contains no tar and is claimed to be fire proof. If a copy of the booklet is sent for mention Hardware and Metal.

Disston Brand Files.

Henry Disston & Sons File Company, Philadelphia, Pa., have issued a large and pretentious price list of files and rasps which they have recently sent out to the trade. They state that in publishing this book they have endeavored to illustrate the different shapes and cuts of files most generally used. This will enable the customer to readily determine the file required for a particular purpose, and save both the dealer and buyer considerable trouble by enabling them to specify correct names, etc. The Disston brand files are made of the finest crucible steel. They are the only manufacturers in the United States who make the steel from which their files are produced, and thereby are enabled to secure an absolute uniformity of quality. The blanks are carefully forged to the most approved patterns adapted for the various classes of work. A number of shapes were originated by them, such as the Great American Cross-Cut Saw File, Chisel Point File for inserted teeth, Acme, with safe back for filing handsaws, etc., which are accepted by the trade as regular stock goods. The teeth are formed to give the greatest amount of strength, with sharp, keen, cutting edges, and at the same time to allow sufficient clearance to prevent clogging. Hardened by their special process, which imparts strength and durability, they state that they are warranted in making the claim that for wearing qualities the Disston Brand Files are unequalled. When writing for a list mention Hardware and Metal.

Water Motors and Fans.

A. Rosenberg & Co., Baltimore, Md., are introducing some splendid lines of motors which are attachable to the water tap in any house or building. The motors are made in many sizes and will run with any pressure, operating sewing machines, saws, coffee mills, fans, etc. Leaflets illustrating the line can be had if Hardware and Metal is mentioned in the letter of inquiry.

AND NO DISCHARGE

Bang the hammer of a loaded Iver Johnson against the table; throw the revolver around as carelessly as you would a handkerchief; handle it as roughly as you may, and there can be positively no discharge—don't do this with *any other make of revolver* if you value your life.

IVER JOHNSON REVOLVERS

You can't fire it unless you pull the Trigger



are the *only* revolvers absolutely safe from accidental discharge—*as safe in the home as the kitchen stove.* The reason lies in the fact that the hammer *never* touches the firing pin, and the firing pin never comes in contact with the cartridge except when the trigger is pulled *all the way back.*

Our Booklet, "SHOTS," mailed free with our descriptive catalogue, *proves* these claims and describes Iver Johnsons with complete illustrations. May we send it to you?

IVER JOHNSON SAFETY AUTOMATIC

Price: Hammer, $5.00; Hammerless, $6.00

Iver Johnsons are sold by dealers the world over, or direct from us if your dealer won't supply you.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

EASY

is the word which describes the working of the

METALLIC ASH-SIFTER

Easy is the word which describes the selling of the METALLIC ASH-SIFTER. It's so simple. It saves so much labor. It lasts so much longer than wooden sifters, and it is so cheap. You certainly should be interested. Our Booklet is the first thing to get.

C. M. CUTTS & CO., SOLE MAKERS. **Toronto Junction, Ont.**

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

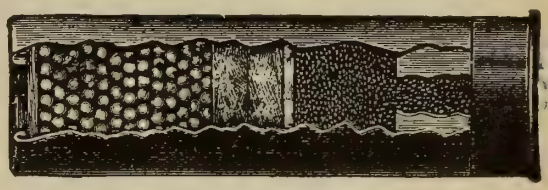
Wholesale Only



Empty Paper Shells

POWDERS

Canadian
American Dead Shot
DuPont Smokeless
Schultz Smokeless



Load Paper Shells

We expect a large supply of Eley's loaded shells this week. Orders will be filled promptly.

RETURNED OCT 7 1905

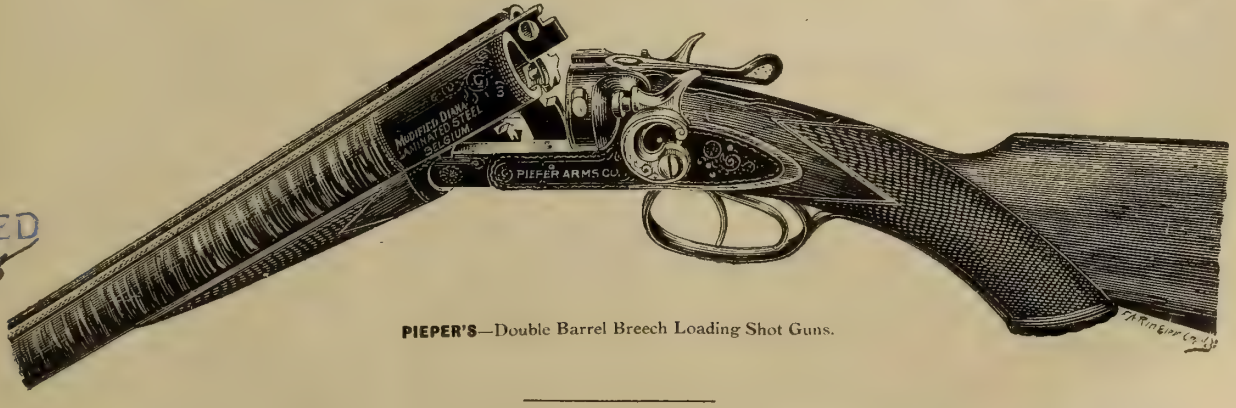


STEVENS'—Single and Double Barrel Shot Guns

RETURNED OCT 7 1905
To Amm
on Book 41
page 43



IVER JOHNSONS'—Single Barrel Shot Guns



PIEPER'S—Double Barrel Breech Loading Shot Guns.

RETURNED OCT 7 1905

For other numbers and fuller particulars see our Catalogue

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

Our prices are right.

Increase Your Prestige

By selling an article that will give satisfaction you increase your prestige with your customers.

You make a good friend of every customer you satisfy.

Pease Economy Hot Water Boiler

is the great friend-maker in the boiler line. It's the Boiler that has made Toronto the ideal home-city of Ontario.

We are in a position now to fill your order at an hour's notice. A telegram will bring the goods on the "next train."

Write For Catalogues.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

ACCORDING to a conservative estimate, it would take five hundred thousand tons of steel rails to lay the Grand Trunk Pacific Railway from Moncton to the Pacific Coast. It takes one hundred and twenty-five tons of 80-pound rails to lay one mile of track, and, as the total mileage of the road will be, as near as can be at present foreseen, about four thousand miles, the total amount required is apparent. In view of this, it is interesting to calculate whether or not the two steel rail mills in Canada can furnish this supply. Since the Dominion Iron & Steel Co. began to make rails last Summer, their total output has been taken by the G.T.R., and has amounted so far to a little more than twenty thousand tons. Just now the mill is working satisfactorily, according to report, and is turning out from three hundred to three hundred and fifty tons a day. Their contract with the G.T.R. for this year was to supply twenty-five thousand tons. They have yet four thousand tons to deliver. A large amount of these rails has been used in connection with the double track of the main line west of London, and the Grand Trunk officials have been so well pleased with them that they have placed another order for twenty-five thousand tons to be delivered in March, April, May, June and July of next year. These rails are of the heavy type, and the ones that have been supplied so far have had before leaving the mill to undergo a more severe test, according to the statement of a G.T.R. official, than any other rails that have ever been used anywhere over the entire system. Reports from the Soo indicate that the rail business there is likewise gratifying. Deliveries to the Intercolonial Railway have met with approval. As the capacity of the mill there is said to be about the same as that of the mill at Sydney, about three hundred tons a day, an estimate might be formed of how long it would take the two mills to supply all the rails needed for the new national transcontinental railway. A conservative estimate would be five hundred tons a day, and at that rate it would take them three years and four months of steady going, counting three hundred days to the year. That means that it would take them a thousand days to make enough rails to lay the road from Moncton to the Pacific Coast, even were they to make no rails for any other purpose. But allowance must be made for renewals that are being made every day all over the Dominion. The C.P.R. use on an average about forty thousand tons of rails for renewals every year, and the G.T.R. about twenty-five thousand tons. One hundred thousand tons for renewals every year on all the railroads of Canada would be a fair estimate. If the mills can turn out only one hundred and fifty thousand tons a year that would leave them only fifty thousand tons for new roads, and at that rate it would take ten years to supply enough extra rails to complete the Grand Trunk Pacific. Of course, the mills claim a larger total capacity than five hundred tons a day, but that is without allowance for mishap and delay of various kinds. The price that the Canadian companies are paying for Canadian-made rails is said to be as high as the duty and the bonus will allow; that is, slightly under the price of foreign rails of a similar standard, plus the duty and the bonus and the freight. It is to their credit, however, that no fault so far has been found with the quality.

The Marysville smelter in East Kootenay is to be enlarged.

The Pacific Box Co., Vancouver, is contemplating additions to their plant.

The Skedden Brush Co., Hamilton, have taken out a permit for the erection of a $10,000 factory.

It is said that a large manufacturing plant may be established at Hull, Que., by an American company. About 1,000 hands will be employed in making metal tubes, according to the report.

An expert in the employ of Mackenzie & Mann is inspecting a rich iron field near Port Arthur, the intention being to secure a source of supply for great industries to be established at that quarter.

Employes of the Cumberland Railway Co., at Springhill, N.S., are again on strike. The men demanded an increase of wages, but the company would not give all that was asked. About 1,400 men are idle.

The share holders of the Brandon Binder Twine Co. are considering a proposition which may result in a reorganization of the company. Only one tender was received in reply to the offer to sell the plant.

Adair Mfg. Co. has been organized with a capital of $75,000, to erect iron works in Revelstoke and manufacture stump burners. The company will also establish a foundry and place air-tight heaters on the market.

Parry Sound voted to spend $20,000 to improve the electric light plant, and to grant a bonus of $25,000 to the James Bay Railway, who agree to make Parry Sound a divisional point, and erect machine and repair shops.

The plant of the Canada Car Co., Montreal, is rapidly nearing completion. Much of the work of equipping the immense shop is now in progress, and it is fully expected that they will be in full running order inside of a couple of months.

The ratepayers of Arnprior, Ont., have voted favorably on a by-law granting a loan of $35,000 to the Montreal Suspender and Umbrella Mfg. Co., in consideration for which the company will erect a large factory there. The manufactures now carried on in Montreal, Ottawa and Sorel, Que., will be removed to Arnprior.

The Bertram Co. is now advertising for tenders for the construction of an addition to its works at Dundas. The building will be a substantial two-storey brick, 200 x 116 feet, and will be

equipped in the most modern manner. When completed the works will be about doubled in capacity, and the number of hands employed will be similarly increased.

The Canada Car Co. will commence about the middle of next month the construction of 1,000 new cars for the Grand Trunk, and after their completion work will be at once begun on 2,000 freight cars for the Grand Trunk Pacific. The G.T.R. placed its order for these cars last Spring, and the plant of the car company is now far enough advanced to make a start on the order for 1,000.

The Dominion Iron & Steel Co. of Sydney have contracted with the Grand Trunk Railway to supply 25,000 tons of steel rails, to be delivered next Spring. It is authoritatively stated that the Grand Trunk Pacific have placed an order with the same company for steel rails to the amount of $4,000,000, delivery to be extended for a period of five years. The Dominion Co. have refused to accept an order for the delivery of a large quantity of rails of light weight required by the Chinese Government for an extensive railway system being constructed in that country.

The Trade and Commerce Department has withheld payment of a bounty claim amounting to several thousand dollars, which several of the Canadian steel mills have made upon their output of angle rail fastenings used upon railways. Parliament two years ago granted a bounty upon structural iron and steel, the intention being that is should apply to material such as is used on bridge construction and in the framework of large buildings. The steel men claim, however, that these rail fastenings come within the definition of "structural" since they are used in the building of railways. The Justice Department, in rejecting the claim for bounty on steel rails, ruled that a railway is not a structure. No opinion has yet been given, however, upon the point regarding the rail fastenings.

Companies Incorporated.

V. J. Hedden & Sons Co., of Toronto, capital $100,000; building contractors. Provisional directors: R. W. Berlmer, H. C. Whitten, D. R. Gillie, H. W. Ivor and J. C. Coveny, all of Toronto.

J. Flett & Co., Wiarton, capital $25,000, implement and hardware business. Provisional directors, James Flett, Wiarton; and W. R. P. Parker, G. McP. Clark, F. B. Matthews, and J. L. Hynes, all of Toronto.

Standard Power Gas Construction Corporation, of Toronto, capital $100,000. Provisional directors: Frank Ford, Britton Osler, G. C. Loreys, J. F. H. McCarthy, and J. M. Ewing, all of the McCarthy, Osler firm, Toronto.

Boiler Flue Cleaner and Supply Co., of Toronto, capital $100,000; to deal in engines, boilers, etc. Provisional directors: A. C. Buell, Buffalo; C. E. Adams, London, Ont.; T. H. Wark and D. W. Livingstone, Toronto, and Eric Wilson, Hamilton.

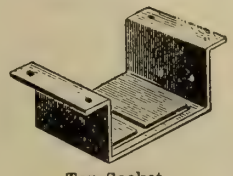
Pre-payment Electric Meter Co., Limited, Peterboro, capital $100,000; to manufacture electrical supplies, etc. Provisional directors: A. Hollingshead, Wm. Hamilton, J. H. Larmouth, J. H. McClellan, Alfred Parker, and A. J. McClellan, all of Peterboro.

Pedlar Talks

"KEEPING EVERLASTINGLY AT IT BRINGS SUCCESS"

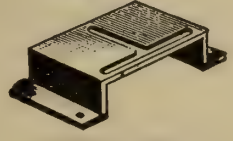
No. 24. OSHAWA, ONT. Oct. 7, 1905

Pedlar's Steel Solid Partition Stud.



Top Socket





Bottom Socket

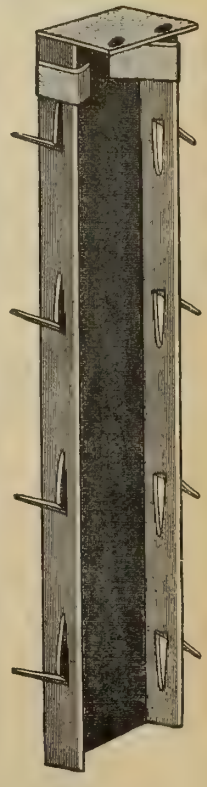
Another Great Essential

The use of Fireproof Partitions has been customary in older countries for a great number of years, but in Canada the cheapness of lumber has, heretofore, made it impossible to get builders to use anything else. In view of the recent rapid advances in the cost of all lumber, and, in conjunction with the use of our Expanded Metal Lath, we have now introduced a **Fire Proof Partition Stud**, made from a very heavy grade of sheet steel that we are offering at a price that should commend it to all builders of substantial structures. Our nearest warehouse will be glad to quote prices and give all particulars.

Pedlar's Sheet Steel Furring Strip.



Pedlar's Steel Studs
For Hollow Fireproof Partitions.



The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

"DOMINION BRAND" ROOFING MATERIALS ARE THE BEST FOR YOU

DOMINION BRAND
TARRED FELT

BECAUSE they are the most durable and in every way the most satisfactory.
BECAUSE their quality remains long after the price is forgotten.
BECAUSE they are the easiest to sell. You know what that means.

Write if you can't call

LOCKERBY & McCOMB, 65 Shannon St., Montreal

ATKINS HIGH-GRADE, CROSS-CUT SAWS

ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



E. C. ATKINS & CO.,
INCORPORATED
Factories and Home Office: INDIANAPOLIS, IND., U.S.A.
CANADIAN BRANCH: 56 King St. E., Toronto, Canada.

LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

Write for Catalogue and Prices.

Forge Ahead!  Forge Ahead!

Business Contentment is a bad condition to get into. To imagine you have "just" the trade and "just" the wares, without being able to prove it, is the opposite of wisdom. Quite a few hardwaremen seem satisfied to sell a stray lock here and there. Others reach out for business, look up builders and keep an eye open. Their success rests largely on the fact that they stick to Canadian goods—

Gurney Cylinder Locks

They can thus give lower estimates on supplying the hardware to a builder and, as far as the locks are concerned, back up their estimates with guarantees. **Gurney Cylinder Locks** get the cream of the Canadian business. Why shouldn't they? They are **made in Canada,** every bit, and **made well,** too.

Catalogue No. 7 should interest you.

THE GURNEY, TILDEN CO., Limited

HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co, Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

NEW BUILDING BY-LAWS.

A BY-LAW which has been under the consideration of the Montreal Council or its committees for over a year has at last been passed on to the council for ratification. Immediately after the Chicago theatre fire Building Inspector Chausse overhauled the by-laws of the city and as many safeguards were found wanting it was decided to remedy the matter, which has been done in the new by-law.

The clause referring to fire-proof construction excited considerable discussion when it came before the committee, as it enacted that theatres, boarding schools, orphanages, etc., should be protected against fire. Some of the aldermen wished to extend the application of this clause to all school buildings, but this was over-ruled on account of the enormous expense attached to this method of construction. The clause was adopted as it stood, with the addition that boarding schools should be considered as schools where dormitories are used.

In defining the meaning of the word "fire-proof," stone, steel and concrete were mentioned, but the words "or any other fire-proof material" were added so as to allow the use of new materials that may be discovered later.

That part of the by-law which deals with the theatres is very comprehensive and contains strict regulations as to the width of the aisles, and seats, doors, exits and the like. Doors must be three feet wide and must swing outward. Among other things the by-law exacts for theatres are automatic sprinklers, brick walls between the auditorium and the stage, asbestos or steel curtains, fire extinguishers, hose connections with the city water service, supplementary lighting service for stairways and exits, and a special fireman in each theatre during the hours of representation. In case this by-law is wilfully disobeyed, the city has the right to order the theatre closed until compliance is made therewith.

A further result of the new by-law will likely be that copies of all plans of buildings authorized by the city building inspector will be kept on file.

BUILDING NOTES.

Two new elevators are being erected at Davidson, Sask.

A consumptive sanitarium is to be erected at Hamilton.

Two new rinks are to be built by the Moosejaw Curling Club.

A new town hall to cost $5,000 is to be built at Sydney, N.S.

A new Catholic cathedral is to be erected at St. Boniface, Man.

Moose Mountain, Man., is to have a new town hall to cost $1,850.

The corner stone of a new $50,000 school has been laid at Regina.

Thomas Lovejoy, Hamilton, is to erect a brick residence to cost $1,500.

E. D. Roberts, Brantford, is to build a double brick dwelling to cost $1,800.

The Northern Electric Manufacturing Co. will erect a factory in Montreal to cost $115,000.

Tenders are being called for the erection of a club-house for the Vancouver Athletic Club.

A $30,000 office building is to be erected in Vancouver by J. A. Douglass, stock broker, Montreal.

The Southwestern Traction Company have purchased a site for a power house at Glanworth, near London.

The building permits issued in Montreal during the month of September show a total value of $635,000.

Tenders for the construction of a galvanized iron roof on the Bank of Montreal, Guelph, are being called for.

Contractors Edge and Gutteridge, Seaforth, have secured the contract to erect thirteen stations on the new Guelph and Goderich branch of the C.P.R. The cost will be $35,000.

Calgary ratepayers have defeated a by-law to expend $23,000 on a new police station and market building, and will now vote on a by-law to spend $35,000 on the new school.

A great shortage of cement on the markets in Pacific coast cities has resulted in important public work being suspended, and a large amount of English and Japanese cement had been exported from British Columbia ports. The works of the Vancouver Portland Cement Co. are being enlarged owing to the increasing demand throughout the Province.

MONTREAL BUILDING PERMITS.

Jos. Vilmere, 301 Panet street, dwellings, $2,000.

E. N. Hebert, Ave de l'Eglise, Duvernay Ward, factory, $2,500.

Marcel Rousseau, Breboeuf street, St. Denis Ward, dwellings, $1,500.

A. H. Lapierre, Gauthier street, Papineau Ward, dwellings, $4,000.

Alfred Rourseau, Marquette street, St. Denis Ward, dwelling, $2,000.

Edward Germain, Logan street, St. Mary Ward, dwellings, $1,800.

A. Chartier, Notre Dame street, Hochelaga Ward, dwellings, $1,750.

Rochon & Bousquet, Bayer street, St. Denis Ward, dwellings, $6,000.

David Richard, Breboeuf street, St. Denis Ward, dwellings, $1,500.

Canadian Rubber Co., Notre Dame street, alterations to factory, $1,500.

Edmond Trahan, 1040 St. Lawrence street, alterations to dwellings, $1,500.

S. Arnoutly, 844 St. Lawrence street, alterations to dwelling and stores, $5,000.

Nap. Deslauriers, St. Denis street, St. Denis Ward, alterations to dwellings, $2,333.

Thos. Evans, Rushbrooke street, St. Gabriel Ward, alterations to dwellings, $2,000.

Canada Glass Manufacturing Co., Limited, Wellington and Charlevoix, factory, $8,000.

Mrs. Malvina Fortier, Champlain street, St. Mary Ward, alterations to dwellings, $2,750.

TORONTO BUILDING PERMITS.

A. T. Laing, brick dwelling, Olive avenue, $3,700.

Geo. Jackson, brick dwelling, Palmerston avenue, $1,500.

L. J. Bland, brick dwelling, 18 Vermont avenue, $2,000.

T. J. Sproule, brick dwelling, Hepbourne street, $2,500.

Thos. Whaley, two dwellings, brick, Albany avenue, $5,000.

David Boyle, one pair brick dwellings, Walker avenue, $4,500.

F. W. Cox, six roughcast cottages, Audley avenue, $3,900.

C. W. Chadwick, three brick dwellings, Albany avenue, $7,500.

Wm. Waters, brick and stone residence, Beatrice street, $3,000.

G. F. W. Price, brick dwelling, 22 Vermont avenue, $1,800.

W. H. Ellis, three pairs dwellings, Campbell avenue, $9,000.

W. J. Turner, concrete dwelling, 48 Henderson avenue $1,800.

S. B. Coon, stone and brick dwelling, Roxborough street, $3,500.

John Percy, one pair roughcast dwellings, Seaton square, $3,000.

Amy Phippen, three roughcast dwellings, Myrtle avenue, $4,000.

S. Phillips, one pair roughcast dwellings, Manning avenue, $3,000.

W. H. Banfield, brick workshop, 120 Adelaide street west, $3,000.

J. Phillips, five pairs roughcast dwellings, Manning avenue, $15,000.

J. T. V. May, stone and brick dwelling, Palmerston avenue, $5,500.

Herbert Galbraith, one pair brick dwellings, Grace street, $5,500.

Herbert Galbraith, one pair brick dwellings, Grace street, $5,000.

N. Manning, one pair brick and stone dwellings, Markham street, $5,000.

E. A. Findlay, roughcast store and dwelling, 194 Hallam street, $1,550.

F. W. Johnston, brick and stone dwelling, Dundonald avenue, $3,000.

Hodgkinson Bros., one pair roughcast dwellings, De Grassi street, $3,500.

Victoria University, brick and stone dressing rooms, Czar street, $3,000.

F. Doan, stable, brick, steel and reinforced concrete, Yonge street, $6,000.

C. Parker, one pair brick and stone dwellings, Roxborough street west, $7,000.

C. W. Chadwick, two roughcast dwellings, 441 and 443 Deleware avenue, $3,600.

Fred. S. Duff, one pair stone and brick dwellings, 207 and 209 Grace street, $5,000.

Geo. Bishop, brick dwelling corner of Markham street and Follis avenue, $1,800.

P. J. Brown, brick residence, corner of Queen street and Carlaw avenue, $9,000.

G. W. A. Faircloth, addition to factory, 64 and 66 Richmond street east, $2,000.

C. J. Carley, alterations to hotel, corner of Queen and Claremont streets, $8,500.

Washington & Bartlett, brick stable, corner Queen street and Broadview avenue, $1,500.

Wm. Davies Co., Limited, alterations to store and dwelling, 400 Queen street west, $4,000.

Fairbanks, Morse Can. Mfg. Co., factory, smith and tin shop, Bloor street west, $18,000.

James Lochrie, brick and stone dwelling, corner of Gladstone avenue and Cross street, $2,500.

The

PERFECT IDEA RANGE

SELLS WELL——and——STAYS SOLD

In deciding upon the line of ranges to push as your leader pick one that sells well and stays sold. The range that sells well is the one having points of merit and convenience above competitors. The range that stays sold is the one that works well even under adverse conditions.

RETURNED
NOV 6 1905
To Owner
Cut Book 42.
Page 78



Points of Merit and Convenience :

Large Ash Pan.
Grates easily removed.
All Nickel Trimmings removable—no bolts.
Deep Fire Box.
Dampers arranged to give absolute control of fire.
Oven large and perfect in baking.
Reliable Oven Thermometer.
Gas Attachment—is a great convenience.

These and other desirable features distinguish the Perfect Idea from others.

Better than all—the Perfect Idea will work where others fail.

Order a sample. Your experience will make you a "Perfect Idea" enthusiast.

The Guelph Stove Co., Limited, Guelph, Ont.

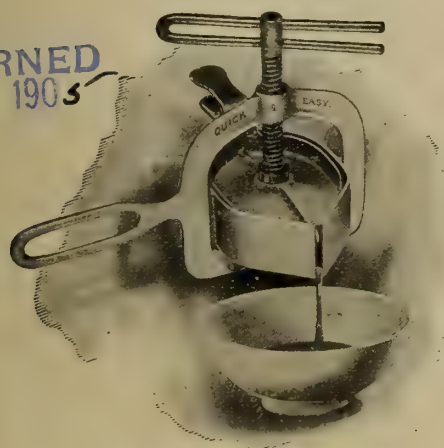
STOVES AND TINWARE

UNDERGROUND FLUES.

WHEN stoves are fixed centrally in hospital wards, or in open halls or shops it is convenient at times to make the connection with the brick chimney by an underground flue, says the Ironmonger. Overhead flues are undoubtedly better and cheaper when possible, but a visible flue-pipe is not admissible. When the floor or its foundation is of non-inflammable material the underground flue may be employed. A stove standing centrally without a visible flue has always a smart appearance. In most large kitchens, too, as in hotels and institutions, the range (of large size and with ovens on both sides) is now placed in the centre, and has communication with the chimney by an underfloor shaft.

The efficiency of a stove which is connected with the chimney by a flue beneath its own level will depend on the height of its chimney—that is, assuming the chimney maintains a proper updraught in it, and is of ordinary effectiveness. Some doubt is occasionally felt by the uninitiated whether an underground flue is at all practical, as it necessitates the descent of the smoke and gases immediately they leave the fire. This is what happens, however, in every modern cooking-range. To heat an oven in one of these the flame has first to pursue a perfectly horizontal path, then descend vertically, and again travel horizontally before it can ascend.

RETURNED OCT 9 1905



Meat and Fruit Juice Press (held in hand.)

The action that occurs in a kitchen range may be taken as an index of what is possible with a stove. We recall an experience with a range with a 24-inch oven, which was doing daily work and doing it satisfactorily with a 15-foot chimney. As chimneys are rarely so low as this the experience was unusual. The flue-range was of iron, and special care was taken to make all joints air-tight, as poor results were expected; but it would appear that a 15-foot chimney can successfully carry the products of combustion from the fire of a stove quite 2 feet in a downward direction and nearly 4 feet horizontally before ascending. This may form the basis of a rule. Good results may be expected with an underground flue if the height of the chimney is two-and-a-half times the combined length of the horizontal and descending flues, and this, as we know from other experiences, will work out correctly. The only proviso to be added is that if the descending flue exceeds 2 feet it should never be more than one-fourth of the length of the horizontal part or parts. Thus a 3-foot drop would be associated with 12-foot horizontal, working into a 37½-foot chimney.

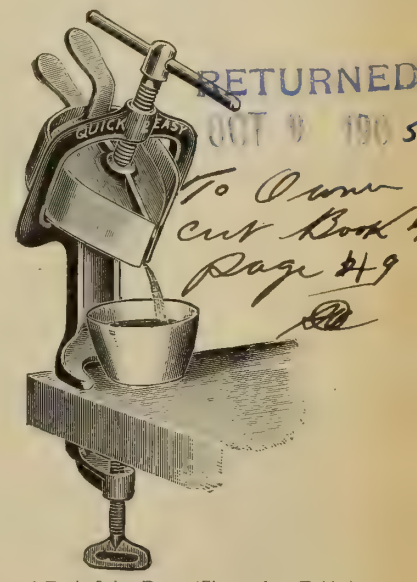
Of course the connection between the stove and the chimney must be absolutely airtight at all points. The joints of the stove itself must be attended to if necessary, the connection with pipe-flue and brickwork must be carefully done, and the joints in the pipe-flue be soundly made. Ordinary glaziers' putty serves well for this and hardens with heat, but the surfaces must be painted first to make the putty adhere. When the stove is fixed all doubtful joints may be tried with the flame of a candle. If the joint is not sound a stream of air will be passing in and the flame of the candle will be carried with it.

The rule that has just been suggested must only be made to apply to stoves or ranges which work with a close fire, and it could not be expected to give such good results with an open grate. The reason for mentioning this is that when independent stoves are used in hospital wards, or in railway waiting-rooms, etc., the fire is nearly always of the open kind and does not work under the conditions of a small furnace as a close-fire or range does. There is, instead, a free inflow of cool air into the chimney, over the fire, and this materially reduces the efficiency of a chimney especially when the requirements are contrary to natural action. In these circumstances we have no experience of a good minimum to which to work. The least proportion we have seen adopted is nearly 50 per cent. greater than that already given, viz., the brick chimney three-and-a-half times the combined length of the descending and horizontal flues. This gave good results, but a blower was used to the fire when lighting (temporarily converting the grate into a stove), and the best plan to adopt is to have some form of blower provided with all open grates that are fixed in this manner.

When the underground flue is at all long, or the chimney inclined to cool rapidly, or there are conditions which make the draught sluggish when the fire is out, it becomes necessary to provide something at the base of the brick chimney to excite a keen draught in it before the stove or grate fire can be lighted each morning. Failing this the fire will fill the room with smoke and fail to burn properly. In some instances it is sufficient to put a soot door and frame at the foot of the chimney, and a good handful of lighted shavings thrust in here will prove sufficient to revive the draught. In many cases, however, the heat is required for a prolonged period. A "pilot" stove is then necessary. This may be any form of close-fire stove of small size, and a fire lighted in this for a short time beforehand will make the chimney hot and create a full draught. The "pilot" stove is then shut off with a soundly fitting damper and the grate-fire lighted.

MEAT AND FRUIT PRESSES.

WALKER'S Meat and Fruit Juice Presses, illustrated on this page, are being put on the market by the Erie Specialty Company, Erie, Pa. These new designs of presses overcome many objections, as the juice is discharged from inclined pan as quick as extracted, through the open slot at the pointed end, and therefore cannot clog up as in perforated pans, or soak back. The press plate and pan being removable, are easy to cleanse and perfectly sanitary. As all the juice is out as soon as screwed down, several pounds can be pressed in a short space of time. They are made in three different styles and three sizes of each style. The construction is durable, the frame being made of malleable iron, square thread steel screw, long nut, will not cut out. Pure meat juice is recognized by physicians as the best possible nourishment, it being highly nutritious and easily digested by the most feeble stomach when digestive powers become impaired. It is equally nourishing for the young and the old, and with the use of a good press it can be served with the least possible trouble and delay.



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To Our Cut Book Page 49

Meat and Fruit Juice Press (Clamped to Table.)

STOVE TRADE OUTLOOK.

STOVE manufacturers report that the volume of business done so far this season is very satisfactory, so far as stoves and ranges are concerned, while the demand for furnaces has been such as to tax the fullest capacity of

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

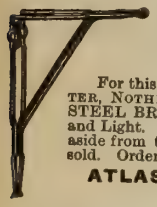
OF ONTARIO Limited

Head Office:
Ingersoll, Ontario.

Walter Mills, General Manager

Wat-r Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables—"Machinery," Newport.

Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited

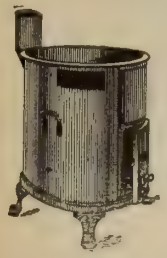
HANOVER, ONTARIO

Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.

Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada.

...FULL STOCK...

Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

the foundries and orders are now considerably behind in their shipments. Year after year the retail merchants hold off the placing of orders till the last moment and then object if they do not secure prompt shipments. Years ago the retailers knew the demand of the trade well and placed their orders months ahead, but the more recent custom has been to endeavor to force the stove founders to keep large stocks, and to crowd the manufacturers with orders as soon as the first touch of cold weather arrives. This year there has been an improvement and more orders have been placed earlier than for some years past, many dealers having evidently been bitten by their own folly in delaying their orders until too late. There is still considerable room for improvement, however, in this direction as the number of late orders still continues very large.

In the west where much depends on the success or failure of the wheat crop there is some reason for delaying orders until the last moment, but in most cases both in the west and the east, dealers know fairly well what their requirements will be, and they should assist the manufacturers by placing their orders well in advance of the Fall rush.

The large crop which will be gathered from the Canadian wheat fields this year has insured a successful Winter's business and while the kind of weather which is approaching is a mystery it is safe to say that from a retail standpoint the volume of trade to be done will be most satisfactory. So far orders have been placed very liberally by the consuming public but a few days of decidedly cool weather would stimulate the trade considerably. In those districts where the farmers have done their threshing, ranges and cook stoves are being purchased in large numbers and air-tights and heaters are also moving very well. The cool evenings are also encouraging the sale of oil heaters and small stoves used for taking the chill off dwelling-houses before furnaces are started. Altogether the stove trade is in excellent shape and there is nothing in sight to effect it adversely.

RUSSIAN VENTILATION SYSTEM.

THE "Timokhovitch" system of ventilation, a patented process of a Moscow firm, is reinforced natural ventilation, although under certain circumstances the patentees use electric or mechanical fans. In its simplest form the arrangement consists of an air-duct open at the end to the atmosphere, at which point louvres or swinging check-plates are introduced to regulate the quantity of incoming air. The duct itself ordinarily has four walls, one formed by the building, two by wood moulding, and the fourth by the use of a fabric. The exact quantity of the last-mentioned may vary, but it is essential that it should be loosely woven and that one side should be rough or woolly. This material is strained over the moulding or frame and acts as a filter through which the air passes. It is claimed that not only does it purify the air, but that owing to the nature of the fabric the air-distribution is equalized, draughts obviated, and thorough ventilation secured. In a school a convenient method is to carry the duct along or across the centre of the ceiling. In a factory, the large wood duct is sometimes constructed along the roof, from which the "Timokhovitch" ducts branch. In a mansion such an arrangement is obviously impossible, as no owner would allow the somewhat unsightly framing to cross his ceilings. Accordingly the inventors of the system arrange to carry the ducts around the wall, along the cornice, and in this connection the fabric to which we have referred already is decorated by art ornaments. In discussing the matter with Monsieur Sakuta, the question of the life of the filter-cloths and the cost of renewal was raised. Experience has shown that these require to be renewed about once a year, although obviously in some cases shorter intervals would be desirable. The cost of the fabric is small, and as the moulding under which it was strained is fitted with screws the actual work of removing the old and putting in new material ought not to be excessive. In Russia the method has been adopted in schools, churches, private residences, factories, railway trains and steamships, and arrangements have also been made in Denmark, Italy, Sweden, Norway and Hungary for the development and adoption of the system.

RISE IN THE PRICE OF TIN.

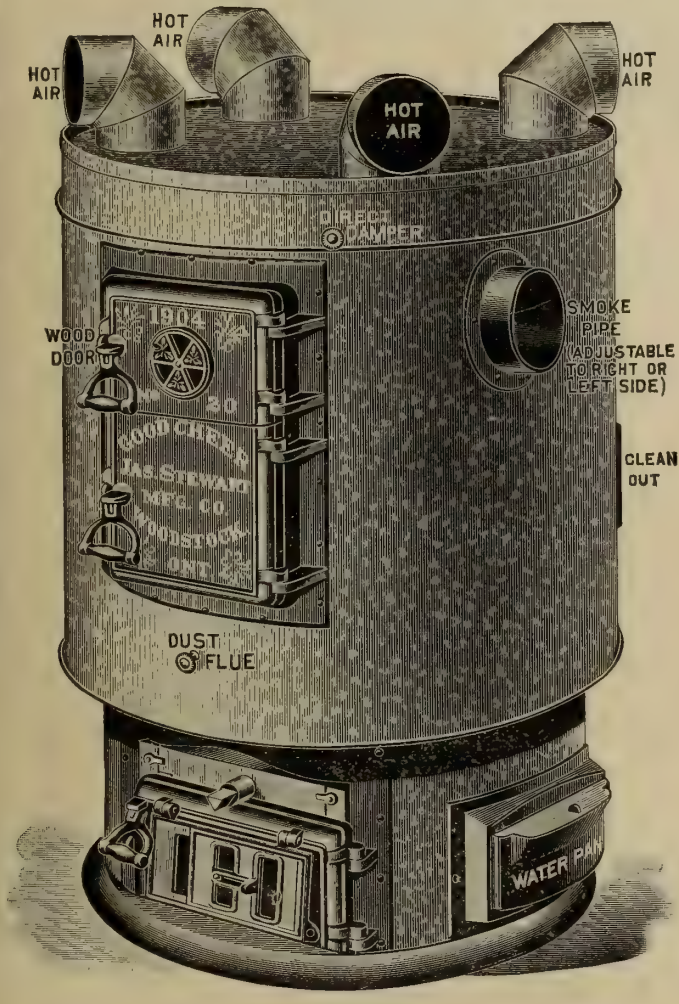
An extraordinary rise in the price of tin has taken place, and consumers are feeling considerable anxiety as to future developments. In January tin cost £132 per ton, a price which manufacturers then considered a serious item on the cost of their raw materials. To-day tin cannot be bought for less than £152 per ton, which is nearly equal to the record price. As there is no efficient substitute for tin in the innumerable industrial processes in which it is used its scarcity and its price are matters of much importance to British manufacturers. The tin mines in the Straits Settlements supply about three-quarters of the tin of the world, but these mines are unable to meet the ever-increasing demands, and prices consequently are likely to remain high. The English mines produce only a small quantity of tin. There seems some prospect of this precious metal being discovered in paying quantities in South Africa. It is not as well known as it might be among tinware manufacturers and others that scrap metal merchants give about 40s. per ton for scrap tin. The changes in recent years in the tinware trade have been many. A tinware manufacturer in the course of a conversation some days ago said that six years ago he made thousands of tin saucepans. To-day he does not make one, the enamelled saucepan having entirely killed his trade.—British Hardwareman.

COMPLETE ELECTRIC KITCHEN.

THE Niagara Construction Co., Limited, of Niagara Falls, Ont., have placed with the Prometheus Electric Co., 39 Cortlandt street, New York City, an order for a complete electric kitchen sufficiently large to prepare meals for fifty persons, and which will be used on the occasion of the opening of the new power station of the Ontario Power Co.

The equipment consists of an angle-iron table 18 feet long, on which are mounted three 5-gallon urns, with inner vessels for milk, coffee and hot water; one oven capable of taking 25-pound roasts or the equivalent; two large copper vessels for boiled dinners; three 12-inch by 13-inch boilers; one plate-warm-

THE "GOOD CHEER" FURNACE

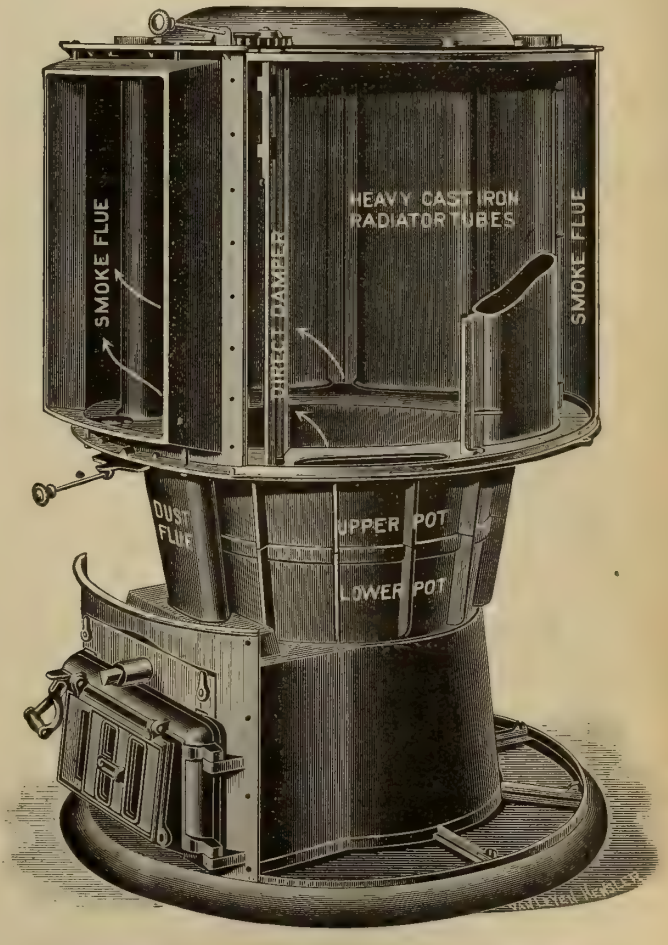


PATENTED

A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS



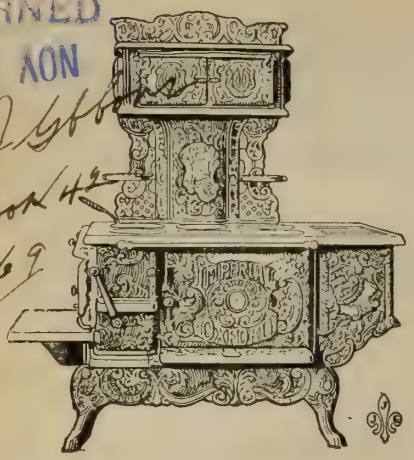
Made in 2 sizes

No.	Diameter of firepot	Height to top casing ring	Heating Capacity
20	*20-in.*	*53½-in.*	*20,000 Cubic ft.*
24	*24-in.*	*55½-in.*	*35,000 " "*

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., AND WINNIPEG, Man. LIMITED



YOU CAN TALK

the merits of the Imperial Oxford Range easily and readily, because you can do so truthfully. You do not have to strain a point even if you were so disposed, for this range fairly bristles with points of superiority over anything else ever offered.

The first thing that a customer enquires about in a range is, of course, the oven. In this, the most important feature, the Imperial Oxford is unquestionably better than any other. The diffusive oven flue is the most effective, practical improvement ever made in oven construction. The Imperial Oxford alone has it. Show this device and explain what it does in baking and roasting and you have sold an

IMPERIAL OXFORD RANGE

There are many other points which may be demonstrated. The patent draw-out duplex grate, which can be removed and repaired without disturbing the fire-box lining or water front; the perfect arrangement of draught dampers and flues, making the Imperial Oxford the most quickly responsive and easily managed Range; and the accurate oven thermometer.

These talking points constitute an argument which should close a sale, but to these may be added the fact that the Imperial Oxford is the heaviest cast iron range, and that it is without doubt the most popular range, as over 40,000 Imperial Oxfords are in use in Canada to-day. If it were not perfect in every particular, it would not be in such universal use.

The appearance of the range will appeal to a prospective buyer and will do its own talking. The Imperial Oxford is well advertised and, on the whole, is the easiest range to sell. If you are out to sell ranges, it should be on your floor.

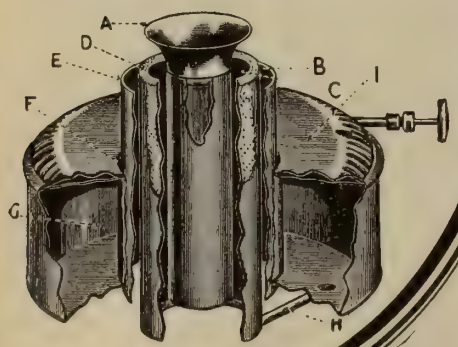
We also manufacture steel plate ranges, gas stoves, ranges and heaters, hotel ranges, hot water and steam boilers and radiators, warm air furnaces, and all kinds of cooking and heating apparatus, plumbers' supplies.

SEND FOR CATALOGUE 61.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER**

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta. 69



Note Construction of Our Grand Safety Burner.

A.—Flame Spreader, solid, no perforations to clog up with oily residium to smell and smoke. B.—Air Space outside of Wick Tube. C.—Air Space inside of Wick Tube. D.—Wick. E.—Outside casing to Burner. F.—Air Space between Fount and Outer Casing. G.—Fount for oil entirely separate from Burner. H.—Feed Pipe conducting oil from Fount to Burner. I.—Shield resting on top of Fount with air space underneath.

ALUMINUM OIL HEATERS

The only Oil Heaters with a partition in the drum, forcing base-burner radiation all over, from sides, bottom and top.

The Safety Burner makes explosions impossible. Numerous air passages insure perfect combustion, so there's no smoke or smell, while a furnace for heat.

Give your trade Aluminum Oil Heaters and see how fast the customers increase. "Every sale a seller."

Handsomest Oil Heaters on the market, and our prices have all competition on the run.

Order to-day to save delays in shipment.

Metal Stamping Co., Dept. 12, JACKSON, Mich. U. S. A.

W. J. McMurtry, GALT, Ont. Canadian Agent



er 45 inches by 16 inches by 30 inches; and one steam table 5 feet long by 2 feet wide, designed to take four food compartments.

The total outfit is designed for a consumption of twenty-seven kilowatts and the output will be controlled separately by means of switches and keys.

AIR HEATING DRUM.

G. E. Leonard, Sheridan, Wis., has invented an air-heating drum, the object of which is to provide a new and improved air-heating drum for stoves arranged to support the tubular heating-drum on a comparatively cool surface by causing a rapid circulation of air through the heating-drum and providing the top thereof with an asbestos filling. It relates to heating-stoves having a tubular heating-drum, such, for instance, as shown and described in a former patent granted to Mr. Leonard.

TIN IN ALASKA.

H. W. Hammond, recently returned from the tin fields of Alaska, says that the placer deposits of tin ore near Cape Prince of Wales are spread over an area twenty-five miles long and ten miles wide. "In this field," he says, "there is enough placer tin in sight to equal for a century the present world output of ninety-seven thousand tons annually. Outcroppings of the ore from which these placer deposits have come have been located at various points in the York mountain range to the eastward, but thus far the main ledges have not been uncovered. The placer fields themselves are so large, however, and so easily worked, that quartz mining is not likely to be necessary or advisable for decades to come."

COLD AIR SUPPLY.

An ideal method regarding the supply of fresh air to the furnace is to have returns from the interior of the building. A circulation by this means is assured and a sufficient supply of fresh air will also be continually taken into the building through openings at doors and windows.

When outside air is introduced, ventilators must be used to form a relief and cause a circulation, otherwise the flow of warm air will be very slow. When both inside and outside air are used the circulation is very slow as one counteracts the other.

CONTRACTS SECURED.

Kelsey Warm Air Generators will be used in heating and ventilating the St. Andrew's Church at Arnprior, the Moira district school at Waskada, Man., and the new hospital at Winnipeg, contracts having been secured for these jobs by the James Smart Manufacturing Company, Brockville.

CUTLERY FACTORY ENLARGING.

J. Wiss & Sons Company, Newark, are building a four-story brick extension to their factory, which will give 6,840 square feet additional room. This with the five one and two-story extensions in rear of their building, will give enough additional room to take care of the increasing demand for Wiss shears, scissors, razors and tinner snips. The entire space is used exclusively for the manufacture of high-grade cutlery.

Business Changes

Ontario.

Aaron Child & Son, hardware, Gravenhurst, advertising business for sale.

There was a meeting of the creditors of E. A. Nixon, machinist, Toronto, on October 2nd.

George C. Campbell, of Brush & Campbell, agricultural implements, Woodstock, deceased.

Quebec.

Paquin & Collard, plumbers, Montreal, dissolved.

Thomas Webster, plumber, Montreal, registered.

V. Choquette & Co., blacksmiths, Iberville, dissolved.

H. H. Desautels, tinsmith, St. Hyacinthe, offering compromise.

The assets of J. A. Gervais, hardware merchant, Montreal, have been sold.

G. D. Pearson & Co., manufacturers of ventilators, Montreal, registered.

Alfred Godreau and J. R. Boulais have been registered with Canadian Oil, Belt Dressing Co., Magog.

John Millen & Sons, hardware, paints and bicycles, Montreal, are offering their hardware business for sale.

There will be a meeting of the creditors of J. H. Daunais, hardware merchant, Montreal, on the 5th inst.

Western Canada.

The United Electric Co., Winnipeg, has been dissolved.

B. J. Lloyd, blacksmith, Winnipeg, is out of business.

Lloyd & Hay, blacksmiths, Winnipeg, have dissolved.

The stock of A. K. Lagarce, hardware merchant, Duck Lake, has been sold.

Davis & Hicks, hardware merchants, Boissevain, have succeeded Davis & Wilson.

NEW AXITE SHELLS.

A NEW explosive, under the name of axite, has recently been introduced by Kynoch, Limited, of Birmingham, England, and it is now loaded in metallic sporting ammunition.

Axite is said to be a distinct improvement over cordite, one of the chief advantages being that the rifle may be left up to twenty-four hours without cleaning, owing to the fact that the new explosive completely eliminates the corrosive effects. A great reduction is also made in the heating of the barrel, as axite has gained the minimum of erosive effect. Furthermore, by the use of axite the pressure is greatly lessened and the velocity considerably increased, thus giving a more uniform rate of combustion and a more complete recoil than other powders. It is also claimed that the residue deposit in the barrel, after firing axite cartridges, reduces the friction between bullet and barrel, and it is, therefore, practicable to use axite cartridges giving higher velocities than can be employed with certain other powders, owing to the latter nickeling the barrel by excessive friction.

The sporting sizes of metallic ammunition loaded with this new explosive are carried in stock by Caverhill, Learmont & Co., Montreal, who will be pleased to name prices on application to those interested.



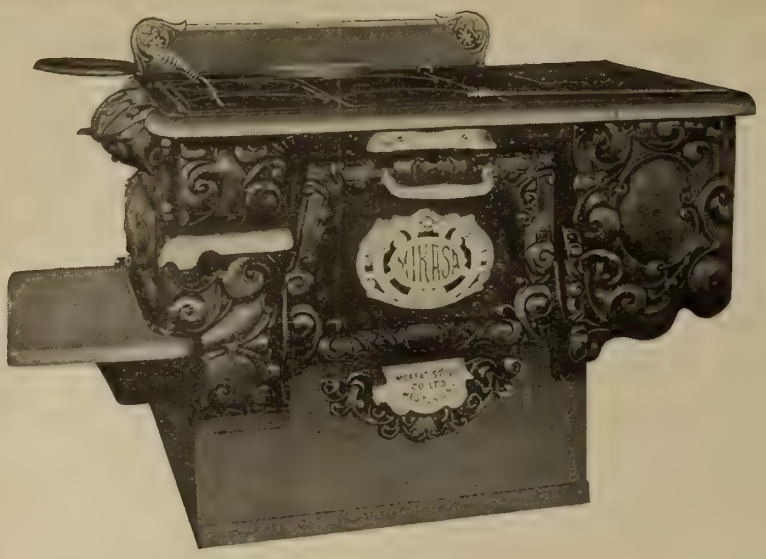
Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
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OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH
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Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
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JOHN FORMAN, - 644 Craig Street
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No others as good.
No others as low-priced.
FLOWER POTS, FERN PANS, SAUCERS, LAWN VASES, ETC. We ship the day order arrives. No. 2 assortment, Pots and Saucers:—5-8 inch, 7-7, 36-6, 50-5, 48-4, 9-10 (Hanging Baskets). Special Price, including crate, $5.40, net. Special orders filled.
THE FOSTER POTTERY CO, *HAMILTON, LIMITED.*


VORTEX HOT BLAST COAL STOVE
for Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.
For sale by
E. T. Wright & Co., Hamilton, Canada.





Cut showing cast iron flue back, guuranteed for twenty years. Steel or sheet iron flue backs rust out in a few years on account of the creosote, and condensation of smoke from the stovepipe and chimney.

THE "MIKASA" NATIONAL STEEL RANGE

IN CABINET FORM

The "Mikasa" cannot be beat in its class. The rivet work on the back of the range is just as perfect as on the front.

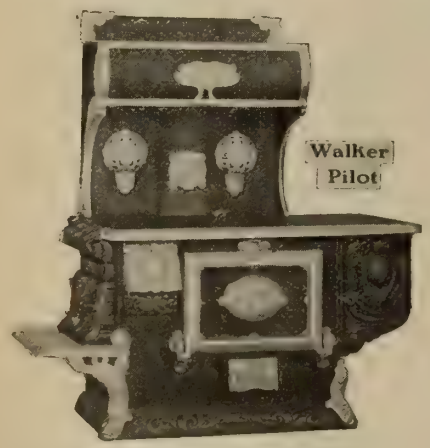
We guarantee that not one ounce of malleable iron is used in our fire-pots or other parts of the range, except where tensile strength only is required.

The pouch feed door is extra large, and will allow you to feed the fire when the top is covered with vessels.

Our oven bottom patent truss is rivetted in such a manner to the oven bottom that it impossible to warp, crack or change its surface in any way.

Key-plate top, sectional cover, reversible duplex grate, balanced oven door, and large ash pit, are some of the many practica and selling features of the "Mikasa" Range.

MADE ONLY BY **THE MOFFAT STOVE CO., Limited, WESTON, ONT.,** WINNIPEG CALGARY



All are Essential and All are Embodied in The

Present and Future Success. Arrange your stove line on a basis of lasting success, combined with a price that will enable you to intelligently and profitably look after the trade.

Demand Merit, First, Last and all the Time. Offer to your customers a thoroughly modern article, one that is replete with all practical utilities and conveniences. Do not injure your standing with them by selling an obsolete style of Range, made simply because some maker still uses the patterns of by-gone days.

Look for These Features. They are essential to the proper working and economy of any Range:

A proper end draft, along the entire length of the grate.

A perfectly controlled reservoir, encased in cast iron, and responding quickly when required.

Ash Pan of ample capacity, easily removed and without spilling of ashes.

A cast iron flue back that will not rust out.

Large pouch feed and broiler door.

WALKER PILOT STEEL RANGE

Other Features of this Range are: Balanced Oven and Closet Doors; Duplex Grates, removed without disturbing linings; Oval Firebox; Enameledware Tank; Oven Thermometer; Wood extension and a profusion of handsome nickel.

All parts are closely rivetted, oven bottom, lower edges and other parts strongly reinforced, and asbestos is freely used where necessary.

Catalog and Prices for the Asking

Walker Steel Range Company, Limited

Grimsby, Ont.

ALL STYLES OF FIRE BRICKS

but only one make—the best.
Also
Furnace and Stove Cement and Stove Castings
at closest prices. We are equipped to supply you. Let us have a trial order. Write for prices.

JONES BROS., - Bracondale P.O., Ont.



TRADE TEMPTER

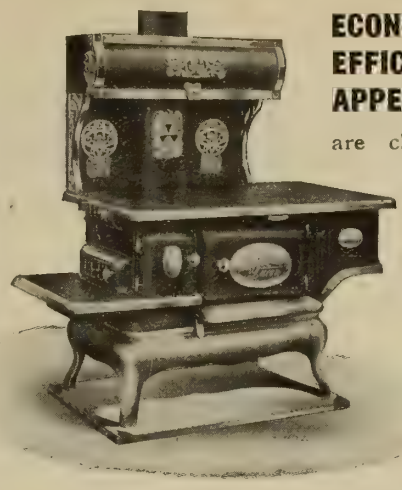
It draws business, does

Sterne's Asbestos Stove and Furnace Cement

It holds business—good business. You might as well be economical now as later on. A trial order starts the ball rolling—starts the profits rolling into your lap.

Prices on request.

G. F. STERNE & SON, MANUFACTURERS, BRANTFORD, ONT.



ECONOMY
EFFICIENCY
APPEARANCE

are characteristics of

The Empire Queen Range

A stove designed for action as well as for ornamentation—suits because it serves. It is a handsome range, but we have omitted a lot of the unnecessary carving on castings and seen more to grates and ovens. Result: **The Empire Queen Range** is in a class by itself as a Baker—First Class.

A Post Card Secures Information.

The Canadian Heating & Ventilating Co. Limited

OWEN SOUND, Ontario

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred. Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



200 CANDLE POWER OF CLEAR, STEADY LIGHT

The best and cheapest light for STORES, CHURCHES and HOMES.

Gives more light than a dozen oil lamps for half the cost. Makes its own gas without smell, smoke, wicks or grease.

Satisfaction Guaranteed. Send for Catalog.

AUER LIGHT CO.——————MONTREAL

ARK-EL-ITE
TRADE MARK

Asbestos Stove Lining

An improvement over Fire Brick for lining and repairing Cooking and Heating Stoves, Ranges, etc.

This lining is made from the well-known Mineral Asbestos and other fire-proof material.

It is more durable than fire brick, clinkers will not adhere to it, and it can be applied in a few minutes.

No need of an expert; anyone with a pair of hands can apply it.

It is packed in heavy cardboard boxes, which are both attractive and durable.

10-six-lb. packages in case, price $1.50 per case.

MANUFACTURED BY

Francis-Frost Co., Limited

Makers of Celebrated "Ark" Brand Paints.

HARDWARE BUSINESS FOR SALE

Owing to the growth of our Specialty Business, now the largest of its kind in Canada, we have decided to dispose of our old established Hardware Business (organized 1867), with possession of the whole or part of the premises occupied, Nos. 1325 to 1331 St. Catherine and 221 to 225 Plessis St., Montreal.

This is a rare opportunity to acquire an up-to-date business with a splendid connection.

JOHN MILLEN & SONS



None Better

Why experiment with new, untried and unknown Oil heaters when you can handle a heater with a successful record of years - one on which you take no chance whatever ?

Our "FAMOUS" Oil Heater is simple and light.

Has no complicated wicks, burners, tanks, etc., but is a perfect working, economical and durable heater.

We Guarantee the "Famous" Oil Heater

Write for folders and prices.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

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Limited

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NEW ADVERTISEMENTS.

Clabrough & Johnstone, Birmingham, Eng.
Perfection Safety Furnace Pipe Co., Toronto.
Francis-Frost Co., Toronto.

THE ADVANCE IN GLASS.

DURING the past week there has been a very sharp advance in the price of window glass. Throughout the Summer there was a good demand which in the last month has been immensely increased owing to the completion of buildings under construction —so much so that stocks now held by the jobbing trade are very much depleted, and in many of the most popular sizes there is almost an entire exhaustion. After October 31st it is doubtful if any more boats will leave Europe for Montreal, as navigation in that port closes about the middle of November, so that it is very questionable if much glass will arrive to relieve the situation.

The European manufacturers have been extremely busy and have found it impossible to keep up with their orders. After the recent collapse of the Belgian Window Glass Workers' strike, which was of such a long duration, the manufacturers found that a great many of the old employes had left and procured other work, and so seriously did this affect the glass trade that at the present time the Belgian factories are not operating to more than half of their capacity. It will be seen, therefore, that the sources of supply being so limited and the demand so great in the local market, window glass will continue to be a very scarce commodity, and the situation cannot be relieved merely by an increase in price.

THE UNIVERSITY COMMISSION.

SOME years ago the unsatisfactory state of affairs in Toronto University, the college of the Province, was exposed in these columns, and a comparison made with McGill much to the disadvantage of the Toronto institution. We charged that the administration was bad and the instructional staff weak.

It was particularly pointed out that Toronto University was governed by a large senate, composed of clergymen, lawyers, doctors, dentists and musicians, and of these not more than three or four had made any mark in the world outside of their own little circle. There was not one business man among them. It was admitted that among the teaching staff of the university were some very able and capable men, but the greater number of them were not the best men that could be got for the position. They were appointed by political and family influence, regardless of a college or a provincial education.

Friends of the college at once rushed to its defence and unpleasant things were said about the MacLean Newspapers. One prominent defender opposed business men having anything to do with university affairs. We protested against the grant of any further money by the Government until the affairs of the university were completely reorganized and put in charge of a governing body composed of representative men, men who had scored sufficient success in their calling, whether in a profession or in business, men like those who managed the affairs of McGill University. The general public read these articles, they read the various defences, and they thought, and some people acted. First of all, a deputation of the Manufacturers' Association waited on the university authorities and the Government, urging action on the lines suggested in these columns. A chance investigation, though conducted by friends of the university, revealed enough to show that the charges made by these columns were not groundless. By this time the graduates themselves had begun to realize that the best interests of the college demanded a change. Finally the Premier of the Province, who is a graduate of the university, and a man of strong common sense, took the affairs of the university in hand and decided that something must be done. He stated that, "the Government will either issue a commission or take other steps to acquire information for the purpose of informing itself as to the best manner of changing the entire administration of the affairs of the University of Toronto. I am not now speaking of the teaching methods or the faculty at all, but it will be something abnormal, something unreasonable, if the affairs of the institution cannot be conducted in a successful way by plain business men. To that end the Government will devote itself, so that when we meet the House again we will ask them to accept a new system of management of university affairs."

He has now decided upon a commission composed of the very kind of men the MacLean Newspapers suggested as being the best sort for administering the affairs of the university. The results should mean much for higher education in this country.

MANUFACTURERS' LABOR POLICY

SOME three or four years ago Hardware and Metal criticized the Manufacturers' Association for taking part in labor disputes on the initiative of the then president, Mr. Cyrus A. Birge. It was pointed out that it would be in the best interests of the manufacturers to work on good terms with the mechanics in securing a tariff which would aid in developing manufacturing industry in Canada, the building up of which would insure steady employment for large numbers of workingmen. The employers' associations, we contended, should deal with all labor matters, their membership being made up of business men and manufacturers who might or might not be members of the Manufacturers' Association.

Experience in both Canada and the United States bears out the position then taken by this paper. In this country the Manufacturers' Association has not adopted a "hands off" policy on labor questions and attention has been drawn to their attitude by speakers in the Trades and Labor Congress, one result being that an anti-Chamberlain free trade resolution, which was only adopted by four votes at the Brockville session of the Congress two years ago, was carried unanimously at the Congress in Toronto last month. Where the Manufacturers' Association has desired to encourage a protective policy the direct opposite has been the result.

Across the line the American Manufacturers' Association has made a similar mistake and their organization is looked upon by wage workers as a purely capitalist body aiming to enslave labor by any means in its power. The association's president, P. M. Parry, by his public addresses condemning labor unions and socialism, has been made the target for thousands of speeches and articles encouraging the workers to look upon the Manufacturers' Association as hostile to the interests of every workingman. And the cereal foods of Manufacturer C. W. Post, of Battle Creek, have been subjected to a most persistent boycott because of the antagonistic stand he has taken to labor unions. The

Citizens' Alliances, composed largely of business men, have also taken a prominent part in labor troubles, and while they are looked upon as being opposed to labor organizations they are not hated so bitterly by trades unionists as is the Manufacturers' Association, which under Parry's leadership has made the "open shop" its chief aim.

Senator Mark Hanna's Civic Federation, organized as a sort of arbitration court, and having Samuel Gompers, John Mitchell and other trades union officials as honorary officers sitting side by side with August Belmont and other capitalists, has been more successful in fostering a feeling of mutual interest than either the Manufacturers' Association or the Citizens' Alliances, but the more recently organized Employers' Associations, led by Frederick Job of Chicago, are really the bodies which seem best fitted to resist the increasing number of demands which are made upon manufacturers by their employes.

In this age of organization employers must be better organized than the workers if the former are to retain control of their various industries. The labor unions were first in the field and won many a strike before the emoloyers learned that only by adopting the weapon of organization could they hope to continue to run their businesses as they deemed best. Nowadays a strike does not find the workers organized and the employers acting as individuals. Representatives of one organization meet the representatives of another and if an agreement cannot be reached a struggle ensues in which both sides are supplied with funds from outside sources. If disorder occurs the police and militia are called out to protect property from destruction. Power is no longer in the hands of the unions and not a strike of any importance has been won in recent years by the workers' organizations. So strong are the employers' associations to-day that some working-class papers are pointing out the foolishness of the workers acting like the balky horse and refusing to work, the contention being that the struggle should be transferred from the industrial to the political field.

Canada has been considerably freer from labor troubles than the United States, but as our country develops the danger of these industrial disturbances with their evil effects upon mercantile business will increase. It would seem, therefore, that the policy urged upon the Manufacturers' Association by this paper on several occasions was a wise one and the manufacturers should direct their attention exclusively to political questions, leaving industrial differences to be adjusted by the Employers' Association for the industry in which the disturbance occurs.

AUSTRALIAN TRADE.

THE recent visit to Montreal of Mr. J. S. Larke, the Canadian trade commissioner to Australia, has resulted in much greater attention being directed by the eastern manufacturers to trade with that country. Mr. Larke addressed a meeting of interested parties in the board of trade council chamber last week, and his remarks should succeed in arousing Canadians of the east to the great possibilities of the Australian market.

Mr. Larke made a somewhat radical proposal to Canadian business men, looking to the establishment of a steady trade with Australia. He advises that a company with a capital of at least half a million dollars be formed, to purchase goods directly from the manufacturers and export them both to the advantage of the maker and the profit of the export company. This mercantile company should have a branch warehouse in Australia, thus bringing Canadian goods directly to the notice of the Australian consumer.

Only a short time ago a deputation waited on the Tariff Commission at Vancouver, asking that steps be taken to arrange a reciprocity treaty with Australia, thus showing that Canadians of the west are fully alive to the importance of fostering trade with the island colony. But there are great difficulties to be encountered in such an undertaking. Australia would, of course, want some advantages in return for any preference to Canadian goods, and the limited number of articles that country has to export would make any satisfactory arrangement extremely difficult, though not impossible.

But a difficulty of even greater magnitude will be the problem of transportation to Australia, especially from Eastern Canada. The Maritime Provinces, by reason of their resources of gypsum, timber (including spruce for the manufacture of paper) and excellent roofing slate, should find a good market in Australia, where there is a brisk demand for plaster of paris, cement, and paper. Fish will also be taken by our sister colony in good quantities, with a preference for herring and other fish put up in tins in appetizing form. It is a peculiarity of the Australian market that no sale can be found for salted or dried fish. Steel is another product which could be supplied by the Maritime Provinces to command a wide field in the future trade of Australia. But all these articles demand much better transportation facilities than at present exist.

The bulk of the Canadian trade is now being done through New York, where there are sometimes delays in transportation of from five to eight weeks. Then there is the Vancouver route, too, but the great mass of goods cannot stand the charges of so long a haul overland. And so, if Eastern Canada is to hold a fair share of the lucrative Australian trade, it is obviously necessary that cheap, and therefore direct, transportation be furnished. In this connection it is well pointed out that Quebec and New Brunswick could always supply a reserve cargo in the shape of spruce timber, which can be drawn upon to fill a ship in case the better paying lines should not offer in sufficiently large quantities.

A feature which is not to be overlooked in determining the commercial advantages of Eastern Canada is the French Canadian labor in Quebec. Many of the people of this Province who have gone to the United States and acquired mechanical training and skill there, are now engaged in turning out goods of a superior quality, and some for foreign trade. There seems to be no good reason why the same skill could not be developed in Canada, and these people kept at home. Indeed, it is stated that even at the present time a good deal of the Canadian goods going into Australia are the product of Quebec factories.

Mr. Larke states that times are improving in Australia. In 1904 her surplus of exports over imports amounted to nearly $100,000,000, and should present prospects be realized 1906 may see a repetition of this extraordinary balance of trade. Mr. Larke believes in a great future for Australia. He expects large yields of gold from deep mining, also silver and copper in large quantities, new fields constantly being opened. However, the future of Australia will be in her agricultural development. She has great areas of land fitted for mixed farming, which are now used for pastoral purposes or in a state of forest.

WESTERN ASSOCIATION NEWS.

SECRETARY J. E. McROBIE, the energetic organizer of the Retail Hardware and Stove Dealers' Association of Western Canada, was in Winnipeg last Saturday on a flying visit and called at the office of Hardware and Metal. He reported very gratifying results in the new Province of Saskatchewan where he has been working for some weeks. Only some three or four hardware merchants had refused to support the association movement. But the increased membership list speaks for itself and comment is unnecessary. The following hardware firms have been added to the membership list:

Priestholdt Bros., Hanley, Sask.

E. R. Mann and S. H. De Wolfe, Davidson, Sask.

E. Troughton and T. J. Brock, Lumsden, Sask.

O. Edwards, Osage, Sask.

Morrison McLeod, Fillmore, Sask.

Jas. Lambe and J. Traundycek, Francis, Sask.

Doull & Banbury, Stoughton, Sask.

Moose Mountain Lumber & Hardware Co., Limited, Stoughton, Heward and Forget, Sask.

E. Dalquist, Forget, Sask.

Mountjoy & Glover, Heward, Sask.

J. G. Hooper and J. R. Nears, Arcola, Sask.

H. Cochrane and Porteous Bros., Carlyle, Sask.

J. M. Stephenson, Sinclair, Sask.

D. J. Fumerton, Reston, Manitoba.

D. Brown, Qu'Appelle, Sask.

A. V. Gerry, F. L. Mackay & Co., and C. T. Laird, Indian Head, Sask.

Grenfell Milling Co., and E. A. Walker & Co., Grenfell, Sask.

Smith & Ferguson, Regina, Sask.

J. B. Kernaghan and T. J. Agnew, Prince Albert, Sask.

J. M. Hackney & Co., J. P. Friesen, Wiebe & Epp, and Kehler & Abrams, Rosthern, Sask.

Geo. McIntosh, Osler, Sask.

Hildebrandt & Harder and J. P. Friesen, Hague, Sask.

W. H. Taylor, Dundurn, Sask.

Oliver & Kempthorn, S. A. Clark and Jas. Clinskill, Saskatoon, Sask.

Mr. McRobie returned to the country on Monday, resuming organization work west of Moosejaw. Many hardware dealers are preparing to shut off credit on November 1st and in all places where a local organization has been effected the members have met and by mutual agreement put a stop to price cutting.

COMING CHANGES IN PAINTS.

For several weeks Hardware and Metal has been reporting advanced prices in turpentine, gum shellac, pig lead and ingot zinc. These all have a direct and very important bearing upon many branches of the paint trade, and it was consequently expected that the manufacturers would soon raise their prices, particularly in mixed paints and shellac varnish.

This has already been done by some of the makers, though others are slow to do so, owing to the fact that good stocks manufactured from material purchased before the advances are still on hand. It is thought, however, that such stocks will all be exhausted before Christmas, and the big firms will then be unanimous in moving prices sharply upward.

Fleas invaded a hardware store in Wisconsin. They held forth on the floors, ceilings, boxes, chairs, desks and other appurtenances, from morn till eve, when they suddenly shook the dust from their feet and disappeared.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 1.

HERBERT H. CLARK was born in Peckham, Surrey, England, and lived in the city of London for 19 years, coming to Canada in 1887 and settling in Cookshire, Que., with the intention of learning farming. Not finding farm life congenial, he was engaged as clerk for T. B. Munro of Bury for some time, and later returned to Cookshire, buying out the fruit and confectionery business of C. S. Sawyer. About a year afterwards he sold out and accepted a position with the Cookshire Mill Co., where he rose to be head clerk and buyer. After four years with this company he was compelled through ill health to go to British Columbia, and was there during the mining excitement of the year 1896. Returning east, he became bookkeeper for Planche Bros., of East Angus, and on the dissolution of this firm entered the business of J. F. Kerr, Sherbrooke, from which he graduated after six months and accepted a position as traveler for Lewis Bros.



H. H. Clark,
Representing Lewis Bros., Montreal, in the Eastern Townships.

During the seven years of Mr. Clark's connection with this firm, he has seen it grow to be one of the first of its kind in the Dominion. At the first re-union of the travelers of the firm in 1898 they were a small company of seven, but at the last convention in December, 1904, the number had increased to twenty-one, only three of the original seven being still with the firm.

Mr. Clark resides in Lennoxville, in the centre of his territory, and always makes it a point to be in Sherbrooke on Saturdays to attend to his many customers there as well as to shake hands with those from outside points.

Since the incorporation of Lewis Bros. Limited, Mr. Clark has become a stockholder, realizing that by so doing he will have a more special interest in the continued welfare and success of the business, and with the co-operation of the headquarters staff can more surely live up to the motto, "Ship quick, quote low."

Mr. Clark takes just pride in saying that during his experience on the road he has, with only one exception, never lost a customer. He is enthusiastic over the phenomenal business of the present year, declaring that his sales are away ahead of those of any other year. This he ascribes to the flourishing state of the Eastern Townships, prices for all kinds of produce having been maintained at the highest level all Summer, thus giving more money to the farmer, who is really the backbone of the Townships and of Canada generally. As a poultry fancier Mr. Clark has a wide reputation, having exhibited prize-winners at many of the leading Canadian exhibitions.

THE-OUT-OF-TOWN TRADE.

IF there is any trade to be drawn to your store from surrounding towns, you ought to make every effort to get as much of it as you can.

People often have a lot more faith in a store located somewhere else than they do in their own local stores. No one knows why—it is the old principle of the prophet without honor in his own country.

If you advertise in the surrounding towns, you will create the impression that your store is a good one, or it could not expect to attract trade from other centres—and you will find shoals of people who will take you at your word.

If you are the first man in your place to reach out after this outside trade, you will get a good start on your competitors.

The big department stores in the larger cities have long recognized the value of this plan, and you will find that they advertise just as carefully and as persistently in the small local papers in the adjacent territory, as they do in the big city dailies.

Just cultivate this field as thoroughly as you are cultivating your home trade and note results.

Of course, your store has got to back up every promise you make and induce customers to come back again and again but that is an axiom that applies to all advertising.

PERSONAL MENTION

Ontario.

J. A. Henderson, Brampton, called on the hardware trade in Toronto this week.

A. Gingerich, formerly of Tavistock, has opened a hardware store at Woodstock.

V. Eastwood has purchased the controlling interest in the Peterborough Hardware Co.

Ald. Hugh Wallace, plumbing contractor, Hamilton, made a rush trip to Bradford, Pa., on Monday last.

Jno. McLennan, of the McLennan Co., Lindsay, has returned from a two months pleasure trip to Europe.

H. J. Farr, J. Bishop & Sons, Brantford, spent a few days in Toronto this week calling on hardware and paint wholesalers.

Will G. Conery is now representing the Bond Hardware Company, Guelph, on the outside as city traveler. His promotion has been well earned.

George R. Petrie, general manager of the Petrie Manufacturing Company, Hamilton, has returned from a trip to the Maritime Provinces.

Fire did between $3,000 and $4,000 damage to Foy Bros. & Southcott, wholesale and retail hardware merchants, St. Catharines, on September 26.

F. N. Burt, formerly in the hardware business at St. John's, Nfld., has purchased the hardware business conducted by J. Woodsworth, 842 Yonge street, Toronto.

The Consolidated Hardware Company has leased premises in Hamilton to manufacture metal goods, gas fixtures, wire goods and tacks. Thirty hands are employed.

E. R. Rogers, the new inspector of asylums, formerly hardware merchant, Toronto Junction, is making his first tour of inspection of the asylums in Western Ontario.

Col. Frank Noble, manager of the London Foundry Co., died last week. Mr. Noble was a veteran of the American Civil War and was in the employ of the Workman & Ward Co. for several years.

R. B. Smith, formerly general manager of the Massey-Harris Company's business in Western Ontario, has accepted the management of the Calgary branch of Wm. Gray & Sons, Chatham.

S. H. Chipman, president of the Ontario Wind Engine and Pump Co., Toronto, is on a trip through the west. He will stay in Winnipeg about ten days looking into the company's business at that point.

Thomas Oliver, hardware merchant, Copper Cliff, has been in the hospital with typhoid and pneumonia. He expects to be well enough to leave the hospital this week. His many friends in the trade will be glad to hear of his recovery.

Mr. Chas. World, traveling representative of the James Morrison Company, has returned from his vacation. Mr. World reports that fishing was very good during his vacation and he has a number of new fishing stories ready to tell his friends when he gets on the road again.

W. H. Cox, manager of Whitman & Barnes, manufacturers of small tools, St. Catharines, was in Toronto on Thursday of this week. Mr. Cox reports the outlook for the Winter trade to be of the brightest and states that business in his district during the Fall has been very satisfactory.

Col. Gartshore of the McClary Manufacturing Co., London, Ont., was a visitor to Toronto this week. Mr. Gartshore states that the demand for furnaces has been far above the average this year and although the foundries have been working to their utmost limit they have been unable to keep up with the orders booked.

J. H. Plummer, president of the Dominion Iron & Steel Co., was a visitor to Toronto this week. His health has been unsatisfactory following an attack of neuritis, and that recovery may be satisfactory he will spend the Winter in Europe after attending the annual meeting of the company which is to be held on October 18th.

Western Canada.

J. H. Ashdown is in British Columbia with the Transportation Commission.

Geo. D. Wood of Winnipeg returned on Wednesday from an extended trip to the Pacific Coast.

H. V. Lawlor, traveler for Henderson & Potts Co., Limited, went west this week. It is his intention to cover the towns between Winnipeg and mountains before he returns.

W. C. Perry, assistant manager of Geo. D. Wood & Co., Winnipeg, returned to his desk this week, after a fortnight's holidays pleasantly spent in duck shooting in the Dauphin district.

S. H. Chapman, president of the Ontario Wind Engine & Pump Co., of Toronto, arrived in Winnipeg last Friday. On his way to Winnipeg he visited a large number of manufacturing concerns in St. Louis, Chicago, and St. Paul. He will remain in Winnipeg about ten days.

Work is being rushed on the construction of the new structure for the Marshall-Wells Co., in Winnipeg. The structure, which is only the beginning of a very much larger building, will be four storeys high, 50 x 130 feet. Wm. Grace & Co. have the contract. The estimated cost of the building is $35,000.

J. Irwin, western manager of Henderson & Potts Co., Limited, returned to Winnipeg last week from Montreal. It was his wedding trip, and the journey was made in leisurely fashion by way of Kingston, Toronto, Niagara, Chicago and St. Paul. Mr. and Mrs. Irwin have the best wishes of Hardware and Metal.

Quebec.

N. Courtemanche, of St. Ours, was in Montreal a few days ago.

J. J. Murphy, contractor, of Quebec, was in Montreal this week.

P. O. Casarant, of St. Chrysostome, visited the Montreal jobbers this week.

T. A. Fajan, general merchant, St. Hilaire, was in Montreal on business this week.

Henri Myard, general administrator of the Island of Anticosti, was in Montreal recently.

Chas. Milot, general merchant of Ste. Monique, visited Montreal during the past few days.

Mr. Williams, of the Asbestos and Asbestie Co., Danville, Que., was in Montreal on Wednesday.

Mr. McKenzie, of Wood, Vallance & Leggett, Vancouver, B.C., is spending a few days in Montreal.

C. Leblanc, hardware merchant, of Joliette, was a business visitor in Montreal during the past few days.

Mr. Shaw, of the Chinic Hardware Co., Quebec, paid a short visit to Montreal, the early part of this week.

Mr. Brown, of Brown & Semple, plumbers, Brockville, called on the plumbing supply houses in Montreal this week.

S. F. Wood, vice-president and general manager of the Hobbs Mfg. Co., London, Ont., was in Montreal on business this week.

Jas. Campbell, of the Acme Can Works, Montreal, is able to be around again, and is covering the trade as usual.

Mr. Youlden, of Selby & Youlden, engineers and boiler makers, Kingston, Ont., was among the out-of-town buyers in Montreal this week.

S. S. Swasey, general manager of the Creamery Package Co., Limited, Cowansville, was in Montreal this week in connection with his business.

W. G. Butler, of W. G. Butler & Co., heating engineers and plumbers, Perth, Ont., spent a short time in Montreal this week, purchasihg supplies.

The Crescent Electric Co., Montreal, are retiring from the retail part of their business, and will hereafter devote their energies entirely to manufacturing and jobbing.

R. B. Cherry, representing the Sargeant Co., of New York, is taking orders in Montreal this week. To the inquisitive, we may state that Mr. Cherry has paid his $300 fine.

Alex. Gibb, manufacturers' agent and metal broker, 13 St. John street, Montreal, is looking for a young man well acquainted with hardware and metal trade, as a traveler and office assistant.

Mr. J. Roper, mentioned last week as having accepted the Canadian agency for John Shaw & Sons, Wolverhampton, England, is Mr. J. Harry Roper, so well known to the hardware trade of Eastern Canada.

W. H. Dorken, of Dorken Bros. & Co., Montreal, Canadian agents for H. Boker & Co.'s cutlery, has recently returned from his visit to the Old Country. His son, who accompanied him, met with a painful accident on the return trip.

The Canadian Fairbanks Co. have completed their contract with the Canada Car Co., Montreal, for shafting, Universal Giant Hangers, Oneida Steel Split Pulleys, couplings, rawhide, pinions, and other transmission material.

H. C. Hunt, of the Belleville Hardware Co., spent a few days in Montreal this week. Mr. Hunt is also secretary-treasurer of the Progressive Lock Works, Belleville, which is making such a good bid for trade that the capacity of the plant was recently considerably increased.

Mr. Harvey, of Bristol, England, has been in Montreal for some days, in the interests of Bristol as a shipping point for goods coming to Canada from the Old Country. A great deal of money has recently been spent on the Bristol docks, thus making them among the best in the United Kingdom.

R. H. Fortye, manager and secretary of the Peterborough Shovel & Tool Co., and formerly secretary-treasurer of the Peterborough Hardware Co., was recently in Montreal, attending a meeting of the directors of his company, which, though a new one, starts out with every prospect of success. The equipment of the Peterborough Shovel & Tool Co. is said to be among the finest on the continent.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Copper is slightly stronger at 17¾c. for ingots.

Ingot tin shows an advance of ½ cent, being now quoted at 36c. to 36½c.

Londonderry pig iron has advanced to $18.75 to $19.25.

Antimony has again fallen off slightly, present price being 14¾c. to 15c.

Bar iron has jumped up again, this time to $1.87½.

Old rubbers are commanding figures ½c. higher than last week. They are now quoted 6½c. to 6¾c.

Turpentine has gained 2c. per gallon.

Mixed paints have advanced from 5c. to 10c. per gallon in the smaller sized packages.

Shellac varnish has gained strength, and prices are advanced.

TORONTO.

Window glass has been advanced to $4.25 for Star, and $6.25 for Double Diamond — base figures.

Turpentine has advanced from 95c. to $1.00 in barrel lots.

Bar iron is quoted 5c. higher than last week.

Galvanized iron and black sheets — prices have been withdrawn.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 6, 1905.

SHELF goods are moving better than any other branch this week, although the market generally is very strong. Sorting orders in horse blankets are also reported in good volume while skates, sleigh bells, and snow shoes are being asked for in increasing quantities with every day.

Country retailers are already preparing for their Christmas trade by putting in good stocks of cutlery and silverware. These two lines have gained remarkably in popularity with the hardware trade during the past couple of years, so much so indeed, that in many cases, they can no longer be considered side lines. Safety razors, both in the cheaper and better grades, are taking a stronger hold on the market, those with a number of cutters being the most desirable.

In sporting goods, ammunition is still well to the fore, and not a few orders for guns and rifles are still being placed. One of the local wholesale houses is drawing attention to a new explosive called "Axite," which is said to excel Cordite in almost every particular.

Snowshoes are becoming more of a feature as the Winter draws near and one house which makes a specialty of this line has issued a neat booklet giving prices in the various grades handled by them.

Axes—The demand continues particularly good and as is the case in all hardware lines at present, prices are very firm. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—We quote as follows: Axe handles No. 3, $1.25; No. [illegible] No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—More attention is now being paid to this line and the various grades of machines are now being displayed in the show rooms of the local jobbers. Prices are unchanged as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Prices for future deliveries have been advanced, but the majority of the lanterns now being sent out were ordered during the recent slump in prices. We quote: Cold blast, $4.50; No. 0, Safety, $5.00.

Rivets and Burrs—As usual there is a good movement in this line. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote following prices: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts— Our prices are unchanged as follows: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Horse Nails—These goods are distinctly in season at this time and good orders are being shipped to all parts. We quote: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 60 and 10 per cent.

Wire Nails—The usual trade is now being done at following prices: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—Price remains $2.20 per keg, f.o.b. Montreal.

Horse Shoes—Like horse nails, the season for these goods is at its full height. We give the following prices: P. B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Ammunition is the strong feature, and the following prices are quoted: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—No change is to be noted in the last week's conditions and trade may be said to be fairly holding its own. For prices see our current market quotations in the back of this issue.

Cordage—As one of the staple lines of the trade, this is enjoying full measure of the existing prosperity. Prices are as quoted in the back.

Cement and Firebrick—No large orders are reported, but as a good deal of building is going on, a satisfactory volume of jobbing orders is keeping the trade busy. We quote as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—Good sized orders are going out every day. We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—There is little activity in this line. We are still quoting as follows: Little Star, $4.85; Hudson, $5.00; Rocking Table, $5.25; Turn Table; $6; Canadian, $4.50.

Skates—In common with all Winter goods skates are moving well. Prices are from 25c. to $2.50, according to the quality.

Sleigh Bells—Indications are that this year's business will far exceed last. We give prices as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snow Shoes—Increasing inquiries from all parts of the country are now

being attended to by the local jobbers. Prices range from $15 to $35 per dozen pair, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Oct. 6, 1905.

EXCELLENT expresses the condition of the hardware markets at present. Business during the closing week of September and since the beginning of the present month has been far above the average. The crop that has caused considerable speculation during the past few months is now being harvested and the farmer knows pretty well what he will get for his summer's toil. He has been rewarded well for his work and when the farmer feels that way it is practically certain that the hardware merchant will have occasion to feel cheerful.

Sporting goods continue to be the most active line and the demand for rifles is picking up considerably. Guns and ammunition are still being ordered in large quantities, and while loaded shells have been none too plentiful, jobbers are now in a position to forward all the business offered. Woodenware, such as ladders, washing machines, etc., are in very strong demand and the trade is far above the average. Other lines that are being called for in especially large quantities are: Sleigh bells, horse blankets, halters and girths, cowchains being included in most of the orders. Besides these lines a general assortment of heavy hardware is being shipped and the trade in bolts, nuts, screws, and burrs is very large. The active demand is probably caused by the increasing price of iron and the certainty that the quotations on heavy hardware lines are certain to be increased shortly.

Builders' hardware, such as wire nails, putty, glass, cement, and building paper, are still called for actively, but the demand for wire goods is falling off considerably, the bulk of the trade in these lines having been done for this season.

Sporting Goods—Stocks of imported shells are larger and standing orders are being filled. Rifles are increasing in demand, while the call for shot guns and ammunition keeps up well. Fishing tackle is also in strong demand.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chains and other Fall lines are selling well. 1-4 inch, $6.50; 5-6 inch, $4.45 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Ladders are being called for actively and more than the average Fall trade is being done. We quote: Step ladders at 10c per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Barb and Coiled Spring Wire—Trade is falling off, the bulk of the season's business having been done. No change in quotations.

Wire Nails—Advances in the U. S. have not been duplicated here as yet. Demand continues very active.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horseshoes—Prices continue unchanged with the outlook for business excellent. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Axes—Both handles and axe blades are in strong demand.

Horse Nails—Blacksmiths are ordering in large quantities and dealers have no complaints to make.

Cutlery—Case goods and carvers are being ordered in large quantity. The volume of business booked is quite satisfactory.

Skates and Sleigh Bells— Merchants are ordering well, particularly for sleigh bells.

Lanterns—The bulk of the business was done in the Spring, but some sorting orders are being placed.

Apple Parers—Trade in this line is falling off some.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—The possibility of higher prices is giving an impetus to trade. Prices remain as before.

Bolts and Nuts— An increase is looked for by some on account of the advancing prices for iron. Mills have plenty of business.

Cordage—Sorting orders are being received. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.: sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton. 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—A scarcity exists owing to the heavy demands of the past season, and prices are very firm in consequence. We quote: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—Demand is expected to pick up this month. Quotations are firm, but prices are unchanged. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Manufacturers report business to be continuing active, the heavy building being done calling for a large quantity of goods. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool— The market continues active. Dealers can place all that are coming in at present prices. Stocks are quite depleted as the consumptive demand absorbs all arrivals and it is not expected that at the present range of prices dealers would attempt to stock up. Existing prices, whilst remaining very firm are not considered as denoting a healthy state of the market and some modification will have to develop before stocks will accumulate. We quote:

Hides, inspected, No. 1 per lb.		0 12
" " " 2 "		0 11
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelt, best city slaughter		0 85
Rendered tallow, per lb.	0 04	0 04
Unwashed wool, per lb	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 6, 1905.

OLD country markets continue to show wonderful activity in pig iron and finished materials, so that a reflection of this is seen in the Canadian market at the present time. Importers have again raised prices on certain grades of pig iron and report that the market will be still stronger in the near future. Contracts which they are now placing with old country producers will not enable them to maintain the present prices at so low a level, and it is confidently predicted that pig iron will be very much higher throughout the coming Winter. As the iron market is always a safe barometer of general trade, the present condition is most satisfactory.

Tin is once more advancing, though jobbers have not yet raised their prices. The present activity simply reflects the trend of the market.

Copper has shown strength throughout the week without any sagging movement such as we recorded in our last issue. The price has been again advanced, ingot copper being now quoted at 17 3-4c.

Pig lead eased off in the early part of the week, but is now stronger and is well held at the old prices. Canada plate and black sheets are two lines which show a splendid turn over, but competition is so great that in spite of the general strength of the metal market, no advance has taken place over our former figures. It is said, however, on good authority that as soon as present stocks are exhausted and contracts now being placed rule the market, there will be a sharp advance.

Galvanized sheets have again been advanced to the importers and it seems very improbable that the jobbers can much longer quote their present prices on these goods.

Antimony has again declined slightly, though it is still quoted at an abnormally high price. The recent record breaking jump of antimony is now partially explained by the statement that the

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS. MONTREAL

Deseronto Iron Co.

LIMITED

DESERONTO, ONT.

Manufacturers of

CHARCOAL PIG IRON

BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"

BRAND.

Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents

Drummond, McCall & Co.

MONTREAL, QUE

or to

Canada Iron Furnace Co.

MIDLAND, ONT. Limited

Get our prices for

GALVANIZED FLAT SHEETS

THE "VANDA" BRAND

For all purposes requiring the best quality.

It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited

Wholesale Merchants

Ormidale Block, Vancouver, B.C., and Liverpool, England

Direct Importers of:

Metals of every description, Wire Rope, Portland ements, Firebricks, Ore Sacks, Grain Bags, etc, etc.

Chinese and Japanese had stopped producing at some of their mines.

Canada Plates—Galvanized plates are still in chief demand, but the whole market is so strong that a general advance cannot be long delayed. We quote: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—Copper has been firm without any let up since our last report and we now quote a higher price in ingot. Our quotations are as follows: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—Once more tin has jumped up and even at our amended prices it is remarkably firm and in some cases will not be supplied at these figures. We are at present quoting: 36c. to 36 1-2c. per lb.

Pig Lead—After a slight weakness in the early part of the week, lead has regained our former figures and is well held at $3.75 to $3.85 per hundred lbs.

Boiler Tubes— Our quotations are as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—It is reported that the strength of the Scotch market is largely due to the fact that American dealers are now being forced to buy across the ocean. Importers in Canada assert that as soon as present stocks run out higher prices will inevitably result and continue throughout the Winter. We quote:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.75 to $19.25	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	20.00	"	"
" (special)	18.50	"	"
Ayresome No. 1	18.75	"	"
" No. 3	17.75	"	"
Summerlee	18.75 to 19.25	"	"
Clarence No. 1	18.50	"	"
" No. 3	17.25	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—Owing to the general strength of iron and steel, both in Canadian and in foreign markets, the advances reported last week are still held. Our prices are as follows: Sleigh shoes, $1.97 1-2, tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.07 1-2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—We quote as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Importers report two or three more advances during the current week and as the demand continues very heavy still higher prices are anticipated. We quote as follows: Queen's

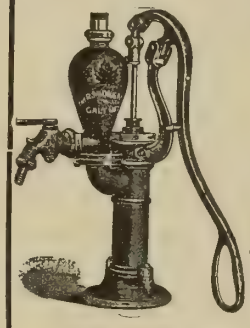
INGOT METALS

Tin—"Straits" and "L & F"
Lead—Best English
Copper—Lake and Casting
Spelter—"V M" and Ordinary
Antimony—Cookson's

From Stock or for Import to wholesale buyers only.

A. C. LESLIE & CO.

MONTREAL.



Enterprising Hardwaremen handle our

ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited

GALT, ONTARIO.

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for excellence is

B.C. BRAND

DRILL STEEL

MANUFACTURED BY

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SHEFFIELD, ENG.

Canadian Representative:
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NOVA SCOTIA STEEL & COAL CO., Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS-MARTIN

OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.
Contractions count as one word, but five figures (as $1.000) are allowed as one word.
Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.
Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED—A tinsmith and furnace man; steady job for right man. Box 104, Melfort, Sask. [41]

SITUATION VACANT.

WANTED—Young man, thoroughly acquainted with wholesale hardware and metal trade. Only parties competent to take charge of office and used to travelling need apply. Address, stating experience and salary required. Alexander Gibb, Manufacturers' Agent, 13 St. John St., Montreal. [40]

TINNER—Experienced in furnace and hot-water heating; three per day year around to steady man; at once. A. V. Gerry, Indian Head, Sask. [f]

TRAVELLER WANTED.

WANTED—Three hardware travellers for Ontario. Apply, with references, and state salary expected, P.O. Box 591, London, Ont. [40]

SITUATION WANTED.

BY cut'ery man, with fourteen years' experience in the wholesale and retail cutlery business; could take charge of cutlery department in either wholesale or retail store; Western Canada preferred; references given. Box 275, HARDWARE AND METAL. [41]

WHOLESALE AGENTS WANTED.

ONE of the largest and oldest European manufacturers of Cream Separators and Dairy Machinery is desirous to arrange with one large and first-class firm for each of the Provinces in Canada for the sale of their goods. Send particulars and references to A. B. C., c/o HARDWARE AND METAL, Toronto. [41]

HARDWARE CLERKS WANTED.

SIX bright, active experienced hardware clerks wanted for a Winnipeg wholesale hardware house. None but thoroughly experienced wholesale clerks need apply. Address, stating experience, age, references and salary expected. Box 73 HARDWARE AND METAL, 511 Union Bank, Winnipeg. [40]

NEWMAN'S PATENT
INVINCIBLE FLOOR SPRINGS
Combine all the qualities desirable in a Door Closer. They work silently and effectually, and never get out of order. In use in many of the public buildings throughout Great Britain and the Colonies.
MADE SOLELY BY
W. NEWMAN & SONS, Birmingham.

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—Enormous orders were placed last year so that stocks are fairly good and despite the advances in the old country Canadian jobbers continue to sell at the following prices: 28 gauge,$2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—We again report a slight falling off in price and are now quoting 14 3-4c. to 15c.

Tin Plates—Prices quoted last week remain unchanged as follows: Cokes, $3.75; charcoal, $4.00.

Ingot Zinc—Spelter has been jumping up again to the importers, though not sufficiently to warrant jobbers in amending our last week's prices. We are still quoting 6 3-4c. to 7c.

Sheet Zinc— This is another product which has advanced to importing merchants. We are still giving as the current prices: No. 8 and No. 9, cask lots, 7 1-2c.; less than cask lots, 7 3-4c.

Bar Iron—The mills are again being compelled to withdraw their prices owing to the strength and tone of iron and steel. They are now quoting: $1.87 1-2 base, f.o.b. Montreal.

Scrap Metal—Although no changes have taken place in scrap metal quotations on the local market scrap iron is looking up. For some time past the American market for wrought iron has been firm, but locally no activity has been experienced owing to the mills not buying. It is now reported, however, that the local mills will be in the market this month, though it is not yet certain what price will be fixed. Old rubbers show another advance, being quoted at from 6 1-2 to 6 3-4c. Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed scrap, 75c. to 90c. per 100 lbs.; old rubbers, 6 1-2c. to 6 3-4c.

H M Metal markets walsh 66

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 6, 1905.

HIGH prices rule in the metal markets. The outlook is most promising. The demand for all kinds of metals is quickening, while stocks are none too large. In pig iron several of the mills are booked ahead for some months and the prices we are quoting are likely to be advanced considerably during the next month or six weeks. Bar iron has shown another advance of $1.00 per ton and is now held very strongly on the local market. Copper is especially active and further advances are likely both in ingot copper and ingot tin. Spelter and antimony are a trifle weaker than in recent reports. Soft coal has jumped upward on the American markets on account of a shortage of cars and an advance here is likely at any time.

High prices for coke and coal also mean increased quotations on pig and bar iron. It is safe to say that the market is in as satisfactory a condition as it could be and while there is a danger of a reaction from the effects of overbuying, this danger is somewhat remote. Quotations have been withdrawn on galvanized iron and black sheets, higher prices being imminent.

Pig Iron—Prices quoted below are very firm and cannot be shaded by large purchasers. Great strength is shown in the existing market. We still quote:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	....	18 50
" No. 2, "	....	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Another advance of 5c is reported this week the market being especially active. We quote as follows: $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—The market is active and demand very keen. Prices are likely to advance.

Tin Plates— Demand is active with prices unchanged.

Galvanized Sheets—Prices have been withdrawn and an advance is looked for.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Stocks continue light and buying heavy at unchanged quotations. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Demand locally is not so active but the market is quite strong. We quote as follows: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—More activity has been shown this week and prices are very firm. We quote as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Stocks are light, but the market is weakening.

Old Material—A better demand is reported and much iron is being purchased by foundries. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.50 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $7.50 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 1-4c. per lb.; country mixed rags, 65c. per 100 lbs.

"Metallic" Embossed Ceilings are remarkable for their high art quality, light weight and regidity. Being cold pressed from high-grade steel, they are much firmer than other kinds.

No metal ceilings made are applied so easily over old plaster as ours. They never sag, warp or buckle, and their accuracy is such that the joints and edges are practically invisible. Used in connection with our wall plates they fireproof any room absolutely and add elegance to its appearance.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto Winnipeg

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts.
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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Coal—A rise in soft coal in the coal fields has not yet been duplicated here, but a scarcity of cars may cause higher quotations to result. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, October 5, 1905.

WHILE the largest producers of iron and steel have been preparing for some time for the heavy consumption which they have anticipated, the buying movement has come somewhat earlier than they expected and has been of surprising volume. As an indication of what has been happening we may note that the September sales of the United States Steel Corporation constituted a record and have been double its capacity.

The most interesting development of the past week has been the rush to buy furnace coke for 1906. A number of the large steel companies have closed very important contracts and the pig iron makers generally have hastened to cover. The price has advanced to $2.55 to $2.65 at ovens for strictly Connellsville coke, which is about $1 above the price at which coke was sold in the Spring.

This means a very serious addition to the cost of production of pig iron and accounts for the attitude which makers are assuming. They are putting up prices and are chary of taking business beyond the first quarter of 1906. Then, too, the feeling is growing that speculative buying on the part of consumers, of which there are some indications, should be discouraged.

Back of all the excitement of the past few weeks is the fact that the general foundry trade, which in point of activity has so long lagged behind the steel trade, is now feeling the impulse of quickened consumption.

The large steel interests are outspoken in their determination to prevent a runaway market, and in this the makers of pig iron join, although they insist that prices must reach a level which will compensate them for the higher cost of manufacture. As prices now stand in this country and abroad there is no chance of any imports of pig iron outside of metal brought in in order to manufacture for export.

Steel is very scarce in all parts of the country. The rail trade has quieted down a little. It is understood that a small part of the New York Central order has been placed.

Additional contracts for plates and shapes for ships to be built on the lakes have been booked and more work of that character is coming up. It is generally believed that we are on the eve of an advance in the price of plates.

The pressure for structural material continues. This lends additional interest to the announcement that the Jones & Laughlin Steel Company has decided to build a new shape mill the capacity of which will be upward of 1,000 tons per day.

In the lighter lines bars have been displaying an advancing tendency and a further rise in the price of bands and hoops is expected at an early date.

It is interesting to note that Russia has again begun to take American iron and steel. Recently some satisfactory business has been done in wire, tubes and sheets.

LONDON METAL MARKETS.

From Metal Market Report, October 4, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 52s., and Glasgow standard foundry at 50s. 3d, making prices as compared with last week 2s. 3d higher for Middleboro and 1s. 9d higher for Glasgow foundry.

Tin—Spot tin opened strong at £148 12s. 6d. futures at £147 15s., and after sales of 400 tons of spot and 500 tons of futures, closed strong at £148 10s. for spot and £147 15s. for futures, making price as compared with last week £1 10s. higher on spot and £2 2s. 6d. higher on futures.

Copper—Spot copper opened firm at £71 15s., futures £71, and after sales of 700 tons of spot and 400 tons of futures closed firm at £71 15s. for spot and £70 15s. for futures, making price as compared with last week 15s. higher on spot and 15s. higher on futures.

Lead—The market closed at £14 7s. 6d, making price as compared with last week 5s. higher.

Spelter—The market closed at £27 12s. 6d, making price as compared with last week 7s. 6d. higher.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for addition to Drill Hall, Toronto, Ont.," will be received at this office until Saturday, October 14th, 1905, inclusively, for the construction of an addition to Drill Hall for cavalry, artillery, &c.

Plans and specifications can be seen and forms of tender obtained at this Department and at the office of S. G. Curry, Esq., Architect, 90 Yonge St., Toronto.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p.c.) of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the owest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, September 16, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (40)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Indian Head Breakwater," will be received at this office until Saturday, October 14th, 1905, inclusively, for the construction of a breakwater at Indian Head, Summerside Harbour, Prince County, P.E.I., according to a plan and specification to be seen at the office of J. B. Hegan, Esq., Resident Engineer, Charlottetown, P.E.I., on application to the Postmaster of Summerside, P.E.I., and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for fifteen thousand dollars ($15,000.00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, Sept. 16, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (40)

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Oct. 6, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

IN all departments of the wholesale hardware trade there is great activity this week. Heavy goods are moving in large quantities and big supplies are being rushed in from the east before the close of lake navigation. Prices are steady throughout in nearly all lines, but there is some keen competition in glass.

Lanterns—Wholesale prices are steady and unchanged, but retail trade is still demoralized. We quote:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Prices are quoted as follows:

Barbed wire, 100 lb		$2 85
Plain galvanized	6 to 8	3 39
"	9	2 50 2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. Large orders are coming in from the east before the close of navigation. The price quoted is $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c

Ammunition, Etc.—Sorting orders are still coming in. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—As mentioned last week there has been an advance in solder and it is now quoted at 21c. per lb. with concessions for large quantities.

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 16 to 16 gauge, 100 lb.	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 5[illegible]
" 1¼ "	7 45
" 1½ "	8 9[illegible]
" 2 "	12 30

Petroleum—No change since the advance noted last week. We again quote:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74 76	27c.

(In barrels f.o.b. Winnipeg.)

Paints and Oils—Business in general lines continues active for immediate delivery. Travelers are now taking orders for shipment of mixed paints next Spring. We quote:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls		0 02½
" " in kegs		0 02¾
Turpentine, pure in barrels		0 96
Less than barrel lots		1 01
Linseed oil, raw		0 60
Boiled		0 63

Window Glass—There is some keen

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST., WINNIPEG, Manitoba

Manufacturers of Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

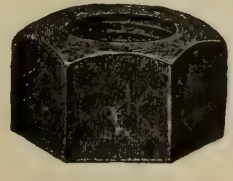
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

All dealers should stock "CLABROUGH" SHOT GUNS

They shoot well!
They wear well! and
The prices are right!

Send for list.

Manufactory:
PRICE STREET, - BIRMINGHAM, ENG.



TRADE MARK

This design a guarantee of quality.

Manilla Paper
SMOOTH, TOUGH, BRIGHT, CLEAN
ALL SIZES AND WEIGHTS

Fibre Paper
THE TOUGHEST OF THE TOUGH
ALMOST WATERPROOF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

competition in window glass prices. Prices generally quoted are as follows:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.00
26 to 40 "	2.25
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

MINES AND MINERALS.

Arsenical iron ore has been discovered on Bowen Island, near Vancouver, B.C.

* * *

The recent reports of transcontinental railway surveyors regarding coal deposits in the Abitibi region are no surprise to the geologists in the Dominion Geological Survey. In fact many years ago Dr. Robert Bell discovered traces of lignite in Northern Ontario, and subsequently in 1885 Mr. Borrow confirmed the report of Dr. Bell. Lignite is a brown coal, which may be described as a fuel about half way in the state of carbonization, between heat and bituminous coal. The term is a loose one and includes materials of wide diversion in composition.

* * *

The New Brunswick company operating at LePreaux, N.B., have made a number of borings to test the quality and extent of the iron deposit. The deepest boring is 1,000 feet.

* * *

The Nova Scotia Oil & Gas Co. have reached a depth of 300 feet in the third well to test the oil formation at Cheverie, Hants county, N.S. Two previous attempts to locate oil were unsuccessful, owing, it is stated in a circular from the secretary, Dr. Hayes, to large bodies of salt water encountered in both cases. One of these wells was put down 2,300 feet.

* * *

The Dominion Coal Co. has commenced the work of sinking a new shaft at Donkin, Dominion No. 6. It is to tap the Emery seam which underlies the Phalen at this point at a depth of about 130 feet.

* * *

An order in council has been passed in reference to the royalty on gold mined from quartz in the Yukon. The order provides that a royalty will be collected on gold produced from claims upon which $25,000 has been spent for machinery, etc., within five years from the passing of the order. It is also provided that royalty is abolished with respect to copper claims upon which $50,000 has been spent within ten years. The order is to encourage quartz mining, which involves a greater outlay of capital to produce better results than placer mining.

* * *

A Halifax despatch says the Dominion Iron & Steel Co.'s billet mill, which has been closed down for repairs since Aug. 8th, has resumed operations. The starting of this mill caused a reduction in the staff of the new rail mill, and consequently the output of the latter will also be reduced through inability to get sufficient steel from open-hearth furnaces.

British Columbia Trade News

Vancouver, B.C., Sept. 29, 1905.

IF the mining men of the Boundary district get half what they asked from the Tariff Commission the industry should have little left to complain of. At the session of the commission held in Greenwood on the 20th sweeping demands were made in a memorandum submitted by representatives of some leading Boundary mining concerns, including the Granby Consolidated, the B. C. Copper Co., and the Dominion Copper Co.

The petition presented by the mining men may be summed up in the following requests:

1. Removal of duty on explosives, at present 3c per lb.
2. Reduction of duty on structural iron from 35 to 20 per cent.
3. Removal of duty on bar steel (used for drills, etc.).
4. Reducing by one-half present duty of 25 per cent. on mining candles.
5. Reduction of duty on rubber hose from 35 per cent. to 20.
6. Reduction of duty on iron pipe from 35 to 20 per cent.
7. Removal of present duty of 25 per cent. on rough and 30 per cent. on finished castings of steel.
8. Removal of $7 per ton duty on steel rails when used for mining and smelting.
9. Placing of blast furnace slag-trucks, blast furnaces complete and converting machinery complete on free list, also parts of machinery on free list used as repairs.
10. That a duty be not placed on rough lumber imported.

The argument was made by representatives of the mining companies that either the goods referred to in the list were not made in Canada, or if they were they were of such poor quality that it paid to buy abroad. It is now up to the Canadian Manufacturers' Association.

* * *

Atlin camp has had a practical demonstration of the utility of an ordinary steam shovel for gold dredging. During the past month or two the Northern Mines Co., an organization of Vancouverites, have had a steam shovel working on their property in Atlin, on Spruce Creek. The venture was largely in the nature of an experiment, as no railway steam shovels had up to then been tried. The results prove eminently satisfactory. The shovel had a capacity of 1,000 cubic yards per day of gravel, though while operated not more than 300 or 400 yards per day were handled. The shovel was put into commission on August 16th and at the last reports from the north it was still working and if the season remained open it would be run well into October. The plant was put to work in the bed of the creek and some dirt which was thought to be valueless but which had to be removed, was cleaned up, yielding quite a sum. When the shovel got down to "pay," a run of three or four days resulted in a cleanup of $4,450. As the shovel only cost $5,000 and the cost of transportation it is a very promising outlook for that sort of equipment, discounting hydraulic dredges very greatly, where the character of the ground permits of using the shovel. It is now quite expected that the Atlin camp will adopt steam shovels very generally for the Summer diggings.

* * *

The Canadian Pacific telegraph service is to be improved very shortly by the stringing of another copper wire from the east to Vancouver. The first copper circuit from Montreal to the coast was completed a couple of years ago.

* * *

North Vancouver, the promising suburb of the Terminal City, situated across the inlet, is to have telephones as well as electric light and street cars. This municipality has a fine water service of wood pipes installed last year at a cost of $50,000.

* * *

Mining continues to increase in a quiet, conservative way in many parts of the Province. In addition to the Boundary and Rossland districts, whose large properties are well known to the public, there are many others gradually increasing plant and facilities for handling ore. The Sullivan mines in Southeast Kootenay are enlarging their smelter at Marysville, not far from Cranbrook. The Ferguson mines, in the Lardeau, are installing plant and putting in a water system. The Britannia mines, on Howe Sound, now shipping actively to the Crofton smelter, purchased to handle its ores, will be the means of developing mines on Prince of Wales Island in the north coast district, as ore from claims there has been contracted for to serve as a flux with the Britannia ore. The Boundary smelters are just now suffering from lack of power, which will be remedied when the West Kootenay Power & Light Co. completes its new line from Bonnington Falls, practically duplicating its present installation. Hitherto the Cascade Power Co. has supplied power, but the source is inadequate. The Granby smelter at Grand Forks is only running six furnaces at present, and cannot blow in the full battery of eight till the new power is secured. With present nigh prices of copper mines managers are naturally anxious to run full capacity. The present output of Boundary copper is about 1,700,000 lbs. per month.

* * *

The mineral display of the Province at the Dominion Fair is a very interesting feature. Every mining district in the Province is represented, from Cariboo and Atlin on the north to Southeast Kootenay and the Similkameen. The Atlin exhibit is much larger and more representative than in past years, while it has a rare interest in the intrinsic value of the gold nuggets, dust and rich pieces of quartz. Many samples of mineral partially or wholly reduced from ore in the mills and smelters of British Columbia are also shown.

Nova Scotia Trade News

Halifax, N.S., Oct. 4.

NOTHING particularly new is evident in the hardware line. The markets, generally speaking, are firm. Prices are about steady, and no change worthy of special note has been made since last report. While trade is fair in some lines, it may be said to be considerably below the average for the

season of the year. The lumbermen are still holding back their orders.

* * *

The Robb Engineering Co., of Amherst, has received an order from the J. R. Booth paper mills for three four hundred horse-power engines, and three one hundred horse-power engines. The same company has received an order from the town of Westmount for a large engine for a municipal lighting plant, and from the town of Napanee, Ont., for engines and boilers for a lighting plant.

* * *

According to private advices received here another valuable discovery has been made at Newfoundland. It has often been suspected that the iron for which Bell Island is now famous has an outcropping on both sides of Conception Bay, and this theory has been practically demonstrated within the past two weeks. Accidentally the discovery of a big deposit of splendid iron ore was made by the men near Clarke's Beach. They secured samples and staked out a claim. The samples were submitted to experts at Bell Island, and pronounced to be richer than the ore mined there. The discovery was kept a secret, but it looks as if on the mainland of the bay there will be a big iron mining boom next Summer.

* * *

The mineral resources of Newfoundland are becoming greater every year. The development of the talc deposits, which are situated inland from Kellignews, is now being proceeded with, the capital being supplied by English investors. Should the mineral be found in sufficient quantity a surface railroad will be built to the deposits, to connect with the colony's railroad, for the purpose of getting the product to the market. It is the intention to grind the ore in Newfoundland and ship it direct to the user.

* * *

A report comes from West Bay, Cape Breton, that a valuable discovery of mica has been made in that vicinity. Indications of the mineral were observed there for some time by the owners of the property, and development was undertaken in a small way. Two American lady tourists, who have been visiting that district, have decided to go into the enterprise, supplying the necessary financial backing which was required. Development work is now going on, and the mineral is found to exist there in large quantities. One sample is described as being a foot square, and as transparent as glass.

* * *

A large quantity of brass, estimated to be worth $400, was seized by the Nova Scotia Steel & Coal Co. during last week. The brass was stolen from the company's plant and sold to a junk dealer at North Sydney. The company has taken legal proceedings.

* * *

Thomas A. Green, who for the past year has been the traveler in the Maritime Provinces for the Chas. Fawcett Mfg. Co., of Sackville, N.B., has severed his connection with that firm to accept the position of assistant manager of the A. C. Thompson & Co., Limited, of North Sydney. He is considered one of the best salesmen in his line on the road. The officers of the A. C. Thompson Co. are: A. C. Thompson, president and manager; Hiram Donkin, vice-president, and W. S. Thompson, secretary.

AN IMPORTANT NEW PROCESS.

The new iron process invented by Bosshardt, a German engineer, converts scrap wrought iron into malleable iron or steel at one operation. It is carried out in a special electric furnace, with the introduction of various substances into the molten metal during smelting. The castings made are claimed to have all the qualities of the best malleable iron, with great tensile strength and ductibility. It is claimed the finest tool steel can be produced by the same process at one melting. Another claim put forward on behalf of this process is that it is possible to cast various articles and parts of machinery that hitherto have had to be forged at great cost, and an important advantage is the delivery within a few hours instead of the wait of one to three weeks for converting cast-iron articles into malleable iron. Furnaces are already in operation in Germany, Holland, France, and Hungary.

CHANGEABLE TENSION DRILL.

IF one can judge from the comments of carpenters and other artisans, there is an assured future for the drill with changeable tension, now being manufactured by the North Bros. Mfg. Co., Philadelphia. They call it the Yankee Automatic Drill No. 44, and it has shown by performance the right to the name which has been associated with the first steps in screw-driver and drill progress.

Tension can be readily adapted to the work being done—made greater for hard woods or large drills; less for soft woods or small drills—by means of an adjustable spring. The mechanic pulls aside a small bolt head, turns cap at top of handle to right for more tension, to left for less, and, by allowing bolt to take its original position, holds spring at desired tension.

An improved method of arranging the magazine for drills makes all drills easily accessible, and protects their points.

This drill has been on the market only a single year, but during that time it has been tried and found not wanting. Even when it is handled by artisans of no more than ordinary intelligence, they are quick to grasp its utility, and can operate it easily. Endurance tests of months' hard usage have shown the spring to be in better condition than had it always worked at mean pressure as on other types of drills.

Frothingham & Workman, Limited, Montreal, are handling it for Canada, and are finding a large and increasing demand for it.



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AID TO FIREPROOF CONSTRUCTION

IN accordance with their motto: "Find out what the people want, and make that," the Pedlar People of Oshawa, Ont., and Montreal, have embarked upon a new line, which bids fair to revolutionize the building trade of this country, by converting the interior construction of all classes of buildings, from the old style fire-trap, to what is claimed as an absolutely fireproof construction.

They are at present installing in their already extensive works a complete plant for the manufacture of sheet steel studding, angle strips, and furrings, which will be marketed in conjunction with the Perfect Expanded Steel Lathing. The steel studding will take the place of the wooden studding heretofore used, and placed at 12-inch centres.

There will be made any length up to 16 feet, to suit the height of the flat, and it will be from 1½ to 3 inches thick, thereby providing for a hollow partition from 3¼ to 4½ inches from face to face, after being plastered. Their T stud will be used to produce a solid fireproof partition, but 2 inches in thickness—merely sufficient for the thickness of an ordinary light door. These studs are also placed at 12 inch centres, secured at the floor and ceiling by sockets. The lathing is affixed to these studs and retained by a series of spuds, or teeth, punched out of the stud itself. It is then plastered, and when the plaster has set the contractor may then go into the next room and plaster on the key already made. The result will be a solid bed of plaster, with the expanded steel mesh in the centre.

This firm are also putting on the market channel irons, angle strips, and plasterers' corner plates. All the foregoing new products are fully explained in their new booklet, entitled, "Fireproof," which will be mailed to the subscribers of Hardware and Metal upon request. Further explanation of these goods will be made in the "Pedlar Talks," at present current in this paper.



RETURNED
OCT 9 1905



Strappings for Binding Cases

WRITE FOR CATALOGUE

J. N. WARMINTON

43 SCOTT ST., TORONTO

207 ST. JAMES ST., MONTREAL

QUEER FACTS ABOUT STEEL.

ALTHOUGH the steel and iron industry is one of the mightiest of the world and offers such rewards that some of the greatest chemists and other scientists study nothing else, there are lots of apparently simple puzzles about it that no one has been able to solve yet. The man who discovers the right answer to one or more of them may make $1,000,000 out of it.

Everyone who handles steel knows that it gets "tired" at times. After a piece of steel has been subjected to a severe strain for a certain period it may suddenly show a decided weakness. Then the experts say that it is tired; and so it is, for if it is allowed to rest a while it regains its old strength.

Recently it has been found that a steel beam can be made stronger by increasing the load on it gradually—in other words, by exercising it just as a man exercises his muscles when he wishes to make them stronger.

MR. HILL SCORES THE AMERICANS

MR. J. J. HILL, the great American railway man who is responsible for the progressive policy which built up the Western States, and who was born near Toronto, has been speaking frankly to his adopted countrymen on the Pacific coast on trade questions. He said the other day:

"The people who are banking on Oriental trade are bound to be disappointed. The United States cannot compete with foreign countries until we can manufacture products at a lower cost, which means cheaper labor. We have outgrown the present tariff laws.

"Great Britain furnishes the Orient half of its iron and steel, the United States less than one-tenth. The transportation rates are the same. We send only raw materials, such as iron, steel and raw cotton, a mere bagatelle. I will never build another ship in this country. The United States, unaccustomed to owning ships on the high seas, offers no encouragement to American bottoms. Kaiser William is the most active seeking agent in the world. The Chinese boycott has been the greatest commercial disaster America has ever suffered. If all other nations on earth closed their doors to American goods, it would not be half as bad as the Chinese exclusion alone.

"The American people are fools and vaingloriously patting themselves on the back over the so-called American invasion of European and Oriental markets, while the other countries, saying nothing, have practically monopolized the trades. As long as the people want politicians to make laws detrimental to the great commercial and industrial enterprises, the United States must expect to get along with a small share of the foreign trade."

NEW INDUSTRY FOR CANADA.

MR. WALTON, a well known member of the Iron and Steel Institute, of London, England, was a visitor in Toronto this week and being interviewed, said he considered the prospects of the iron, steel and kindred trades in Canada to be very good. "At present," Mr. Walton said, "a great deal of goods are sent into Canada from the United States and the Canadian manufacturers, in many lines, are in business, at the present time, solely by the consent of the trusts of the United States. This is especially applicable in the case of the manufacturers of iron and steel pipes, channels, girders, and other sections of merchant iron. Such a condition can only last for a short period. Continuing, he said he hoped to return to Canada early next Spring and put down tube works and make every class of tubes, including a process which is by far the cheapest production of iron and steel pipes and tubes of large sizes. At present there is no pipe over one inch butt weld produced in Canada. All the boiler flues and lap well pipes come from the United States. That means that Canada is sending abroad the money which should be spent at home to the great benefit of the labor and development of the great tract of land." The outlook in the piping business is especially bright just now owing to the discovery of natural gas in Western Ontario.

NEW LINE OF FURNACE PIPE.

A new company which has entered the furnace and stove trade is the Perfection Safety Furnace Pipe Company of Toronto. Premises have been secured at 3 Brookfield avenue, and furnace and pipe fittings will be manufactured and supplied to the trade throughout Canada. The lines to be produced have many points of merit which will commend themselves to the trade, and as the proprietors, Mr. A. H. Power and Mr. S. Ward, are both practical men of long experience in the stove business, Hardware and Metal looks forward to see this new firm grow and become an important factor in the trade before many years. Mr. Power was a traveling salesman and is well known to many of our readers, while Mr. Ward has had a close connection with the trade in Toronto. Attention is drawn to their advertisement in this issue and readers who desire further information can secure it by writing the firm, who offer to send circulars describing their new lines to any correspondent who mentions having seen the announcement in this paper.

LOADED SHELLS.

H. S. Howland & Sons have received a large shipment of Eley's Loaded Shells in both black and smokeless powders and are now ready to fill orders for these goods. Considerable difficulty has been experienced this season in securing delivery of shells from England, but the shipments now being received should do much to bring the stocks up to the proper requirements.

QUEBEC BUSINESS FAILURE.

Louis Giguere, hardware merchant of Quebec city, assigned on Wednesday of this week, with liabilities of $18,750 and assets of $18,700. Among the creditors ror large amounts are: Frothingham & Workman, Canada Radiator Co., Pilkington Bros., Paterson Mfg. Co., McDonald, Wilson & Co., James Robertson & Co., P. D. Dods & Co., Starke Hardware Co., Seybold, Sons & Co., Amiot, Lecours & Lariviere, and A. Prudhomme & Co., Canada Paint Co., all of Montreal.

A "free day" scheme is being worked by Australian hardware merchants. Customers are advised to save their purchase slips for an entire month as one of the days is to be a "free day," when all moneys received will be refunded. To determine which day this shall be, the numbers will be drawn by an independent person. The offer applies to everything the firm stocks, with the exception of galvanized iron, fencing wire, cement and white lead.

More Details about

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During the past week every subscriber to Hardware and Metal has been offered a special inducement to subscribe to The Business Magazine. Remember, this offer only holds good until the first number is published. If you have not yet heard of the offer write in for full information at once.

To all others we can but repeat that the subscription price of The Business Magazine is $2.00 per annum. If you feel interested fill in the following form and forward to us :

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PAINT, OIL AND BRUSH TRADES

THE MAKING OF PAINT.

IN the manufacture of ready-mixed paints a great amount of time and care is expended in the mere operation of mixing. It would seem as though the proper mixture of white pigments with linseed oil could be easily secured and was a very simple mechanical operation; however, the process is long and tedious, and requires the construction of a large amount of heavy and costly machinery.

The quality of a paint depends very largely upon the intimate mechanical mixture of the atoms of oil and pigments, and experience has proved that this can only be secured by many hours of manipulation in the various agitators and mills of a paint factory. In such a factory the operations commence on the top floors, and are carried on continuously in machines which are placed on the succeeding floors, the contents being finally gathered in storage tanks on the lowest floor.

The dry white pigments and the linseed oil first come into contact, in the proper proportions, in an apparatus known as a chaser, which works somewhat on the same principle as a common mortar wheel. Here they are worked up into a rather stiff paste, and when of the right consistency the mixture is dropped into a mill, built somewhat like an agitator, and again into two double mills and a final finishing mill. In passing through these machines the paint is ground to a remarkable fineness, and upon leaving the last mill it has the proper consistency for the brush.

The paint is then carried into long, horizontal steel reservoirs, inside of which are shafts which carry a number of steel propeller wheels, which serve as agitators. The thrust of the wheels is in the direction of the final outlet from the tanks, so that the fluid is driven in that direction. Below the storage tanks is a series of large cylindrical tanks, into which the white liquid is drawn in the quantities required. Here it is tinted by mixing certain invariable proportions of coloring pigments with it, each tank having its own color.

Constant agitation in these coloring tanks is necessary to keep the solid pigments from settling in the tanks, and it serves to keep the paint at the proper consistency. It is constantly agitated until drawn off in barrels for shipment. —Master Painter.

LEAD MINING AND TARIFF.

BRITISH COLUMBIA lead miners have made strong representations to the Tariff Commission that a continuance of Governmental assistance to lead mining is necessary, either in the form of the present bounty or in a higher protective duty against foreign lead, many of the speakers seeming to prefer the latter alternative.

Lead mining is the most important industry in the Nelson district, and now that a bounty and good prices in the lead market have combined to make the industry profitable, there has been a marked impetus and development on the hillsides. Whatever view the rest of Canada may take of the bounty system, there are no two opinions in British Columbia as to the wisdom of the lead bounty. It is claimed to have made the difference between success and failure in this district. In 1900 there were 31,870 tons of lead produced, in 1901 25,790 tons, but the product fell to 12,000 in 1902. The next year the bounty came into force, followed this year by the increase in the tariff on dry white lead and dry white lead ground in oils. The result is an increase by 500 per cent. in the production of lead ores, an equal increase in the number of operating mines producing ore containing lead, the erection of an additional lead smelter at Marysville, and an increase in the capacity of the lead refinery at Trail. The total production in the Kootenay of lead in ores for the year ending June 30 last amounted to 27,844 tons, as against 8,000 tons for the year immediately preceding the bounty. As the total consumption of lead in Canada is only 15,000 tons, it will be seen that the industry has reached an export trade basis.

During last year no less than 125 different properties in Kootenay shipped lead-bearing ores to the local smelters. The investment in the silver-lead mines of British Columbia is estimated at $20,000,000, while in railway and steamboat companies dependent on those mines and their incidental mining industries for their traffic, there is an investment estimated at $14,700,000. The smelters' investment for the same purpose is placed at $1,000,000. The wage expenditure is estimated at $1,900,000 for 1,500 men, most of which is again expended in the district, a great deal going for provisions and supplies brought from the prairies.

The lead miners contended that they were entitled to more protection than manufacturers, and that if a duty of 25 per cent. was imposed on lead pipe and other finished products the duty on pig lead should be at least 20 per cent. At present prices of lead the bounty amounts to about 20 per cent. protection, but under the sliding scale if the price went down the bounty would be increased, and amount to an ultimate protection of 45 per cent.

It was pointed out that last year Canada imported dry white lead to the value of $638,381, the miners contending that if the Canadian producers had the whole market they would have about $300,000 or $400,000 more than they have now.

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MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, October 6, 1905.

WE understand that circulars have been issued by some of the paint manufacturers advancing liquid paints on an average of five to ten cents per gallon. That is to say, one gallon packages remain, for a time at least, at their present quotations, but half-gallon and quart packages have been advanced, the former five cents per gallon and the latter ten cents per gallon, over prevailing prices. These price amendments are owing to higher wages and enhanced values for zinc and turpentine.

Attention is drawn to a sharp advance in the price of shellac. The gum seems to be on the upward trend again, and values are steadily climbing.

Fall orders seem to be coming in freely, and several manufacturers report that there is enough business in sight to keep them energetically employed until Christmas.

As predicted in our last week's issue, turpentine has advanced and is now quoted at ninety-three cents. This is accounted for by the unsatisfactory condition of labor in the southern pine belt, and the fact that the weather there is unfavorable to the harvest. Receipts are very small for the season.

Turpentine—A scarcity in the supply has again sent prices up. We quote: Single barrel 93c. per gallon. Two barrels or over, 92c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—A large over-supply in the United States market has caused great unsteadiness in this country. During the past week, however, prices have remained firm, and we still give them as follows: Raw, one to four barrels, 45c.; 5 to 9 barrels, 44c.; boiled, 1 to 4 barrels, 48c.; 5 to 9 barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—Renewed activity in the primary market has only served to strengthen existing prices, which are as follows: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—An advance is already reported on foreign markets, but in spite of the continued strength of spelter, Canadian producers are holding to the following prices: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)— Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral — We give the the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—The price given below is very firm. Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—This article has been the subject of many advances lately and prices are now very firm as follows: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—The advance predicted by Hardware and Metal has at last occurred. The rising value of gum shellac hastened this move and we are now quoting: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Raw material for the production of mixed paints has been steadily advancing for some time. This has been especially true of ingot zinc and turpentine, so that we are now compelled to amend our prices slightly by adding 5c. to half-gallon, and 10c. to gallon packages. Prevailing prices are $1.20 to $1.40 per gallon.

Castor Oil—Good inquiries continue to come in and orders are being shipped freely at the following prices: 8 1-2c. to 9 1-2c., according to lots.

Refined Petroleum—Contrary to general expectations and in spite of the advance in crude oil, prevailing prices have undergone no change during the past week. The demand is good and the market remains exceptionally firm.

ONTARIO.

Office of HARDWARE AND METAL.
10 Front street east,
Toronto, October 6, 1905.

WINDOW glass and turpentine divide attention as the features of the market this week, window glass having made its long expected advance, the base price being $4.25 per 100 feet for star, and $6.25 per 100 feet for double diamond. Turpentine has continued its upward movement and is held very strong at $1.00 for barrel lots, while $1.05 and $1.10 are being asked for 10 gallon lots, this being an advance of from 5c. to 8c. over last week. Very little is being bought at these figures and buyers will hold off for better prices, but the strength of the market in the south is such as to lead one to believe

STOLL'S FLINTCOAT STAIN

(FLOOR FINISH)

An entirely new preparation for staining and finishing floors of every description. Stains and finishes at the same time. Dries hard over night. Makes a tough, durable, elastic surface; is not affected by hot or cold water; will not crack, mar or chip off. Can be used with impunity on Wainscoting, Woodwork, Furniture, Doors, Screens, Oilcloth, Linoleum, etc.

6 Finishes. Cans. Prices on Application.

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.



COVERT MFG. CO.,

TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

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SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited

TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES AGAIN

Our **IMITATION FRENCH MEDAL GLUES** are of such high class and are so suitable for Export that we would like to quote you. Export trade in this line is growing rapidly, and we pack in casks or cases as preferred. Quality unrivalled.

GROVE CHEMICAL CO., LTD., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON

OTTAWA WINNIPEG

No Better :: No Lower-priced

"Island City" Brand

Paints and Varnishes are hard to beat, no matter from which standpoint. If it's the grade—you get the Best. If it's the prices—you get the Fairest. "Island City" brand customers are **satisfied customers,** which means **steady customers.** If you desire **sure trade** ally yourself with "Island City" goods.

P. D. DODS & CO.

Toronto, Montreal, Vancouver, Winnipeg

Fall Orders

The Canada Paint Company

desire to state that they are ready for some good, well assorted FALL ORDERS.

It is anticipated

that higher figures will take effect almost immediately, and if our clients desire to have their shipments before the Winter rates come into force, specifications should be placed in our hands without delay.

Order Now

and avoid the rush and risk of being late as is usual just before the increase in the freight tariff and the close of navigation.

Ample Stocks.

Every department is running to its utmost capacity.

Liquid Paint

customers are respectfully requested to forward their orders immediately.

THE CANADA PAINT COMPANY LT'D

that lower prices will not be quoted for some time.

Linseed oil continues at the low figure quoted last week, and in most cases the dealers handling English oil have met the prices named for the Canadian product. Some, however, claim to be be getting 48c. for English oil, while 46c. is the ruling figure for the oil from the Baden Mills. Calcutta seed is increasing in value and there is little likelihood of English oil being quoted lower than it is at present. The Canadian producers are buying large quantities of seed and intend crushing sufficient to supply the Canadian market.

An advance is expected in liquid paints, but jobbers still quote at the old figure. Shellac varnish is stronger but has not been advanced yet. Petroleum continues at the prices quoted last week. The volume of business is very large, owing to the expected advance, and the desire to increase stocks before navigation closes.

Business generally is reported to be good and no falling off is expected before the snow flies.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 46c.; boiled, 49c.; 5 to 9 barrels, raw, 45c.; boiled, 48c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel, $1; 10 gallon lots, $1.05 to $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Much business is being done at the old figures, shipments by boat being very large. We quote: Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c; 18 1-2c. ex warehouse.

Crude Petroleum—Prices are very firm and further advances are likely. We quote: Pennsylvania, $1.36; Ohio, 92c.; Canadian, $1.32.

Glass—An advance of from 40c. to 50c. has been made owing to the scarcity of supplies as outlined on another page. For revised figures see current market.

MONTREAL WINDOW GLASS.

Arrivals are still small and the condition reported for the last several weeks has changed but little. Several Canadian dealers are just now receiving orders which were placed back in January, and it is said that in many cases importers will have to wait for fully two years for shipment. The demand remains very brisk and consequently the figures we give are firmer than ever. There still exists in Belgium a very unsatisfactory relation between the glass manufacturers and their employes, and none of the mills are working full staffs. This will tend to keep down the quantities of glass being shipped to this country. We quote: as follows: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick. first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50 seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do. $28.50.

WALL PAPER IMPORTS.

IT is gratifying to note that the increase in the amount of wall papers imported from foreign countries during 1904-5 over those of 1903-4 is very small. Although the total amount of wall paper consumed during the past year has greatly increased over the consumption for the same length of time two years ago, the amount imported rose from $188,330 to $199,924, a very small amount, comparatively speaking. Even this increase is referable to the better quality of paper which is now being used by the Canadian buyer, for the total number of rolls has decreased from 2,553,701 in 1903-4 to 2,408,418 in 1904-5.

Butler's
Famous Cutlery
AND
Electro-plate.

Sole Makers of Butler's "KEEN" Razors, the "Cavendish" Brand of Table Knives, Carvers, and Plate (Regd.).

HIGHEST AWARDS. SPECIAL MENTION.

GEORGE BUTLER & CO.'S
London Showroom:
62 HOLBORN VIADUCT, E.C.
(Over Snow Hill Station).
Manufactory: Trinity Works,
SHEFFIELD, ENGLAND.

"BUTLER" was Registered as a Trade Mark A. D. 1768.

GRANTED A.D. 1681. ART 1761.



WALL PAPER

The "Staunton" Line for 1906 is so exceptionally attractive that to many a dealer the difficulty is to find room for all the good things he would like to buy.

Give us the opportunity to show samples before you place any order.

STAUNTONS LIMITED
TORONTO

GUESSES AT THE RIDDLE OF LIGHT

THE MAKER'S GUESS

When **your store** is dark you have the cause of darkness remedied in **some way**, don't you? Where **you** meet once or twice in a decade with such-like stores, in your own business changes, **thousands** are meeting with them **every day**. That's a question of numbers, isn't it? And on that **very question** we base our belief in the **sales** of

MAXIMUM LIGHT GLASS

Say but one out of every twenty of your customers **have reason** to be interested in light. Would it not be **advisable** to have in **your store** a quantity of the **greatest daylight-creating system** on earth to throw "light" on the subject and **proffer the remedy?** The riddle **ceases to be** when MAXIMUM LIGHT GLASS appears.

SOLE CANADIAN AGENTS:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.



The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
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RETURNED OCT 7 1905

Bath Room

SHOWERS

Lavatory Fixtures

We have a "SPECIAL" to offer you.

A High-Grade article at a low price—while they last.

Some of your customers may be putting on the finishing touches in their bath room installation—a good shower at a low price would probably interest them, and add to your profits.

MANUFACTURERS OF HIGH-GRADE

Plumbing Goods



RETURNED OCT 7 1905

To Owner
our Book #1
page 44

The "Cast" Aluminum Folding Urinal, with nickel-plated fittings, a convenient article that stands the wear--it can't break.

The James Morrison Brass Mfg. Co., Limited, 89-97 West Adelaide St., **Toronto**

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

ARTICLE XVII.

THE KITCHEN BOILER.

KITCHEN boilers, though humble-looking devices, have a large share in providing the great measure of comfort enjoyed to-day in almost every home, and that being the case, and in order that the maximum of usefulness may be obtained from them, it is necessary that they should be properly connected to the water-front in the stove, or ring in the furnace, as the case may be.

In connecting a kitchen boiler several things must be taken into consideration, and among them is the fact that the pressure of the water lends absolutely no assistance in producing a circulation between the water-front and the boiler, and for that reason care must be taken in putting in these connections that they are properly graded, so that air may escape from the boiler, water-front and pipes through the cocks in the sink or elsewhere.

The plumber should also put in pipe connection of as large a size as possible,

Fig 2.

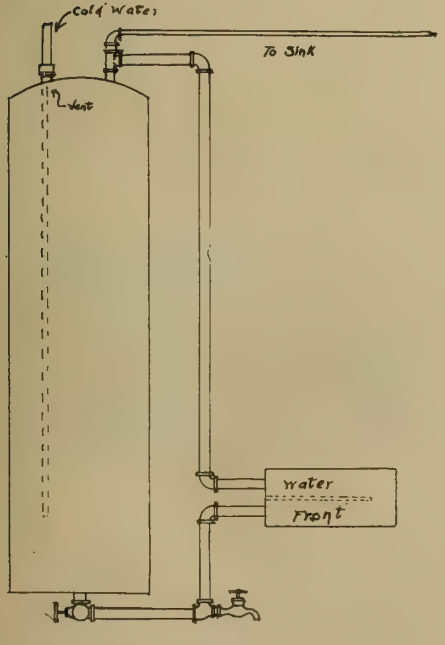


Fig 1.

and this for the ordinary size boiler is one inch in diameter, that being the size of the tapping in the side and heads of the boiler. The water-front is, however, usually tapped ¾-inch, which in the opinion of the writer is a mistake, the only remedy for which is for the plumber to put on ¾x1-inch elbows at the first turn and so increase to the size of the boiler.

The necessity for as large connections as possible are two-fold, first because they reduce friction, and secondly, and of more importance, because of the comparatively large amount of sediment which collects within them, and which, with the usual form of connection, cannot be removed without taking the pipes apart.

Figure 1 shows a connection which

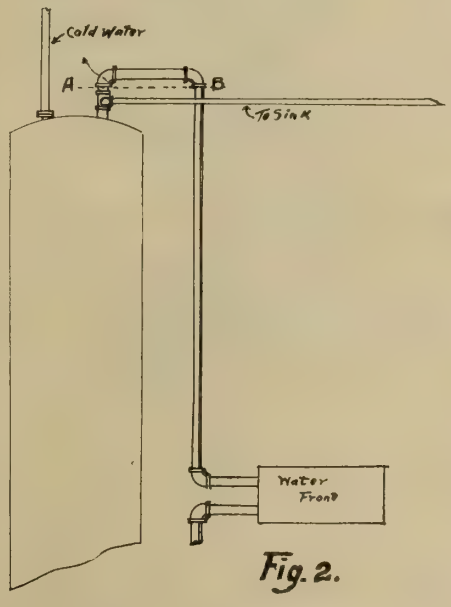


Fig. 2.

very largely overcomes the difficulties usually found with stove connections, and which is so far as possible a perfect connection in every way.

It will be noticed that the flow pipe from the top of the water-front enters the boiler at the top instead of at the side. The great advantage of this style of connection over that shown in figure 3 is that with the fire on for a short time only, a certain amount of very hot water may be obtained, because that which has been heated will remain at the top of the boiler, constantly getting hotter until it is drawn off, so that six, ten, fifteen inches or more of boiling water may be obtained without heating any more, as would be necessary in the case of figure 3, where the circulation, taking place between a point on the side of the boiler and the bottom thereof, causes all of the water which has been heated to pass up through the great volume of water between the inlet on the side of the boiler and the top, and thus necessitating the heating of nearly all the water in the boiler to a high temperature before any can be drawn.

Figure 1 also shows how the connection to the various cocks should be taken off, viz., from the highest point, so that, as was said before, all contained

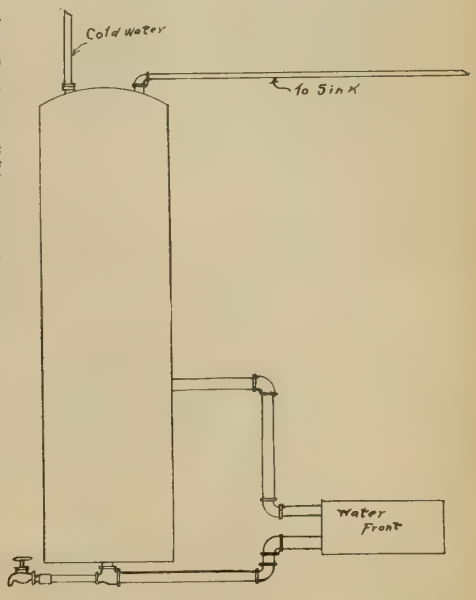


Fig 3

air may escape when any hot water cock is opened. In this respect figure 2 shows a connection which is incorrect and will cause a great deal of annoyance and trouble, for the reason that the air, which is sure to accumulate in that portion of the circulation pipe above the line "A-B," cannot be removed through the pipe "to sink," and will divide the stream, so that there will be a constant "pounding" or water-hammer as soon as the water in the water-front begins to form into steam.

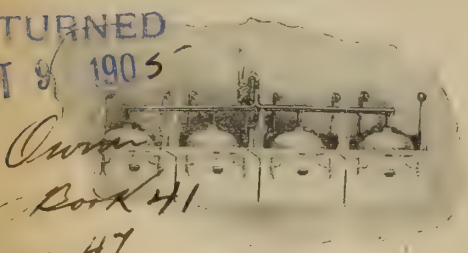
Figure 1 also shows how the cold water pipe should be carried to a low point in the boiler, so that the incoming cold water may not mix with the outgoing hot water at the top. It is necessary, however, to bore a small hole, say ⅛-inch in diameter, at the point marked "vent," so that if a stop and waste cock is closed off in the basement, it may not syphon out the water in the boiler.

The same figure also shows an angle valve placed on the return pipe immediately under the centre of the boiler, the object of which is that when blowing off the boiler, and having opened the draw-off cock for two or three minutes to allow the water to flow from the bottom of the boiler, from which point it will naturally come, because of least resistance, the angle valve may be closed, which action will compel the full force of the water to be driven from the top

of the boiler down through the waterfront, thereby insuring the proper cleaning out of the whole circulation system, after which the angle valve must be again opened so that a circulation may be established.

PLUMBING IN PUBLIC BUILDINGS.

A MARVELOUS advance has been made during the past quarter of a century in the sanitary equipments of such public institutions as hotels and schools, and in such industrial establishments as factories and warehouses. There was little to select from twenty-five years ago but the progress made since then has resulted in fixtures which now seem to be practically perfect. Even to-day in the outlying districts the plumbing arrangements are anything but what they should be, but the traveling public have it in their hands to compel hotels at least to adopt modern fixtures. A number of illustrations are reproduced in this article showing types of the latest fixtures manufactured by the Standard Sanitary Manufacturing Co. of Pittsburg, Pa.



Sectional Lavatories.

The general character of the sectional lavatory is shown in Figure 1, this pattern of lavatory being capable of being extended indefinitely. Each section, with the slab and bowl, is cast in one piece and arranged so that there can be no place for accumulations of any character. A sectional fixture adapted to a wider scope of usefulness is shown in Figure 2. The sink provided in this case can serve the double purpose of a lavatory and a sink. These goods are of iron selected and prepared so as to take on a white porcelain enamel of high gloss. The enamel construction is also designed so that the expansion and contraction attending the use of hot and cold water can have no effect on it, with the result that the fixtures may remain in use for long periods without cracks or crazing.



Fig. 2—Lavatories and Sink.

For factory purposes, constructed so that they can be placed in the middle of a room, along the sidewalls, in the corner of a room or around the corner of a room are so-called range wash sinks. Some sinks of this class are arranged to be supplied by faucets high enough so that the head and shoulders of the workmen can be thoroughly bathed with no little convenience and a degree of comfort approximating that of the shower bath.

Not less important than the facilities for washing in institutions is the necessity of providing a convenient supply of drinking water, and in Figure 3 is a sectional view of an artesian drinking fountain. This is finished in the same handsome white porcelain as those described and, being made of cast iron, is susceptible of hard usage without damage. As shown by the section, the supply pipe runs up through the centre to a mouthpiece which is thoroughly washed every time it is used, and the waste water overflows to the basin, from which it runs to the waste pipe and is carried off to the drainage system of a building. This fixture has been found particularly convenient in schools, and it has been demonstrated that a large number of children can satisfy their thirst in less time than by any of the other drinking conveniences which have been produced for public use.

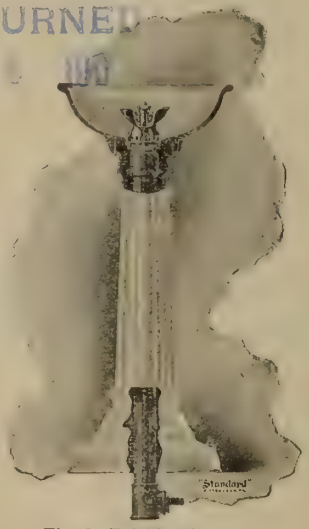


Fig. 3—Drinking Fountain.

The expense attending the equipment of public buildings with water closet facilities in the past resulted in many buildings being dependent on privies. The general disadvantage of such conveniences led to the production of dry closets, while their defects resulted in turn in the production of range water closets. The accepted type of range closet is now made in sections and is of the water closet type, so constructed that a range of them may be either set in compartments or left exposed in a row of stalls, each seat, however, independently connected with the main drain. The equipment as shown in Figure 6 provides for an automatic flushing, the flush tank being arranged at one end of the range and connected with the double trap on the discharge end, so that periodically a flushing of the contents of the range drain into the sewer is effected. Blue prints with instructions for erecting and operating are furnished by the company with each fixture, so that correct installation by the plumber may be made without risk as to the certainty of satisfactory action.

In Figure 7 are the plan and elevations of the Standard automatic siphon education public urinal, which can be furnished so that it can be approached from both sides, or so that it can be placed against the wall, according to the number to be accommodated. This fixture is arranged also to be automatically flushed periodically to insure cleanliness. The urinal troughs are made of cast iron coated with the same non-absorbent durable character of high gloss white porcelain enamel and some are made with lips at the front and all with provision for stalls for greater privacy.



Fig. 4—Sectional Fixture Equipment.

The appearance of the toilet room equipped with these sectional sanitary fixtures is presented in Figure 4, with the urinals at the left, the closets in the background, and two styles of sectional lavatories. One of the latter is supplied from overhead piping, so that the shower effect can be secured when desirable, and the other with the water supply lower down for washing purposes only.

A more pretentious toilet room is shown in Figure 5, this being provided with a sectional lavatory of more attractive appearance and with range closets fitted with stalls and with a compartment chamber locked for use say in school buildings for the teachers. The entire arrangement can of course be enclosed in similar compartments. A feature is the provision of a large ventilating pipe through which the entire toilet room is ventilated by drawing the air from the room through the different seats, and through a main trough or drain to the point where the ventilating pipes connect.



Fig. 5—Toilet Room Ventilated through Fixtures.

INVERTED BUSINESS POPULAR.

Inverted burners for incandescent gas lights are all the rage in Great Britain, and many very handsome designs of fixtures are being put on the market. The great advantage claimed is the absence of shadows and the throwing of the light downward instead of upward. The idea meets with general favor, but Canadian lighting dealers have not yet found a satisfactory burner for sale on the Canadian market.

RAMSAY'S



This is the lead for business and profit.

Better than pure lead, and for less money.

Have You Sold

Ramsay's Exterior Lead ?

If not, let us send you a booklet and tell you about it. Don't confuse it with any other lead under a similar name. They have nothing in common.

A. RAMSAY & SON COMPANY

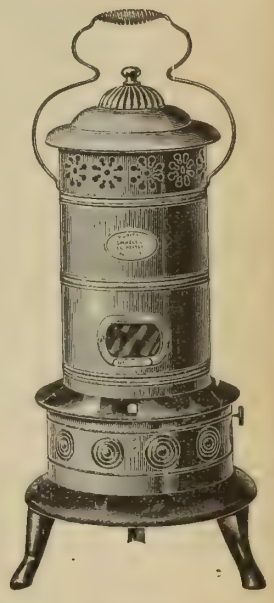
Est. 1842 MONTREAL THE LEAD GRINDERS

DO YOU SELL LAMPS?

Better order now a full stock. You will want them **badly** and **in a hurry later.**

We can supply you.

FOR BURNING GAS or OIL.
FOR HOUSE or STORE.
FOR FACTORY or SHOP.
FOR ANY AND ALL PURPOSES.



Mantles, Lamps AND Glassware

Now is the time to sell

PARLOR OIL HEATERS.

We have the **PURITAN SMOKELESS**—the best of all, and perfectly safe.

THE ROCHESTER LAMP CO.

TORONTO, CANADA

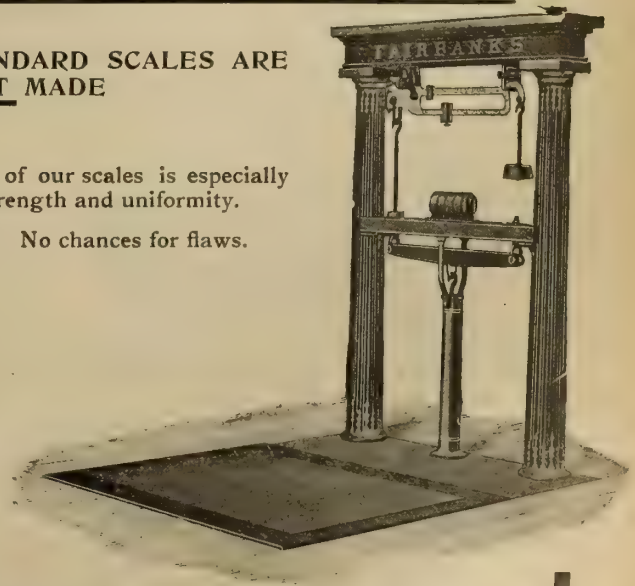
FAIRBANKS STANDARD SCALES

Reason No. 1

WHY FAIRBANKS STANDARD SCALES ARE THE BEST MADE

All the Pig Iron entering into the construction of our scales is especially selected and tested by us in order to get the greatest strength and uniformity.

This means there are no weak parts in our Scales. No chances for flaws.



Reason No. 2

We employ only the highest grade of skilled labor in our factory, men whose fathers and grandfathers before them have been scale-makers. Each man has a particular part of a scale to make, and he makes that part only, consequently attaining a degree of exactness and perfection impossible to the man who does a little of everything.

THE CANADIAN FAIRBANKS CO., Limited,

Montreal Toronto Vancouver Winnipeg

LIGHTING SUBURBAN HOMES.

PROPER lighting of a suburban home involves not only a device which will give the greatest possible candle power, but also one which is convenient, safe and economical, writes George Somers in Light. The danger involved in the use of the ordinary kerosene lamp is second only to the bother which they cause. At the same time thousands of people hesitate to install any of the modern systems of lighting feasible in the country home because they do not fully understand them, and imagine that they are either very expensive or are dangerous.

Acetylene is a clever lighting agent for use in any country or surburban home, and a complete system may be installed at comparatively small expense.

Acetylene is one of the most economical illuminants which can be secured and the light furnished by acetylene is remarkable because of the fact that its spectrum is nearer to the spectrum of the sun than that of any other illuminant. All artificial lights entail a strain upon the eyesight, because of the difference in the quality of the light from that afforded by the sun, to which the eye is naturally adjusted, but this strain is lessened to a very large extent when acetylene is used, an advantage which is of no little importance in these days, when eye troubles are so common. This peculiar quality of the acetylene light makes it an excellent illuminating medium to use when delicate fabrics, paintings and flowers are to be exhibited at night. It is a very diffusive light, reaching the farthest corner of a room.

The principle involved in the use of acetylene is simple. A piece of calcium carbide, a product of the electric furnace, is dropped into water or water is dropped upon it when it almost immediately decomposes and unites with its oxygen, the carbon and hydrogen forming a union by which acetylene is generated.

An acetylene plant sufficiently large for the needs of the ordinary country home will occupy but comparatively little space and may be located in the cellar if desired. It is a common plan, however, to place the generator in a pit out of doors. If a house has been piped during its construction, very little time or labor will be required to install an acetylene plant. Few connections will be required and standard fittings can be used.

Once in position an acetylene plant requires but little attention. At intervals, which vary according to the amount of gas burned, it is necessary to fill the carbide holder at the top of the machine with carbide, which comes in cans ready for use, and to fill the generating tank with water. No further attention is necessary until the carbide is exhausted, except that when charging the residuum of the carbide must be drawn from the generating tank. As this is lime, it can be used in making whitewash or on the land to sweeten the soil.

Much has been said and written about the danger of acetylene which is mythical. The gas generated by carbide is not poisonous to the human system; it will not cause asphyxiation, even though it is allowed to escape into a sleeping room throughout the night. It is explosive, however, just as any other gas is, and in the same way. There would be decided danger in taking a lighted lamp into a room where any illuminating gas had been escaping, or in lighting a match in the cellar where a generator is located, when something had been allowed to interfere with the system.

The water in the generating tank must not be allowed to freeze. Acetylene itself is dry and will not freeze, and, if desired, may be piped to the dwelling from pit or generator house on top of the ground.

In speaking of the possible accidents, one point should be emphasized strongly. The cans in which the carbide is shipped must be kept absolutely free from dampness. Otherwise the contents will follow a natural tendency, and begin to slack. The formation of gas will be the result, and, being confined, this gas will explode. This is a danger that must be guarded against, and the simple precaution of keeping the cans in a dry place will obviate any trouble.

As the capacity of the generators vary greatly, so does the cost of the machines. None but those approved by the Board of Fire Underwriters should be considered. They have been tested. A generator that will operate eight or ten lights can be purchased at a very reasonable price. If the house is piped for gas, there will be little extra expense; if not, it will be necessary to allow for piping, and the expense of installing.

METHODS OF ARTIFICIAL DRAFT.

"ARTIFICIAL draft may be, and has been, produced by means of steam jets inducing a flow of air, by blowing engines, by air compressors, by positive rotary blowers and by fan blowers or exhausters. Although the practical success of the locomotive is largely due to Stephenson's introduction of the steam nozzle for draft production, it does not follow that the same method is applicable where the exhaust steam would not otherwise be wasted. The blowing engine, the air compresser and the rotary positive blast blower, all possess disadvantages which render undesirable their adoption for this purpose. In fact, they have been introduced to only a very limited extent. The centrifugal fan has, however, been most extensively applied under all conceivable conditions, until it has become the symbol of artificial, or, as it may properly be designated, of mechanical draft, and is to-day the accepted substitute for the chimney."—From treatise on Mechanical Draft published by the B. F. Sturtevant Co., of Boston, Mass.

MOVING AIR.

THE problems involved in the transportation or movement of fluids, differ essentially from those concerned with the conveyance of solid materials. In the case of the latter the process is one of actual carrying, while in the former the movement results from, and is proportional to, the pressure difference existing between the delivery and receiving points.

The solid is actually carried in bulk, while the fluid, as its name suggests, merely flows toward the point of least resistance. In other words, the transportation of fluids, of which air and water are the most familiar and plentiful examples, results from the creation of a difference in pressure.

A portable receptacle is usually required for the latter, while a conduit is necessary for the passage of the former.

A very comprehensive discussion of the subject is presented in the exhaustive treatise on "Mechanical Draft," published by the B. F. Sturtevant Co., of Boston, Mass.

PLUMBING GOSSIP.

Geo. Larose, tinsmith, of Beloeil, called on the supply houses in Montreal this week.

Eusebe Monbleau, steamfitter and machinist, of St. Johns, was in Montreal a few days ago.

E. Guillet, of E. Guillet, Sons & Co., Limited, Marieville, was in Montreal during the week.

Ph. Gaudette, of the water works, St. Ours, called on the Montreal wholesale houses this week.

Alex. Lalonde, tinsmith, of Alexandria, Ont., was purchsing supplies in Montreal this week.

T. G. McClatchie, tinsmith, of Hemmingford, was among the outside business men in the Royal City this week.

W. Gaulin, tinsmith and plumber, of St. Cesaire, paid a visit to Montreal this week, in connection with his business.

Mr. Tanguay, of Tanguay & Mayrand, plumbers and tinsmiths, of St. Johns, Que., visited the Montreal supply houses this week.

A large addition is being made to the Fort Frances Hotel, owned by J. Paul. A steam heating plant will be installed and the building will be lighted by electricity.

The Ontario Lead & Wire Co., Toronto, are now represented in Manitoba and the Northwest by Mr. W. F. Brock, manufacturers' agent, with headquarters at Winnipeg.

Oil bubbling up from the river bottom at Brockville is said to indicate the presence of natural gas, and it is possible that the developments made in Western Ontario in supplying this fuel for heating and lighting may be duplicated in the St. Lawrence River district later on.

Jas. F. Read, formerly in business with his father as plumbers and steamfitters, at Smith's Falls, was released this week from Toronto jail, he having been in prison for the last seven months for debt. Read gave a creditor, M. W. Everett, notes amounting to $659, but was arrested because Everett swore that he believed Read intended to leave the country without paying the account. Read was a veteran of the South African War.

The Standard Sanitary Mfg. Co. will erect several buildings on a site recently acquired by it in Detroit. The main building will be 63 x 290 feet, and three storeys high, the power building will be 42 x 95 feet, two storeys high; the engine room 40 x 40 feet, and the foundry building 63 x 73 feet. The pattern, storage and other buildings will cover a space of about 125 x 90 feet. The power building will be equipped with a 500 h.p. Corliss engine, all necessary pumps, heaters, dynamos and generators, and will have a battery of four boilers.

We Pay—You Pocket



Could any Proposition Be more Attractive To You?

Our good money is being liberally spent in advertisements—

From all of which you will secure the benefit.

All you have to do is put in a sample line of NATURO CLOSETS—recognized by all familiar with them as the best sellers and the most satisfying.

Other plumbers are taking advantage of our unusually good offer.

Won't you?

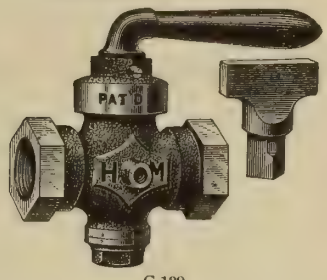
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C. H. Muckenhirn, President.

Salem, N.J.

MUELLER GROUND KEY WORK

No. 49 Stop and Waste Cock



C-139

A cock may completely serve its purpose as a stop but not fully answer it when open because of unmatched water-ways.

The stop lugs in Mueller Stop Cocks are milled true, so that when the cock is opened they cause the key to stop turning with the water-ways in exact line. They serve both uses equally well.

All Mueller Stop Cocks are given a 200 pound hydraulic pressure test as near like actual service use as possible, bear the Mueller trade mark and are *unconditionally guaranteed.*

We also mak ession work and fuller work for plumbers' use. Catalogs on req

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Phone No. Parkdale 1809

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The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 6, 190 5.

INTEREST in the local plumbing market this week centres in the strengthened tone of iron pipe and fittings. General advances in pig iron and finished material in the United States and England, where great orders are being placed, make Montreal manufacturers and jobbers predict an early withdrawal of the present quotations. The demand, which has held so strong throughout the Summer season, shows no sign of abatement, but rather is increasing.

Lead is again on the advance, after having experienced a temporary dullness early in the week. This has given a very firm tone to lead pipe, which is well held at the prices quoted below.

Copper is also on the upward move again, with the result that brass goods are even steadier than before and copper boilers also reflect the strength of the primary market.

The advancing season is, of course, bringing with it a great many heating contracts, and most of the local plumbers have their hands full with this class of business. Plumbing jobs are not lacking either, so that the trade here are kept continually busy.

Range Boilers—Sales are large. Prices are all very firm, especially for copper boilers. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The strength of pig iron is holding this market firm. Our quotations are as follows: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c per hundred lbs. extra.

Iron Pipe Fittings—Reports from England and the United States show that there is great activity in the iron and steel markets. This, added to a large demand here, makes it reasonably certain that prices will soon go up in this article. Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Manufacturers assert that present figures cannot hold much longer, in view of the advances in pig iron and finished material. There has been no letup in inquiries, a fact which has assisted in giving to the whole market a stronger tone. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.: 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—Prices are well held as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—The market shows considerable strength, but there is no disposition to raise prices just now in spite of the fact that tin and lead are high. We quote: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Octo'er 6, 1905.

BUSINESS continues exceptionally brisk both in plumbing supplies and heating goods, many of the supply houses finding it necessary to work their staffs at night in order to secure shipment of the orders in hand. A very large volume of business is being done in the west. Carload orders are being shipped almost daily to this district. From all parts of Ontario also orders are coming in very satisfactorily. September was one of the largest months in the history of the local supply houses, each house reporting an increase of several thousand dollars worth of business over any previous year. In plumbing supplies the bulk of the orders are given for finishing goods, although roughing-in requirements are still being included in fair amounts.

Increases in prices are looked for in most lines at an early date, owing to the great strength being shown in the metal markets. Iron pipe and fittings and both iron and copper range boilers are likely to advance, while the increasing price of raw material will also warrant an advance being made on enamelled ware. The looked for jump in brass goods cannot be much longer delayed, as while the old prices still rule manufacturers have withdrawn their quotations and are selling subject to an advance at any time. The strong conditions of the lead market also indicates that lead pipe will advance about an equal proportion to other lines listed. Last week's quotations remain unchanged.

Lead Pipe—Prices are very firm and there is a possibility of an advance. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—The recent scarcity of goods is not as apparent. The manufacturers are able to ship in larger quantities. Demand is active and prices steady. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—There is a strong demand for both iron pipe and fittings, and while stocks are not so large as they should be, manufacturers are able to hold the business in their hands. We quote as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers—A large business is being done, the discount remaining at 15 per cent.

Galvanized Iron Range Boilers—Large sales are reported owing to the completion of contracts in dwelling houses. Prices continue strong. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—The high price of pig iron indicates an advance soon. Business is very active and prices firm. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 1-2 inch, $15.75; 3 in. $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—A fair demand exists and the firmness in the lead market prevents any decrease in price. Our quotations are as follows: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware—A tremendous volume of business is being done owing to the demand caused by contractors finishing work on houses which have been under construction. The Canadian producers are well able, however, to handle the orders being received. Prices continue unchanged. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality,

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

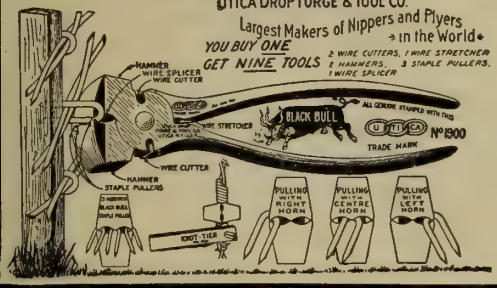
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Galvanized Sheets

for Corrugating are best. Submit your enquiries by mail or cable to

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

UTICA FENCE TOOL & BUTTON PLYER
UTICA DROP FORGE & TOOL CO.
Largest Makers of Nippers and Plyers in the World.
YOU BUY ONE GET NINE TOOLS
2 WIRE CUTTERS, 1 WIRE STRETCHER, 2 HAMMERS, 3 STAPLE PULLERS, 1 WIRE SPLICER



Utica Black Bull Staple Puller

The only STAPLE PULLER with THREE Pulling Points.

Pulls bottom wires equally as well as top wires. The centre prong pulls staples straight.

Each Tool is Tested before leaving the Factory. Fully Guaranteed.

ASK YOUR DEALER FOR UTICA TOOLS

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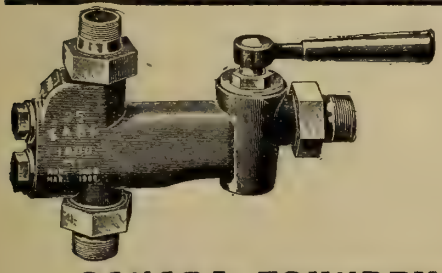
UTICA DROP FORGE & TOOL CO.
296 Broadway, NEW YORK, U.S.A.
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FOR SPRINGS,

made and backed up by a concern with fifty years experience, send your specifications to

The WALLACE BARNES CO., BRISTOL, Conn.

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EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED

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Do You Use WIRE or SPRINGS ?

IF so, write for prices on

Annealed, Bright, Polished, Coppered, Bronzed, Galvanized, Oil Tempered, Tin-plated, Broom Wire, Wire for Buckles, Staples, Rings, Hooks and Eyes. Reed, Harness, Bonnet, Hat, Clock and Umbrella Wire ; Bicycle and Motor Wire, Square, Flat, Oval, Half-Round Wire.

Springs for Every Purpose.

J. A. HENDERSON, *Board of Trade,* ***MONTREAL***

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED

STANDARD OAK

FOR A HEATER.

SOVEREIGN

AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

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PRIEST'S CLIPPERS

BALL BEARINGS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

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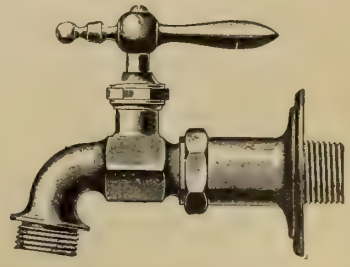
JARDINE'S Patent Pipe Die

saves half the labor in threading pipes. We return money if die is not satisfactory.

ASK FOR CIRCULAR.

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HESPELER - - - ONTARIO

GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, CLEVELAND OHIO, U.S.A.

RETURNED
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T. Montreal
Cut Book #3
Page 61

$17.50; special, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality, $19; special, $17; 3 inch rim, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.

SERVICEABLE NOVELTY.

One of the best and most serviceable novelties yet introduced to be used in connection with gas lighting is the "Twentieth Century White Flame," for which Walter Grose, Montreal, is the sales agent for the Dominion. The editor of Hardware and Metal has given one a personal trial, and has no hesitation in recommending the novelty as one which will sell rapidly wherever introduced, and every customer will aid in selling by recommending the fixture to his friends.

The light attaches to an ordinary gas fixture, and besides throwing out heat sufficient to warm one or two fair-sized rooms lights the room better than the regular gas tip, without burning any more gas. The selling qualities of this light can be seen at a glance, and dealers who want to make a quick turnover should place an order at once, as the cool evenings between seasons are the time when the most sales can be made.

ELECTRICAL NEWS.

Thomas A. Edison announces that he has completed a new storage battery for automobiles that greatly simplifies the problem. He has been experimenting a long time, and announces that he has found just the right type of battery, that he has tried it on a number of vehicles, even to a two-ton car which he ran 33 miles an hour over rough roads, and has met with perlect success. It is one-half lighter than any battery ever made, and the cost is said to be only 58 per cent. of that of horses.

The town of Drummondville, Que., are calling for tenders for the installation of a water and electric light plant.

The contract for the supply of electrical machinery for street lighting purposes has been awarded by the city of Victoria, B.C., to the Hinton Electric Co. The plant is to be of the Canadian General Electric manufacture.

CANADIAN WARE IN DEMAND.

Mr. A. D. McArthur, Toronto representative of the Standard Ideal Co., states that never in the history of the business have orders been so large and the call for Canadian ware been so great. The factory is working to its utmost limit in an endeavor to keep up with the orders in hand, and while shipments are being kept well up to date it is only by the hardest kind of work. The general satisfaction with which the Standard Ideal goods are received, and the tremendous demand for them amongst plumbers in all parts of the country, speaks well for this growing Canadian industry.

HEAT LOST BY RADIATION.

The amount of heat lost by radiation from bare pipes containing steam at 100 pounds pressure has been estimated to be equal to two tons of coal a year for each 10 square feet of pipe surface. It has also been found that 88 per cent. of this loss can be saved by the best pipe covering.

STEAM PIPE

WE'RE READY for your Fall pipe order. We want it and have good reasons why it should come our way.

We know our product will give the user thorough satisfaction. It is made with that object and can be depended upon.

Material is the best procurable.

Manufacture is watched and followed with the greatest care—every length subjected to high pressure test and rigidly inspected.

Threading full to size and true to standard.

Our trade mark appears on every bundle. See that it is on the tag. When you order, specify

TRADE M.R. Co. MARK

THE MONTREAL ROLLING MILLS CO.

The Best South Wales Produces

IN STEEL COKE TINPLATES

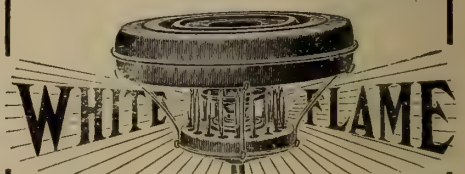
"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

QUICK ACTION
Fall and Winter Sellers
Time for Trade to
ORDER NOW
to ensure supply when the "populace cry" for
20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY
FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM
IS YOUR BATHROOM CHILLY?
SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug, 12, page 59; Aug. 19, page 58; Sept. 30, page 72, or send for Catalogue.

WALTER GROSE, MONTREAL } Sales Agent for the Dominion

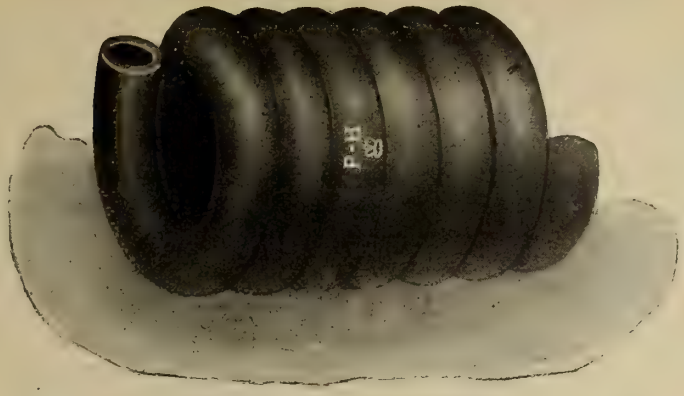
PIPE THAT IS PIPE

THIS IS OUR BRAND

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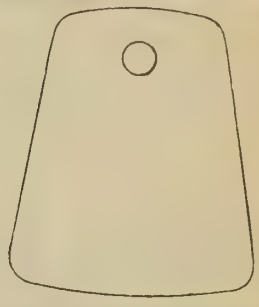
You Want It.

See that You Get It.



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TAKE NO OTHER

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TRADE PENBERTHY MARK.

THE BEST



AUTOMATIC INJECTOR

BY TEST

We make a specialty of manufacturing brasses for gasoline engines. Our oilers are made of best red metal and have steel ball valves for cylinder use. Made in 7 sizes, either brass or nickel plated.

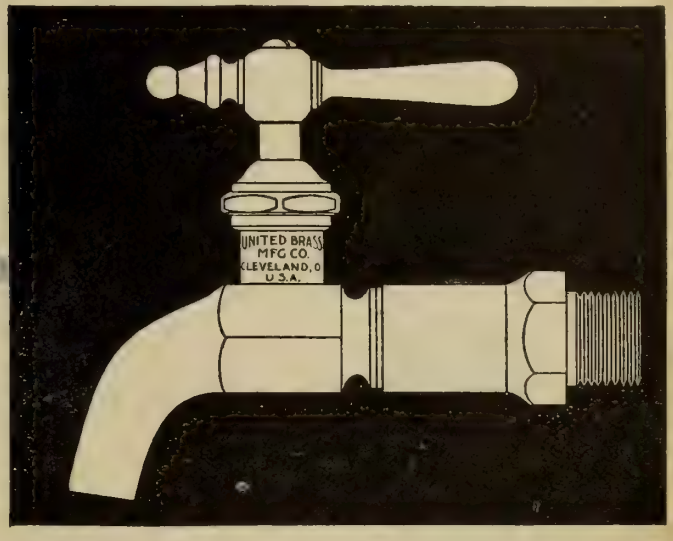
ASK FOR PENBERTHY



Tried and Tested—Always Satisfactory

United Fuller work used by Leading Plumbers Everywhere

Unite with United Brass Goods The Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., Cleveland, Ohio, U.S.A.

WROUGHT IRON PIPE

We carry in store all sizes from $\frac{1}{8}$ inch to 8 inches.

Quality the Best. Shipment prompt.

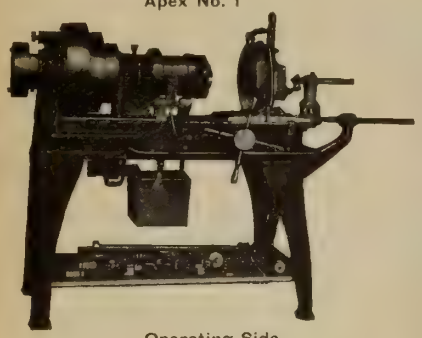
Orders Welcomed. Correspondence Solicited.

WM. STAIRS, SON & MORROW, LIMITED

HALIFAX, N. S.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

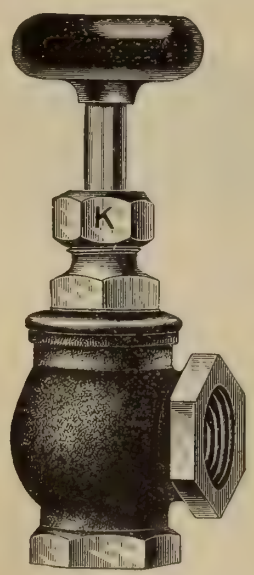
Capacity of this machine from ¼ to 2 inches inclusive. The Adjusting Ring at the back of the vise provides ample adjustment for the variation in size of pipe. The Bearings are very large and heavy, and babbitted with the best anti-friction metal. This machine is especially adapted for making nipples.

Our Catalogue is Interesting.

THE CANADIAN FAIRBANKS CO.

Sole Agents for Canada Limited

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Standard and

Jenkin Disc Radiator Valves

are perfectly constructed, and of beautiful design. Like all "Kerr" specialties, strictly high-grade.

The KERR ENGINE CO.,

Manufacturers Limited

WALKERVILLE - ONTARIO

STEAM JET VS FAN BLOWER.

Careful experiments conducted some years ago at the New York Navy Yard, to determine the best form of steam jet for producing forced draft in launch boilers, showed that from 8.3 to 21.2 per cent. of the steam produced by the boiler was consumed by the jet. In a jet which had a hole only one-sixteenth inch in diameter, and which was the most economical of all, the steam used was one pound in two minutes. The amount of steam required by a fan blower is under ordinary conditions from a fraction of 1 per cent. up to a possible maximum of 3 or 4 per cent. in small boiler plants or with uneconomical apparatus; and practically the whole of this expenditure of power, in the form of exhaust steam, may be subsequently utilized for heating or similar purposes.

The case of a steam jet may be briefly summarized thus: It has the advantage of costing very little to put in and keep in repair. Its disadvantages are: First, it requires a very large amount of steam to run it; second, it introduces a large amount of water or steam, all of which has to be heated and carried up chimney; third, unless very carefully managed there is a large development of carbonic oxide, hydrogen and marsh gas, due to dissociation of the water, which has a tendency to carry off a great deal of heat in the stack; fourth, the intensity of draft producable by this means is distinctly limited; and, fifth, and by no means least, the noise incident to its use is at times almost intolerable.

The late Mr. Eckley B. Coxe thus expressed himself: "The fan is most expensive to install, and may cost more to keep in order, but where the arrangements can be made to utilize the heat in the stack gases it is more economical so far as heat units are concerned. It has one great advantage, it is possible to at all times obtain the exact blast necessary to produce the best results in the furnace, which is very important.

SYSTEM IN BUSINESS.

H. MUELLER MANUFACTURING COMPANY, Decatur, Ill., are to be commended for the systematic method used by them in conducting the correspondence of their advertising and business departments. This firm recently placed an order for advertising in Hardware and Metal, the order to cover fifty-two weekly insertions each year. This will necessitate one or more letters being sent to the paper by the Mueller Company each week, so in order to prevent any of their letters going astray through the mistakes of employes, they have had printed a sufficient number of envelopes to cover the correspondence, the envelopes being plainly printed in red ink addressed to Hardware and Metal, Printing Department, 10 Front street east, Toronto Canada, together with the words "Rush, advertisement department copy and proofs." In addition to this there is, of course, the ordinary address of the sender and the announcement on the back that the company is in business to sell water, gas, and plumbing goods, the postal department being requested to return the envelope if not delivered in five days.

By going to the expense of having 50 or 100 envelopes printed for each of the firm's correspondents it is clear that the system in use in the Mueller Co. offices is most comprehensive. Another instance of this is the manner in which the Mueller Co. forward the engravings used in their advertisements. A letter is sent ahead containing the announcement that one or more engravings have been forwarded, the description of these being contained on the invoice enclosed. The publishers are requested to note the charge made for duty, etc., and to enter this on the monthly statement for advertising forwarded to the advertisers.

System is the order of the day and the saving made through the systematic conducting of every branch of business is more than sufficient to cover all expense incurred in purchasing card index systems, doing necessary printing, etc., and employes of companies who are systematic do more valuable service than those who work in a haphazard manner. In the keeping of records also a firm is safeguarded against any contingency which may necessitate the taking over of work by a new employe at any time. Looked at from every standpoint system is an advantage to all business concerns and the ones who have not adopted it as yet are not doing business on twentieth century methods.

BOOK REVIEW.

THE Sanitation of a Country House, by Dr. Harvey B. Bashore. Published by John Wiley & Sons, New York. Price $1.00. The aim of this work, as stated in the preface, is to make the country as healthy as the city. It is true that summer resorts sometimes bring sickness instead of health; that there are rural localities which have more typhoid fever per population than our great cities; and Dr. Bashore declares that it is from the country that the cities get twenty-five per cent. of their typhoid cases. His contribution to the prevention of this state of affairs is addressed to both persons who build in the country for permanent residence, and to summer visitors and campers. To the latter he gives warning chiefly about water supply and disposal of wastes. "The price of pure water, wherever you go, is everlasting and unremitting vigilance," and his advice for open water supply, by streams, is "to see the other end to its 'uttermost parts'." For the use of springs and wells the same consideration must be applied to the geographical strata through which the water comes, but he gives no rules to make this easy. If it is necessary to take water from a suspicious stream, he recommends the plan practiced by the natives of India, who dig little holes in the sand of the shore until they get below the water level, and so, when the holes fill with water, get water which has filtered through the sand and is safer than the raw water of the stream.

The matter of waste disposal at summer camps is a matter which is within command, and Dr. Bashore's directions are good and easily followed. The book is not long and its matter will not be new to persons having a good knowledge of sanitation, but the points to be considered are brought together in a manner that has the merit of being very readable.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

GUELPH AXLE WORKS

THE GUELPH SPRING & AXLE CO. LIMITED
GUELPH, ONT.

$ $ $ $ $ $ $ $ $ $

CONTRACTS

mean dollars for the pockets of contractors. The weekly reports in the

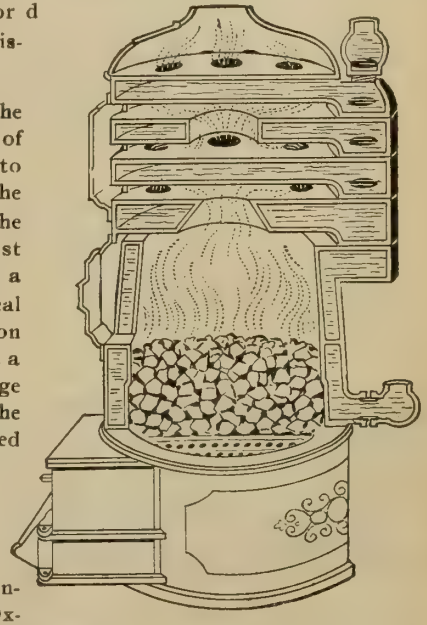
CANADIAN CONTRACT RECORD

tell where contracts may be had. $2 per year buys them. Address

THE CONTRACT RECORD
TORONTO, MONTREAL, WINNIPEG and VANCOUVER.

OXFORD HOT WATER HEATING SYSTEM

It Pays. Dealers can make both money and friends by recommending and installing Oxford system. Our sixty years reputation for producing the best is behind you if you are pushing Oxfor d lines. Every system installed is satisfactory, and you get the credit for it.



Important Improvements. As a practical man, the points of superiority of the Oxford Boiler must be very plain to you. The overhanging fire-pot, the walls of which incline inward over the fire, so that the heat strikes against them (instead of passing by as in a straight wall) is the greatest practical improvement in Boiler Construction made in years. It is not a theory but a proven fact that this simple change increases the heating capacity of the Boiler very greatly. We have repeated this principle in the first water section nearest the fire, still further improving the efficiency of the whole as a heating apparatus.

Other Points. The metal to metal connections made with Oxford Steel Push Nipples, doing away with gaskets or washers, the Triangular Revolving Grate and large ash-pit, are a few other important features.

Oxford Hot Water and Steam Radiators

used with Oxford Boilers give universal satisfaction as perfect distributors of heat—leaks are impossible, as every connection is metal to metal, made with the Oxford Steel Push Nipple—no gaskets or washers.

Send for the Gurney Oxford Book of Steam and Hot Water Heating Apparatus.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 123
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE
768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED
WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.
Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND
Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM
HERBERT RODGERS & CO.
Saracen House, Snow Hill, London, Eng.
Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT
GALVANIZING
ONT WIND ENGINE & PUMP CO.
TORONTO, ONT. LIMITED.

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng
TINPLATES
In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

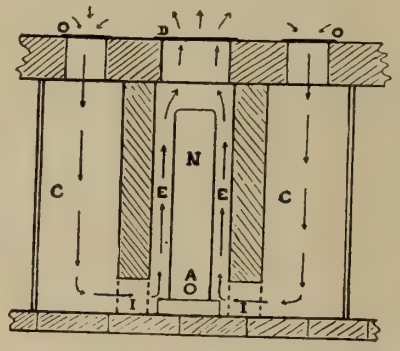
Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

FIRST STEAM WARMING.

THE first practical application of steam for heating purposes was made by James Watt. In the Winter of 1784-85 he used steam for warming his study. The apartment was eighteen feet long, fourteen feet wide, and eight and one-half feet high. The apparatus was a box or heater made of two side plates of tinned iron, about three and one-half feet long and two and one-half feet wide, kept at the distance of an inch apart by stays, and joined round the edges by other tin plates. This box was placed on its edge near the floor of the room, and furnished with a cock to let out the air, and a pipe which proceeded from the lower edge of the box to a boiler in an under apartment supplied steam and returned the water of condensation. The effect produced by this apparatus was less than Mr. Watt expected, but the failure could not be explained until Leslie made his experiments on the heat transmitted by polished surfaces.

About 1800, Mr. Lee, of Manchester, under the direction of Messrs. Boulton and Watt, erected a heating apparatus of cast-iron pipes, which served also as supports to the floor, and was, in point of materials used and construction, the earliest of its kind. He subsequently heated his house by steam, and the

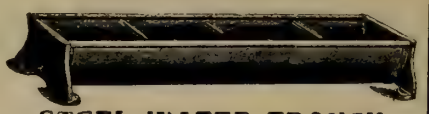


First Steam Warming.

staircase, hall, and passages were warmed by the ingenious apparatus shown in Figure A, placed in the understory.

The vertical cast-iron cylinder, A, is surrounded by a casing of brickwork leaving a space, EE, of two and one-half inches all round, and having openings, 1, below, to admit the air. This casing is surrounded at the distance of three or four inches with another wall, which forms what may be called the well, C. The coldest air, being the heaviest, falls to the bottom of the well, C, and entering by the holes, 1, into the space, E, comes in contact with the cylinder, A, where being heated and becoming specifically lighter, it ascends. There is a valve to regulate the admission of steam into the cylinder, and a small pipe to allow the air to be expelled when the steam is entering, that are not seen in the figure, and another small pipe to withdraw the water of condensation. Another valve is placed on the top of the brickwork to regulate the transmission of the heated air. When this apparatus was in action, the staircase soon became so warm that it was necessary to shut off either the valve admitting the steam, or the air valve.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.** Limited
TWEED, Ontario



Dark days are coming. Buy the best **Light Producers.** We make twelve different styles of Lanterns. For sale by all prominent dealers.

ONTARIO LANTERN & LAMP CO. LIMITED
Hamilton, Ont.

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

"PERFECT" GALVANIZED SHEETS
Is a Synonym for
GILBERTSON'S
COMET
Brand

Flat, well selected, soft and smooth, easy to work up. The price—Less than other high-grade brands. Get the prices.

MAKERS:
W. GILBERTSON & CO. Limited.
PONTARDAWE, SOUTH WALES.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



HOLLOW-WARE

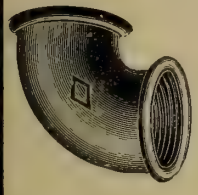
PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

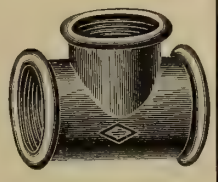
We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.
LLANELLY, WALES



TRADE MARK REGISTERED



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

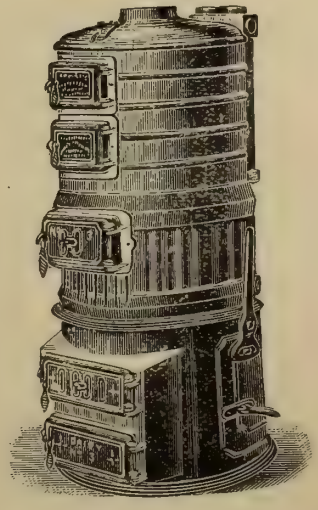
SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.
Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.
50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

The Maximum of Quality

is to be seen in our

BUILDING PAPER
WRAPPING PAPER



TARRED FELTS
READY ROOFING

SHEATHING

And the maximum profit is in store for the merchant who seizes the opportunity and orders.
We would like you to write for prices, etc.
Will you do it?

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

CURRENT MARKET QUOTATIONS.

Oct. 6, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—		
56 and 28-lb. ingots, 100 lb.	$37 00	$38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. / " 14x60, " / " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 85
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 94½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality, best warranted	....	0 18
"I" " warranted	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs.	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¼ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅝ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 25
Part casks	....	7 50

LEAD.

Imported Pig, per 100 lb.	4 00
Bar, "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's	per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00		16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet 2½ in.		16 75	14 75
5 " 2½ "		17 50	15 50
5½ " 2½ "		19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 " " "	1 75
No .7 Fuller's "	2 10
No. 4½ " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

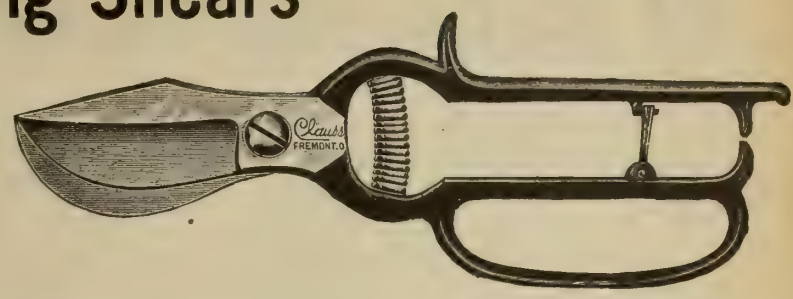
Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20,00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand Pruning Shears

Fully Warranted

Our Plain Pruning Shear is of the very best our secret process of manufacturing can produce. There is no question as to the quality, which is unsurpassed.

Filed Handles and Finely Polished Blades. Ask for Discounts.



The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PUTTY.

Bulk in bbls	1 50
Bulk in less quantity	1 80
Bladders in bbls	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent.
American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes. 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb. 0 07½ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M. 4 25
Small heel " 4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz. 6 00 9 00
American " 12 00 18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross 7 50 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz. 2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Balky Customer

is harder to manage than a *Balky Horse.* Your customers *won't Balk* if you offer them Paterson's Building Papers and Wire-Edged Ready Roofing, because these goods never fail to please the user.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	00
4 "	" "	25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window Box Price.

size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 00
101 to 105	....	24 00
100 to 110	....	27 50

For less than 100 feet of one size, panes list less 33⅓ . Terms 90 days net, 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2½ 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lace's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" 5-in., "		0 06½
" 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	....	3 25
Spring, No. 20, per gro. pairs	....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	.... 0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { Head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	.... 0 60

KNOBS.

Door, japanned and N.P., per doz.	1 50	2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt 10½-in., 14-in. cut		$ 8 50 to $11 00
Star, 9 -in.	"	6 00 to 6 50
Daisy, 8 -in.	"	5 25 to 5 75
Philadelphia, 7½-in.	"	6 00 to 7 50
Woodyatt, 10½ in., ball bearing		13 25 to 18 00
Grass Boxes		1 75 to 2 00
King Edw'd 12-in., 14-in. cut		9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in.	5 50	6 25
8-in.	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 0 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	.... 6 75
Plumbers	"	.... 3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		.... 10 00

Davidson oilers, discount 40 per cent.

Zinc and tin, discount 50, 50 and 10 per cent.		
Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
" "	"	.... 9 60

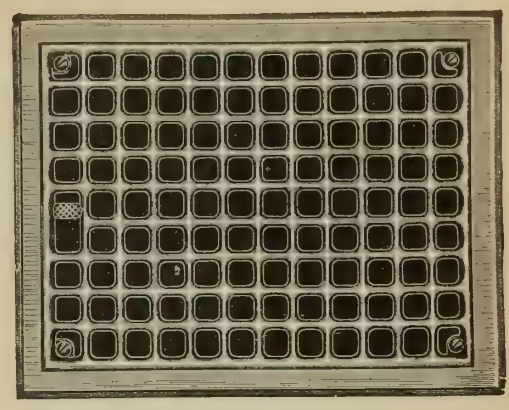
PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.



HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.

PUNCHES.

Saddlers .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0 10½
Pure Manilla	0 15
"British" Manilla	0 11½
Cotton, 3-16 inch and larger.....0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's...per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete.....each 0 75 2 75
" frame only.....each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, iscount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	...	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " " ...		7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 6 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c. "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14, $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 fo small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

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Confederation Life Ass., Toronto.
Metropolitan Bank, Toronto.
Reed, Joseph B., & Son, Toronto.
Western Assurance Co., Toronto.

Fire Brick, Furnace and Stove Cement, etc.
Francis-Frost Co., Toronto.
Jones Bros., Bracondale, Ont.
Sterne, G. F., & Son, Brantford.

Firearms and Ammunition.
Claybrough & Johnstone, Birmingham, Eng.
Colts Patent Firearms Co., Hartford, Con.
Hamilton Rifle Co., Plymouth, Mich.
Harrington & Richardson Arms Co., Worcester, Mass.
Johnson's, Iver, Arms and Cycle Works, Fitchburg, Mass.
Walter, E. F., & Co., Montreal.
Richards, Westley, & Co., Birmingham, Eng.

Food Choppers.
Enterprise Mfg. Co., Philadelphia, Pa.
Lamplough, F. W., & Co., Montreal.
Smith & Hemenway Co., New York.

Galvanizing.
Montreal Rolling Mills Co., Montreal.
Ontario Wind Engine and Pump Co. Toronto.

Gas Lamps.
Rochester Lamp Co., Toronto.

Glaziers' Diamonds.
Sharratt & Newth, London, Eng.
Shaw, A., & Son, London, Eng.

Glue.
Grove Chemical Co., Lancashire, Eng.

Hardware Specialties.
Erie Specialty Co., Erie, Pa.
Gurney, Tilden Co., Hamilton, Ont.
Mast, J. M., Mfg. Co., Lititz, Pa.
Smith & Hemenway Co., New York.

Hollow Ware.
Welsh Tinplate and Metal Stamping Co., Llanelly, Wales.

Horseshoe Pads.
Canadian Rubber Co. of Montreal.

Horseshoes and Nails.
Canada Horse Nail Co., Montreal.
Maritime Nail Works, St. John, N.B.
Montreal Rolling Mills Co., Montreal.
Peck Rolling Mills Co., Montreal.

Hot Water Boilers.
Cluff, R. J., & Co., Toronto.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.

Ice Cream Freezers.
North Bros. Mfg. Co., Philadelphia, Pa.

Ice Cutting Tools.
Erie Specialty Co., Erie, Pa.
North Bros. Mfg. Co., Philadelphia, Pa.

Injectors—Automatic.
Morrison, Jas., Brass Mfg. Co., Toronto.
Penberthy Injector Co., Windsor, Ont.

Iron Pipe.
Montreal Rolling Mills Co., Montreal
Page-Hersey Iron and Tube Co., Guelph.

Iron Pumps.
McDougall, R., Co., Galt, Ont.

Ladders—Extension.
Waggoner Ladder Co., London, Ont.

Lanterns.
Kemp Mfg. Co., Toronto.
Ontario Lantern Co., Hamilton, Ont.
Wright, E. T., & Co., Hamilton.

Lawn Mowers, Rakes, Etc.
Birkett, Thos., & Son Co., Ottawa.
Kohler, F. E., Canton, Ohio.
Maxwell, David, & Sons, St, Marys, Ont.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.

Ledgers—Loose Leaf.
Crain, Rolla L., Co., Ottawa.

Locks, Knobs, Escutcheons, etc.
Gurney, Tilden Co., Hamilton.

Machinery Supplies.
Armstrong Bros. Tool Co., Chicago, Ill.
Canada Foundry Co., Toronto.
Canadian Fairbanks Co., Montreal and Toronto.
Jardine, A. B., & Co., Hespeler, Ont.
Jenkins Bros., New York.
Kerr Engine Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Morrow MachineScrew Co., Ingersoll, Ont.
Penberthy Injector Co., Windsor.

Mantles, Grates and Tiles.
Batty Stove and Hardware Co., Toronto.

Manufacturers' Agents and Brokers.
Gibb, Alexander, Montreal.
Jenking, A. C., & Co., Montreal.
North West Machinery and Iron Co., Winnipeg, Man.
Rogers, Herbert, & Co., London, Eng.
Pearce, Frank, & Co., Liverpool, Eng.
Thorne, R. E., Montreal and Toronto.
Turnbull & Henderson, Vancouver, B.C.

Metals.
Booth Copper Co., Toronto.
Canada Iron Furnace Co., Midland, Ont.
Canada Metal Co., Toronto.
David, R. Sullivan, Montreal.
Deseronto Iron Co., Deseronto, Ont.
Emerson & Fisher, St. John, N.B.
Frothingham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson, W., Pontardawe, Wales.
Henderson, J. A., Montreal.
Ironside, Son & Co., London, Eng.
Jackson, C. F., & Co., Vancouver, B.C.
Johnston, Rd., Clapham & Morris, Manchester, Eng.
Kemp Mfg. Co., Toronto
Leslie, A. C., & Co., Montreal.
Lewis, Samuel, & Co., Dudley, Eng.
London Rolling Mills Co., London, Ont.
Lysaght, John, Bristol, Eng.
Montreal Rolling Mills Co., Montreal.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
Portland Rolling Mills, St. John, N.B.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Stairs, Son & Morrow, Halifax, N.S.
Summers, John, & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

Metal Lath.
Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

Metal Polish, Emery Cloth, etc.
Anglo-Canadian Supply Co., Toronto.
Solarine Company, Chicago.
Oakey, John, & Sons, London, Eng.

Milk Cans and Trimmings.
Davidson, Thos., Mfg. Co., Montreal.
Kemp Mfg. Co., Toronto.
McClary Mfg. Co., London, Ont.
Wright, E. T., & Co., Hamilton, Ont.

Nails and Spikes.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

Office and Warehouse Trucks.
Monteith, Nixon & Co., Toronto.

Paints, Oils, Varnishes and Glass.
Berry Bros., Detroit and Walkerville.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works Windsor, Ont.
St. George, H. E., London, Ont.
Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

Perforated Sheet Metals.
Greening, B., Wire Co., Hamilton.

Plumbers' Tools and Supplies.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co., Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Stairs, Son & Morrow, Halifax, N.S.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Toronto Foundry Co., Toronto
20th Century Mfg. Co., New York.
United Brass Mfg. Co., Cleveland, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Thompson, B. & S. H. & Co., Montreal.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.
Page Wire Fence Co., Walkerville, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Lewis Bros., Montreal.
Shurly & Dietrich Galt Ont.
Spear & Jackson, Sheffield, Eng.

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co. Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.
Weeton, G., Mfg. Co., Toronto.

Skates, Etc.
Starr Mfg. Co., Dartmouth, N.S.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co., Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
James & Reid, Perth, Ont.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
McLean, Holt & Co., St. John, N.B.
Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Perfection Safety Furnace Pipe Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Stewart, Jas., Mfg. Co., Woodstock, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Stauntons Limited, Toronto.

Washing Machines, etc.
Dowswell Mfg. Co., Hamilton, Ont.
Taylor-Forbes Co., Guelph, Ont.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

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CANADIAN ALUMINUM WORKS, LIMITED

CHAMBLY CANTON, QUE.

H. C. EADIE, Montreal Sales Office, 22 St. John St., MONTREAL

Give that man a **UNION PLANE** when he asks you for a

GOOD PLANE

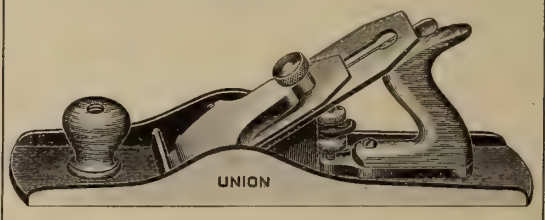
They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever adjustment and Solid Frog.

Patented.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

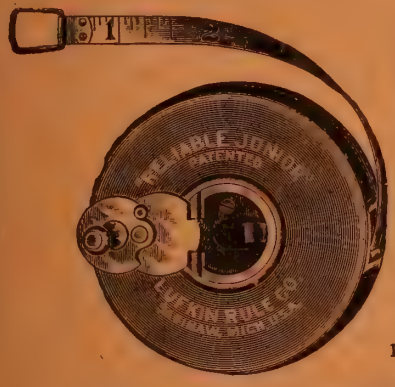
New Britain, Conn., U.S.A.

IRON

Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

London Rolling Mill Co.
Limited,
LONDON, CANADA.

STEEL



LUFKIN MEASURING TAPES

Steel, Metallic, Linen, Pocket, Ass Skin, Pat. Leather, Bend Leather, Etc.

ARE THE BEST AND MOST POPULAR TAPES IN THE WORLD.
YOUR STOCK IS NOT COMPLETE WITHOUT THEM.

LUFKIN RULE CO., Saginaw, Mich, U.S.A.

London Office and Warehouse—48 Lime St. New York City Branch—280 Broadway.

For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.

NIAGARA COW TIES

(Ohio Pattern)



"Dekol Butter Boy Prince"
Registered Holstein-Freisan Bull, No. 30369

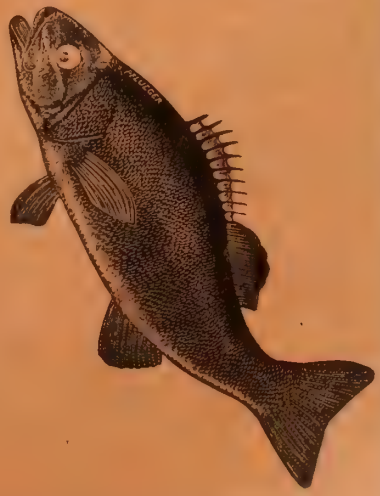
NIAGARA COW TIES

are an indispensable necessity in all first-class dairies, as they provide not only for an attractive appearance, but also for the actual security and welfare of the animals.

ONEIDA COMMUNITY, Ltd., NIAGARA FALLS, ONT.

PFLUEGER'S Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines. Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio

Est. 1868. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve Medals



Awarded
By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

"Redstone"

High Pressure

Sheet Packing

A packing that will hold. For use in highest pressures for steam, hot or cold water and air. Packs equally well for all.

From actual tests, we believe that this packing is the most durable and satisfactory of any on the market. Try a sample lot and see for yourself.

Manufactured Solely by

THE GUTTA PERCHA & RUBBER MFG. CO.

of TORONTO, LIMITED

HEAD OFFICES.

47 Yonge Street, Toronto.

Branches: Montreal, Winnipeg, Vancouver.

"Apollo" Galvanized
American Bessemer
Bessemer Blue Annealed
Polished Steel Sheets, Etc.

We can furnish Steel Sheets in different qualities, suitable for all purposes, and shall be glad to make quotations on receipt of particulars of your requirements.

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

Dominion of Canada Sales Agents

United States Steel Product Export Company

Sheet Steel and Tinplate Company Department.

SADLER & HAWORTH

LEATHER BELTING

We talk Quality

because we know that when you buy belting you want the right kind. It would be foolish to emphasize quality if we were not able to "deliver the goods."

Montreal, Toronto.

Cutlery and Fall Goods Number.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, OCTOBER 14, 1905 NO. 41

E. M. BICKINSON'S

CARVERS
CASED GOODS
TABLE CUTLERY



BUTCHERS'
HUNTING &
POCKET KNIVES

CUTLERY.

FOR SALE BY LEADING WHOLESALE HOUSES

BEST STEEL SHEETS

"QUEEN'S HEAD"—softest and flattest made.

"SOUTHERN CROSS"—Dead flat, quality guaranteed.

Also, good merchant quality, open and close annealed.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.

A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Lawn Mower Prices for 1906

Place your orders for Taylor-Forbes Machines, the best Mower in the world. We hold a place by ourselves.

Only One Grade of Steel for Cylinders, and that of the best and most expensive.

All Castings are Machine-made, and therefore of one size and uniform.

All Labor Used is Thoroughly Skilled. We do not use any cheap labor.

PRICES TO SUIT THE MOST FASTIDIOUS

Orders should be booked NOW for 1906

SOLD THROUGH THE JOBBING TRADE

Taylor-Forbes Company,

Montreal Branch:
9 De Bresoles St.

The Largest Manufacturers of Lawn Mowers in Canada.

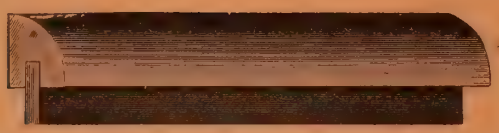
LIMITED.
GUELPH, CANADA.

See Classified List of Advertisements on Page 71.

WOOD AND FELT

WEATHER STRIP

TURNED
14 1905



No. 0. For sides, tops and bottoms of windows

URNED
14 1905
Book 41
c 6.



No. 2. For bottoms of doors.

Get our Prices on

ASH SIFTERS

COAL SCOOPS

OIL AND ALCOHOL HEATERS

RETURNED
OCT 14 1905



No. 1. For sides and tops of doors and large windows.

RETURNED
OCT 14 1905



No. 4. For joints between sashes and for centre of double doors.

RUBBER WEATHER STRIP

We can supply from stock rubber tube weather strip, most suitable for windows and inside doors.

Write for Prices and Samples.

RICE LEWIS & SON

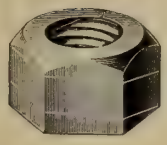
LIMITED

TORONTO.

PATENT

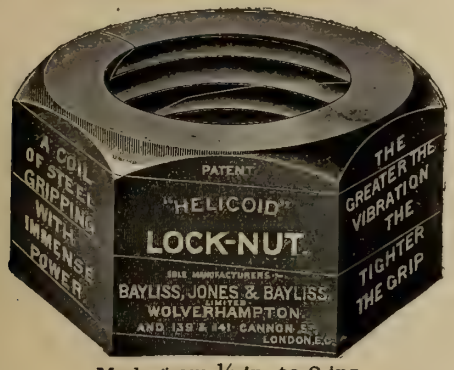
LOCK-NUT.





BAYLISS, JONES AND BAYLISS, Ld.

ARE SOLE OWNERS AND MANUFACTURERS



Made from ¼ in. to 2 ins.

SAMPLE NUT AND COMPLETE LIST MAILED FREE.

Also Manufacturers of BOLTS, NUTS, PATENT TIE BARS, RAILWAY AND TRAMWAY FASTENINGS, IRON AND WIRE FENCING, HURDLES, RAILING, GATES, Etc.

VICTORIA WORKS:— **WOLVERHAMPTON,** (ENGLAND).

LONDON OFFICES AND SHOWROOMS: 139 and 141 CANNON ST., E.C.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.



"AMERICAN"

(2 in 1) **TWIN FREEZERS**

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.

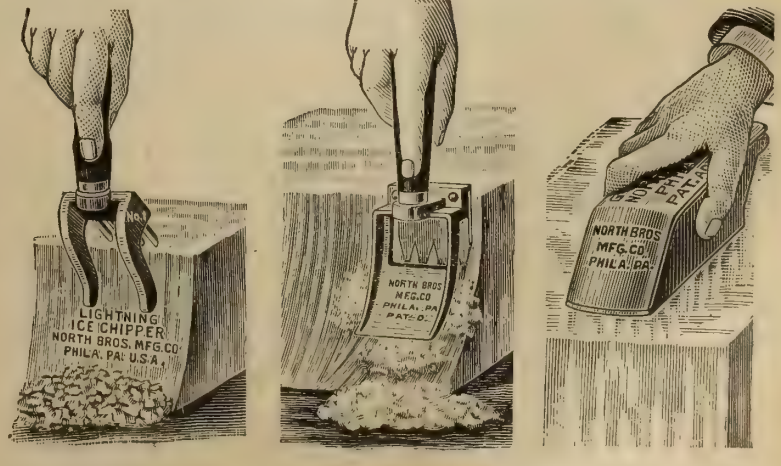
PHILADELPHIA, PA.

"LIGHTNING" "GEM" "BLIZZARD"



THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



"LIGHTNING" "CROWN" "GEM"
ICE CHIPPERS ICE SHAVE



No. 10—**"New Process."** Design attractive. Construction first-class.

No. 21—**"Standard."** Cheaper in quality, but well proportioned and handsome in appearance, and a strictly up-to-date heater.

New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

Write for Prices.

The Thos. Davidson Mfg. Co., Limited

MONTREAL.

Copper Sheets

HOT ROLLED COLD ROLLED

Plain, Tinned, and Planished.

We Solicit your Enquiries.

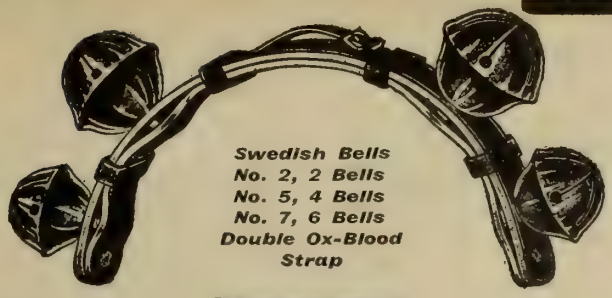
M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

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SLEIGH BELLS



Swedish Bells
No. 2, 2 Bells
No. 5, 4 Bells
No. 7, 6 Bells
Double Ox-Blood Strap

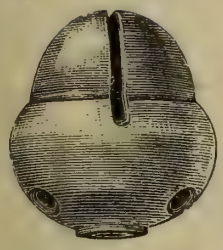
This line possesses a peculiarly harmonious tone, common to bells of this pattern only.

They are nicely put up; one set in a pasteboard box.

RETURNED OCT 14 190

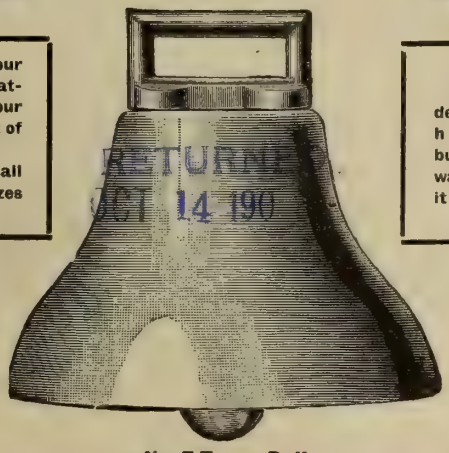
Refer to our 1,000 page catalog for our complete list of sleigh bells. We keep all styles and sizes in stock.

Our Mail Order Dep't. will handle your business the way you want it handled.



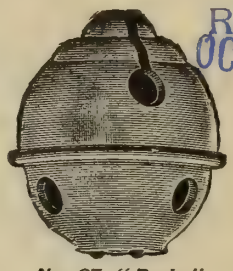
No. 138, "Body"

Cast Brass Dome Bell, fine tone, 30 heavily nickel plated bells, felt-lined russet strap, scalloped edge.



No. 7 Team Bell

Wrought Steel, Bronzed, 3¼ in. mouth, 3¼ inches high.

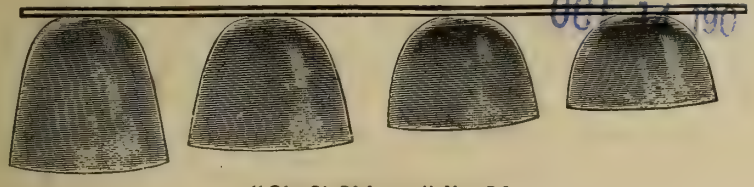


No. 67, "Body"

Stamped Metal Acorn Bells, 30 nickel plated bells, plain black strap.

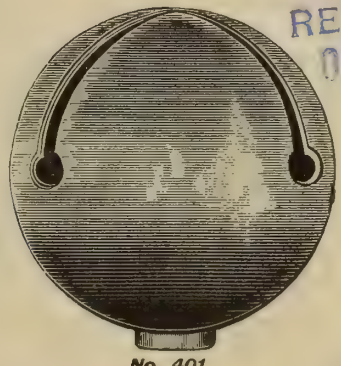
No. 150, Back, 12 nickel plated bells, plain black strap.

RETURNED OCT 14 190



"Shaft Chimes" No. 24

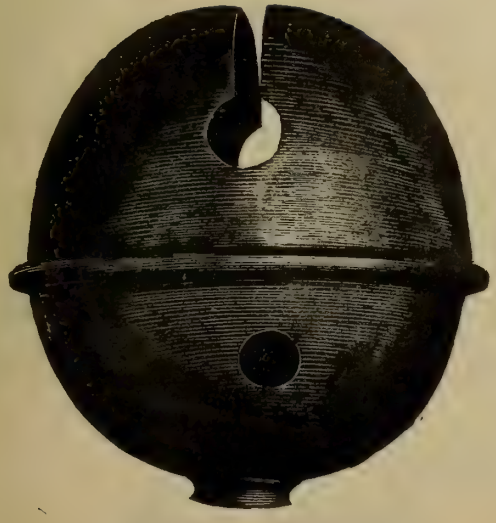
Four nickel plated cast bell metal gongs, ranging from 1⅝ to 1⅞ in. wide, iron strap. Extra fine and clear tone.



No. 401

Cast centennial, back. 10 natural brass finished bells, plain russet strap.

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No. 10, Back, Extra Large

8 stamped metal nickel plated "Dexter" Bells, 2¼ in. diameter, mounted on plain russet strap.



No. 200

Stamped Dexter, back, 10 nicke plated bells, felt lined studded russet strap, scalloped edge. This bell is the same size as No. 401, shown on this page.

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LEWIS BROS., LTD.

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CALGARY
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FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

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A Royal Warrant



couldn't secure you more fully.

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This saw is made of CRUCIBLE CAST STEEL, of the FINEST QUALITY, is tempered in Oil, carefully tested, and is

FULLY WARRANTED

If found defective upon reasonable trial the purchaser may return it to the Ironmonger from whom he bought it and who is hereby authorized to replace it free of charge or to refund the price paid.

If returned, this label, properly filled in on the reserve side, must be attached to the saw.

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Etna Works, SHEFFIELD

To every hand saw we send out is attached a label corresponding to this.

You assume no risk in selling our saws—your customer takes none in buying them.

We stand behind you and guarantee satisfaction.

Couldn't have anything fairer than that could you?

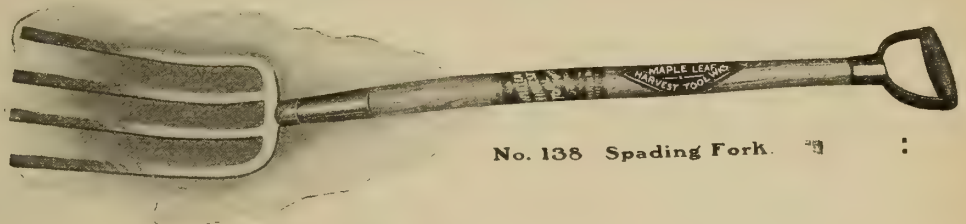
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Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



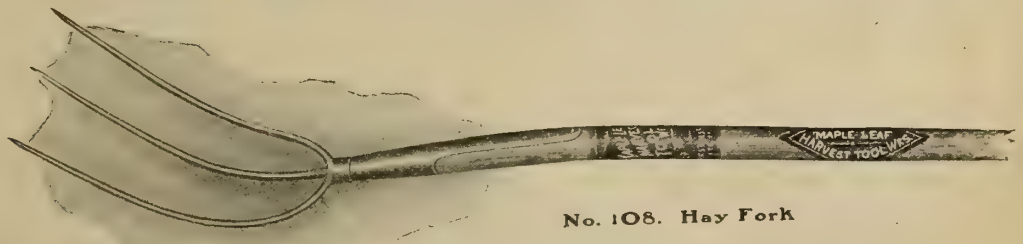
No. 122. Manure Fork.



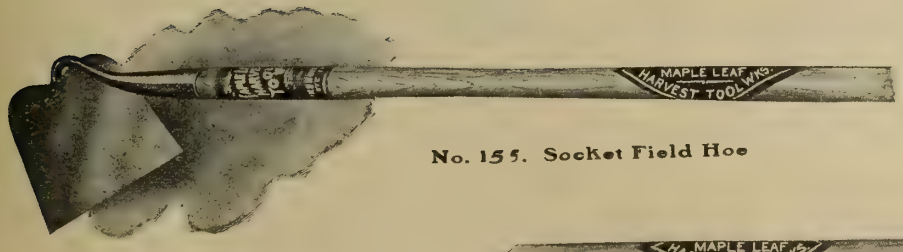
No. 138 Spading Fork.



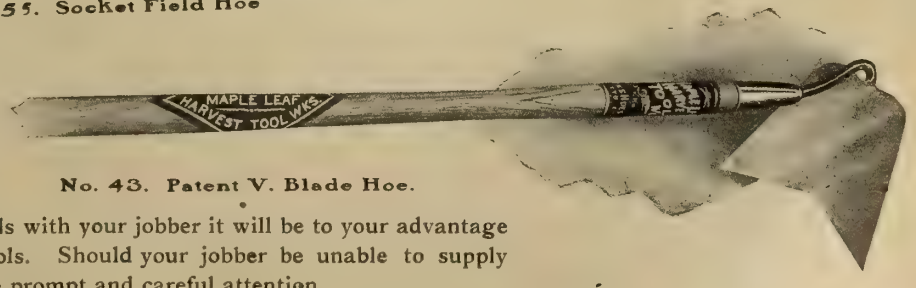
No. 243. Beet Fork.



No. 108. Hay Fork



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

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MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

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R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

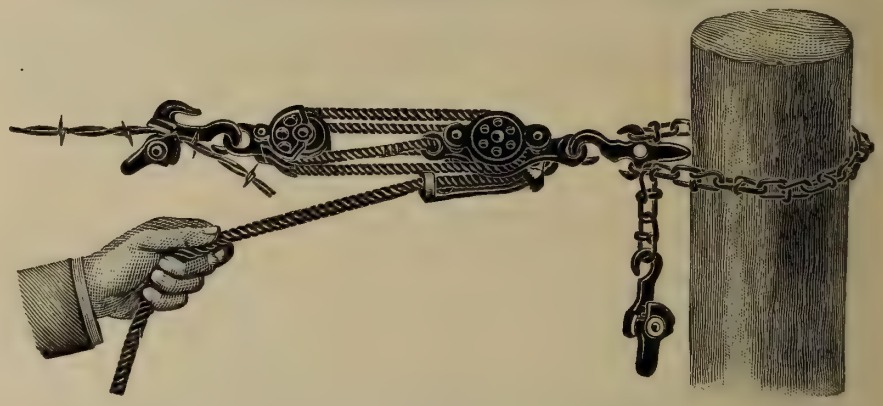
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



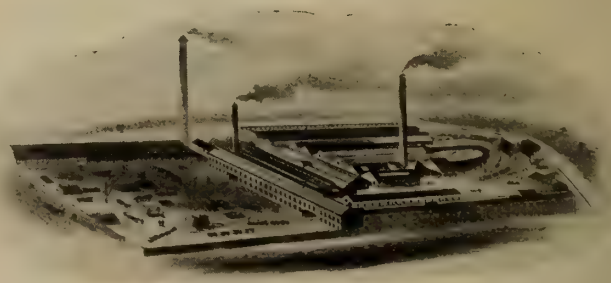
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



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To handle any but reliable goods.

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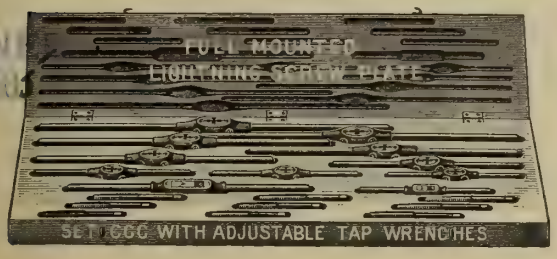
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Set 119, 9 sizes taps and dies with stocks, ¼ to 1 in.



Stock supplied with "Derby" Sets.



Set CCC, 9 sizes taps and dies with stocks, ¼ to 1 in.



Stock supplied with "Lightning" Sets

Have you the full mounted sets of "Derby" and "Lightning" screw plates in stock? You will find them sellers on account of their convenience and low price.

You should investigate their merits.

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Christmas Silverware

Write for Catalogue Illustrating Newest Designs in

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3 SEPARATE AND COMPLETE CATALOGUES

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Book 41
page 63



No. 540 TEA SET APPLIED, WITH No. 1400 WAITER

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of Electro Silver Plate of every description, and suitable for all markets.

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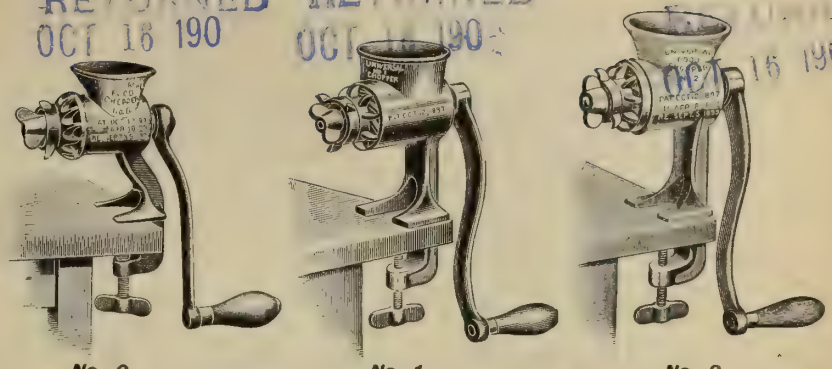
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UNIVERSAL FOOD CHOPPERS

WILL CHOP ALL KINDS OF

MEAT, FRUIT AND VEGETABLES

WITHOUT SQUEEZING OR MASHING



No. 0 No. 1 No. 2

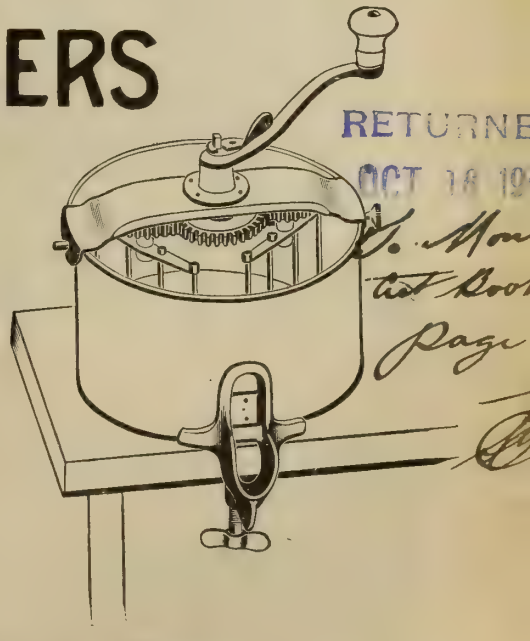
No. 0.	Small	Family	Size,	Weight	3	lbs.	each,	3	Cutters,	Chops	1½	lb. per minute.
No. 1.	Medium	"	"	"	4½	"	"	3	"	"	2	" " "
No. 2.	Large	"	"	"	4¾	"	"	3	"	"	2½	" " "
No. 3.	Hotel		"	"	8¼	"	"	4	"	very fine to very coarse.		

UNIVERSAL MARKET CHOPPERS

No. 231.	Capacity	4	lbs.	meat	per	minute,	weight	8½	lbs.
No. 204.	"	6	"	"	"	"	"	14½	"
No. 244.	"	4	"	"	"	"	"	35	"

UNIVERSAL CAKE MAKERS

will Mix Cake Batter, Whip Cream and Beat Eggs



The Cake Maker pan is made of one piece of sheet steel, covered with a heavy coating of pure tin, which does not darken the batter.

The operative parts can be lifted off with the bridge, making the machine exceedingly easy to clean.

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Every Dealer Will be Asked for Them

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RUSH ORDERS
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Caverhill, Learmont & Co.,

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Hamilton Handiness

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MODEL No. 23

HAMILTON RIFLE

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THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**

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Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

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The American Hardware Store

A Manual of Approved Methods of Arranging and Displaying Hardware.

By R. R. WILLIAMS, Hardware Editor of the IRON AGE.

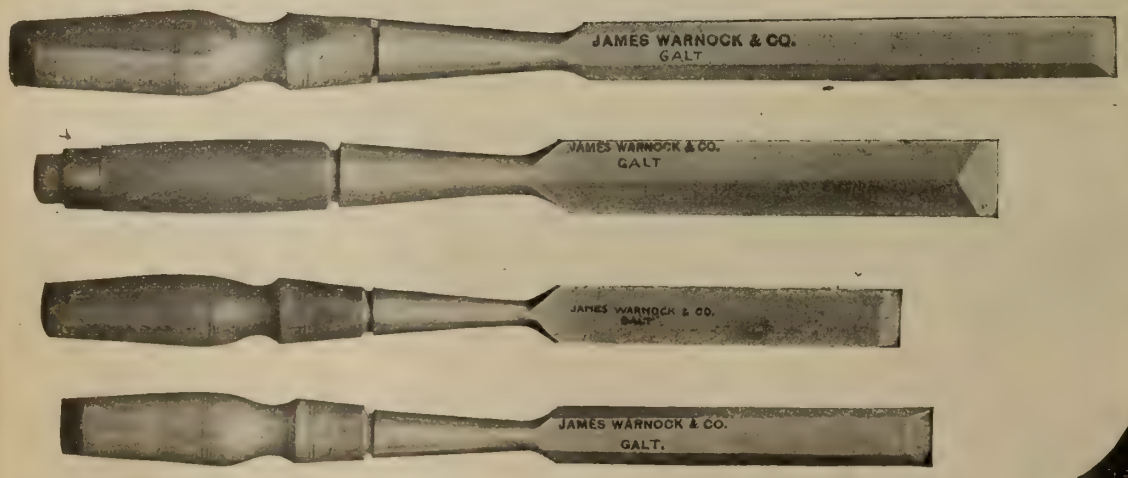
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For all kinds of Coal



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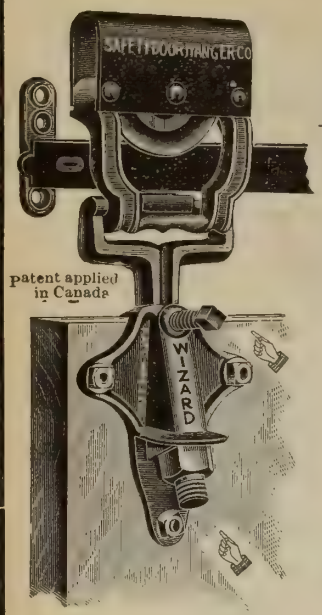
The fire-pots also have been made nearly straight, giving larger capacity and less trouble from holding up the clinkers and ash.



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WIZARD ADJUSTABLE

Flexible Door Hanger

may be placed as

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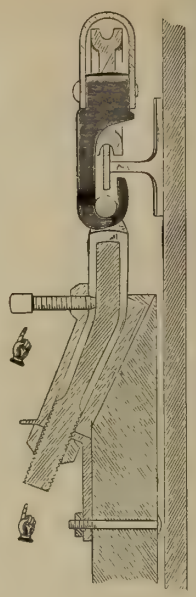
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Lateral Adjusting Screw

This makes it the **Best Hanger** for **Canadian Winters.**

Ask Your Jobber or Write Us.

Vertical Adjusting Nut.

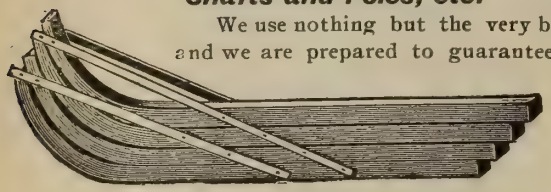


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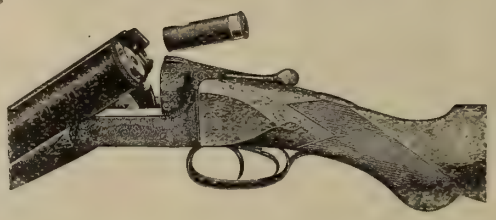
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The prices are right !

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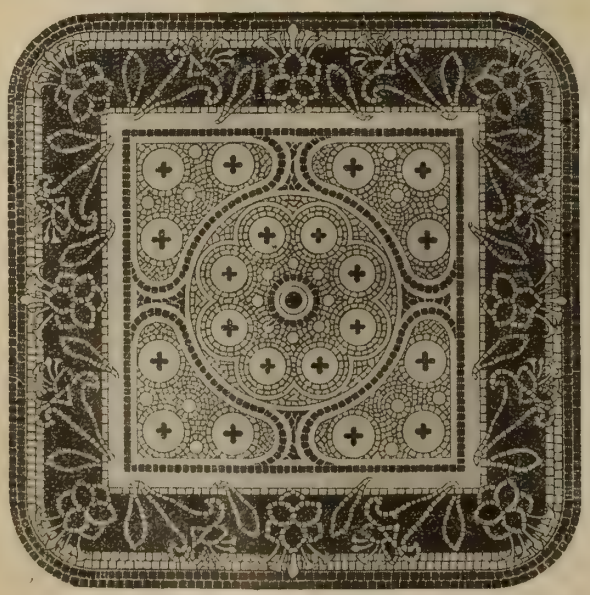
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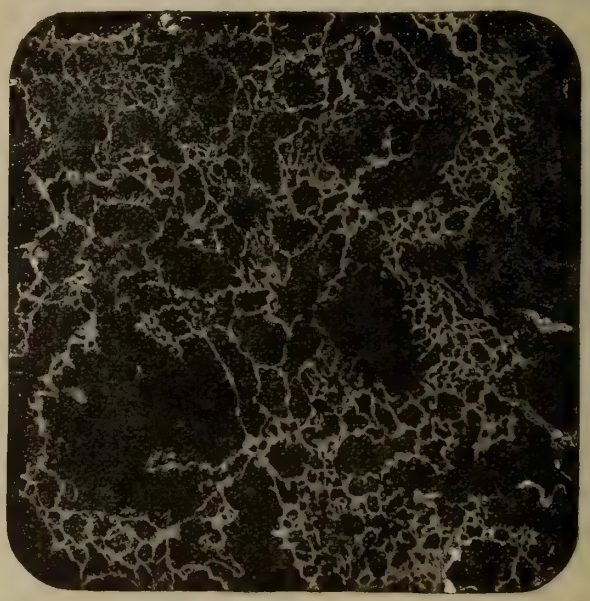
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KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

THE HISTORY OF CUTLERY

THE use of knives dates from the earliest times, and begins with primeval man, who rubbed flint flakes until a sharp edge was obtained, thus forming a knife. So right through the ages of man's existence upon this earth—many thousands of years in point of time—a steady development in the manufacture of knives has been going on.

In early records knives and swords are intermixed, pointing to the offensive and defensive purposes for which knives were made. Indeed, the term "cutlery," says the Ironmonger's Chronicle, applies to edge knives of various forms and shapes, many of which were used, concurrently, for warlike and peaceful purposes. Cutlery denotes knives, scissors, razors, and any other sharp-edged cutting instruments. The process of evolution from the flint and stone celts to knives of iron and steel included in its march bronze knives and copper swords and, incidentally, bronze reaping-hooks and other articles of husbandry. This development has been steadily going on until the present time.

Homer says the knives carried at the girdle in his day were of triangular form. Many of the knives found in British barrows have long, narrow blades, others again are broad and of dagger form. Both Normans and Anglo-Saxons carried about with them a met-soex, or eating-knife. King Athelstan left his knife on the altar of Beverley Minster as a pledge for his redemption of a vow of benefaction. Up to the end of the fifteenth century knives do not appear to have been used much at table, but as every one carried a knife at his girdle possibly it served to cut meat with in common with many other uses. Meat knives of Queen Elizabeth's day had handles of white bone with jewels set in them, thus being antitypes of the bone-handled table cutlery of later days.

Spring shears of Roman form were the only kinds of cutlery known with springs up to Norman times. Of course spring pocket-knives are, comparatively, a modern invention, but previous to their introduction "jack" knives, which shut into a groove or handle without any spring or lock, were made. The manufacture of metallic knives in England was doubtless at first isolated, and confined to those village smiths who were cleverer than some of their neighbors. As time went on "cutlers," as makers of cutting weapons and tools were called, banded together in large centres for mutual protection, and later were granted special charters in the manner customary in those days when guilds of traders were no sinecures, and when power to deal with commercial matters was needed, the law courts of the period not being competent to understand trade disputes.

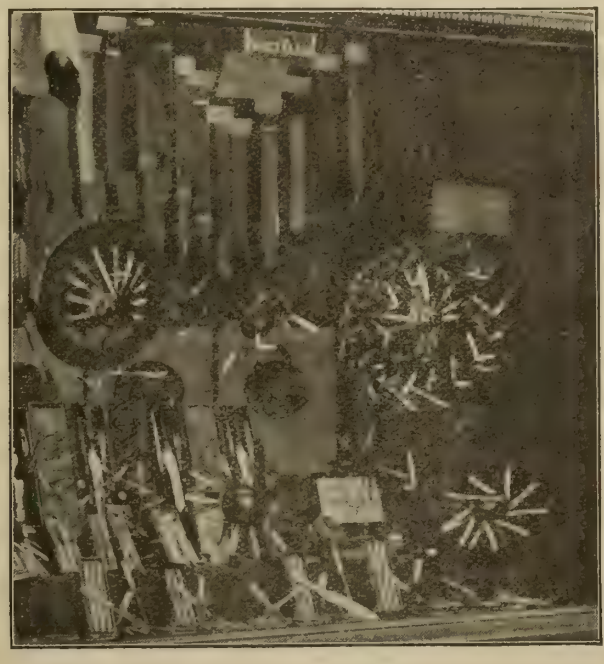
The arms of the cutlers of London were granted by Thomas Holme, Clarencieux Knight of Arms, in the sixteenth year of the reign of King Edward IV., and later cutlers were granted a crest which consisted of an elephant bearing a castle.

Knives have been made in England for many centuries, but in the early days they were coarse, rough and crude. As time went on British cutlers advanced in the knowledge of their craft, and when James I. sat upon the throne of Great Britain it was generally acknowledged that the finest and best knives in the world were made in London. It is said that Richard Matthew, whose workshop was at Fleet Bridge, was the first Englishman who attained any great skill in making fine knives. During the reign of Elizabeth he obtained a prohibition against all strangers, preventing them from bringing any knives into England from beyond the seas (at that time the great place for making cutlery was Flanders.) The same Richard Matthew also obtained a patent from Queen Elizabeth for making knives and daggers with a new kind of handle, but complaints were lodged against him by other cutlers in the city of London, it being urged that the prices charged were prejudicial to Her Majesty's subjects.

In the London Hall of the Cutlers' Company there is an ancient picture of a cutler named Crawthorne, who gave certain charitable bequests to the cutlers of London in trust. The London Company of Cutlers were divided into three sections, namely, those who were smiths and forged blades, and consequently they were known as Bladers; the men who made hafts for the bladers, who were known as Haftmakers; and lastly, the Sheathmakers, who made the sheaths for knives, swords and daggers. In the reign of Henry VI. these three companies were incorporated in the one fraternity, under the name of the Cutlers' Company.

Sheffield has long been associated with the manufacture of cutlery, and in 1565 it is recorded that at a Court of the Rolls of the Manor of Sheffield a jury of cutlers was impannelled "to assign marks to the different manufacturers, whereby their respective knives could be identified." In 1624 the Sheffield cutlers, who had been protected hitherto by the Lords of Hallamshire, received an Act of Incorporation "for the good order and government of the makers of knives, sickles, shears, scissors and other cutlery ware." In 1638 a hall was built in which they could transact business, and the "Feast," still given annually by the Master Cutler on his official appointment, was inaugurated. The trade marks granted mostly belong to one of three classes: (1) one or more letters, as IXL; (2) single words, as names of persons or places, such as Carver, China, etc.; (3) designs, as a dagger, a cross, or an anchor.

The commencement of the manufac-



Window Display of Cutlery.

ture of knives with springs in Sheffield is attributed to the seventeenth century, but, as a matter of fact, very few knives with spring blades were manufactured before the close of the eighteenth century. One of the earliest references to Sheffield cutlery occurs in Chaucer, in which it is said, "Sheffield thwitel bare he in his hose."

Dr. Johnson asserts that knives as table appointments were not introduced in Scotland before the Revolution. Before that period every man had a knife of his own as a companion to his dirk or dagger. The men cut the meat in small portions for the women, who put them into their mouths with their fingers; the use of forks at table was then considered a superfluous luxury, and in Scotland was forbidden to the Covenanters by the decrees of their church. Princes and nobles carried knives at all times, substituting in later days swords. Spenser, in his "Faerie Queene," uses the word "knife" for a sword—"And after all his war to rest his wearie knife." Shakespeare, in the old quarto of 1597, makes Juliet wear a knife at the friar's cell. In the South Kensington Museum the dagger mark is to be seen on six of a set of fourteen knives, which have handles of ivory carved with portrait figures representing English sovereigns, all of which, with the exception of Edward V., are represented with jewelled crowns. Nine of these figures are shown with swords, four of them holding a sceptre in the right hand. On thirteen of the knives there is another stamped mark, which may be described as a diamond, joined at one point to a trident. The knives are of English make, and bear date 1607.

Although the manufacture of knives had been carried on for some time previously, it was not until 1820, when the first Lord Wharncliffe introduced his famous blade, that spring pocket-knives came into common use and were carried regularly in the pocket. The Wharncliffe blade had a long term of popularity, and is still sold in some localities.

To return to the practical side of cutlery, as far as it relates to knives, it is surely unnecessary to remind hardwaremen what kind of knives are sold at the present day, nor yet to relate the various types in common use. Table knives have blades of different shapes, and handles of various materials and different hues. Pocket knives have gone through many revolutions, and both large and small examples of cutlery have been produced. Knives with hundreds of blades and curious fittings have been made up, showing to what perfection the cutler's art has reached.

The manufacture of cutlery is no longer confined to Sheffield and London, indeed the exclusive production has long passed from Great Britain. The great works at Solingen show how Germany has cultivated the industry, and Americans know that the fame of the cutler has crossed the Atlantic. Nevertheless British manufacturers may take heart, for Sheffield still leads the van, and by far the greater quantity of cutlery sold by ironmongers in this country is made there.

Display of Cutlery.

A very neat window can be dressed with cutlery, the brightness of the blades and the variety of the goods allowing the dresser much latitude in his endeavor to make the window attractive. In the window shown in the accompanying illustration several methods of showing knives and razors are shown, the stands being made of wire and plush covered wood. The circles of blades attract the attention of passers by and bring trade to the store. With a little more labor wire strands can be strung across the window and knives of all sizes hung to the wire support.

Carving sets and other case goods can be arranged attractively on shelving or platforms in the window, while oilstones and other sundries can fill up the odd spaces and corners. As shown in the cut the hanging of strops from the ceiling relieves the vacancy too often found at the top of otherwise well-dressed windows. The show cases supplied by razor manufacturers can also be used to advantage in arranging the display.

KNIFE BLADES

The public appear to be developing an instinct of criticism as to the relative durability of knife blades, says the Hardwareman. People often wonder how it is there is such a marked difference in the price of knives that apparently to the uninitiated look the same. Hitherto they have accepted the fact that the difference is there in some occult form which is beyond ordinary comprehension, contenting themselves with bending them as a sort of test, but now with the march of the times they require to be informed on the point. The cheap knife is, of course, a machine-made article, while the higher priced domestic implement is hand-forged—a fact which considerably enhances the cost. Anyone seeing a pile of either in the rough form before being buffed would hardly believe that they could ever be made bright and attractive as they appear when purchased in the paper wrapper in their finished state. The same applies to silver goods before burnishing, the finishing process making all the difference between apparently old lumber and artistically finished goods.

SPORTING GOODS MAKE TRADE.

A GOOD story is told of the man selling soda water fountains, says the Sporting Goods Dealer. He worked hard to sell one to an old druggist and could only get the response that the druggist had never had any call for soda water. The up-to-date druggist on the opposite corner put in a soda water fountain and in a few weeks, and during the hot Summer days, the profits from it paid the rent of the store. Now, the old, fossilized druggist would not put in the soda water fountain because he had never had any call for soda water. It's so with many merchants. They do not put in stock good paying lines which belong to their business simply because people do not come and ask for the goods as they do for common wants of living. The business, however, is there, and it is only ready for the storekeeper to reach out and take up if he only knew it.

Sporting Goods are Profitable.

That sporting goods when once taken up are profitable is known by the fact that they are bringers of business. They bring customers into the store, men customers, for sporting goods appeal to men only. This is one reason why department stores have been and usually are unsuccessful in selling fishing tackle or other sporting goods, because the department store is not a man's store, and women seldom buy their husband's fishing tackle or his gun goods, although they may buy his shirts or even his neckwear. But when it comes to picking out his fishing outfit or camping goods he draws the line; if a sportsman he finds as much pleasure in buying the goods as using them. So it is that no matter what business the dealer is doing he finds that a line of sporting goods will bring more men customers into his store. Suppose it to be a hardware store, it is true that nearly 80 per cent. of the average dealer's customers are men. Now the more customers a dealer has coming to his store—no matter for what they may come—the more trade that dealer is going to have. It may be only a fishline or a box of cartridges the customer buys to-day. He may formerly have been buying what little pick-up tools he needed at another store, but if he is well waited on, gets a good fishline or box of cartridges at the right price, sees a good display of goods, a well-arranged and well-kept store, you may rest assured that it is only a question of time until that man will become a regular customer of that store.

Good Display Sells Goods.

It has been carefully estimated that in fishing tackle not over 50 per cent. of the goods sold at retail are ever used by the original purchasers. It goes without saying that the reason for a large amount of the tackle being bought is because the sportsman sees something he fancies—or fancies the fish will fancy. We all have heard about the country boy who caught all the big trout with a bit of white string, a bent pin and a hickory pole for his outfit. Many of us know that in our younger days as country boys that with a ten-cent outfit we used to catch more fish down by the big swimming hole than we ever have since, even with the best tackle and most attractive assortment of flies. But, of course, in those days there were more fish and it was easier to get them. And that is just another reason why a better class of fishing tackle is being sold. Fishing has become here in many parts of our own country more of a science, and better tackle, lighter rods and lines and leaders and smaller flies are necessary. But all this bears out the statement that very much of the tackle bought is really never used, and therefore to be sold it must be displayed. There is the whole thing in successfully selling sporting goods. A man may come into a store and buy almost anything in hardware, without having his

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

attention drawn to it. He knows pretty well about tools, or files, or locks, but when it comes down to sporting goods, the only way to sell the goods—except ringed fish hooks and .22 short cartridges—is to properly display the line.

FACTORY-LOADED SHELLS BEST.

DISCUSSION of a more or less heated kind has been taking place in the columns of several of the trans-Atlantic sporting papers on the superiority or otherwise of the factory or the dealer in the loading of cartridges. The argument is a strong one on both sides, but the balance seems to lie on the side of the factory machine-loaded shells. The contention of the hand-loaders is that an individuality is necessary in the cartridge because the gun has an individuality which has to be studied in order to produce the best results. The advocates of the factory-loaded shells, however, aver that the uniformity of loading even of second-rate materials produces better results by machine-loading than similar materials loaded by hand. There seems to be common sense in this, and if it be conceded that the factory uses the best of material surely the exact uniformity of the loading must minimize the faults of it. It may, of course, be true that every gun has its individuality in shooting, which necessitates special cartridge loading, but this appears to cut two ways, in that it makes the gunmaker admit that he can not make a gun that will shoot an ordinary cartridge effectively. The way to settle such a question is to experiment in a series of trials for pattern and penetration. There seems prima facie to us a probability on simple logical principles, of the factory load winning hands down.

STORAGE OF EXPLOSIVES.

FOR years the city council on Montreal have been trying to adopt by-laws which would regulate the storage of oils and explosives in that city. During this time the most absolute carelessness has been manifested on the part of many dealers, some of whom have not even taken the trouble to secure the license demanded by the city statute. Cases are cited of immense quantities of powder being stored in old wooden shacks, in some of the busiest parts of the city, without paying any attention to the law requiring a city license for this privilege. Under such circumstances it is miraculous that Montreal has escaped many serious explosions.

At length, however, an adequate by-law has been prepared, and the city fathers have given their assent to its second reading. Its comprehensive and drastic nature may be guaged from the fact that it covers twenty-two printed pages, with the avowed object of prohibiting "the manufacture, storage, use and transport of explosives, and highly combustible materials, within the city of Montreal, and to prevent accidents by fire."

The retail hardware trade will be especially interested in the following provision:

"No person shall store or keep for sale any of such liquids (petroleum or other oils) in any quantity exceeding one hundred (100) gallons or any of the explosives above mentioned, except in building or premises approved of by the inspector, and then only after a permit to do so has been obtained from the council, as hereinafter provided."

The by-law also contains half a dozen clauses on automobile storage, repairs to the machines, and the sale of naptha, and instructions are very definite as to the use of explosives in blasting operations.

The new regulations are being very favorably received among the wholesalers, and it is almost certain that they will work out to the great ultimate advantage of the retailer as well.



How to Get More Business

This is for the wide-awake paint dealer. If you are not a progressive, energetic dealer this is not for you. If you are always alert for new business, read this over—read it twice.

There's a great field for trade and profits in *S-W. Aluminum Paint.* It is made especially for use on gas stoves, ranges, water boilers, pipes and fixtures, machinery, implements, mail boxes, chandeliers, railings, iron poles, decorative work, outside or inside, store fronts, automobiles, etc. When people see what it can do, they buy it constantly and are delighted with it. It has these distinctive points of excellence that put it in a class by itself: no disagreeable odor; gives a durable velvety lustre; is unaffected by extremes of heat or cold; works easily; has great spreading capacity. For these reasons it reaches a very large sale wherever it is pushed.

S-W. Aluminum Paint is a specialty that is an especially good seller at this time of year. Write our nearest office for information.

THE SHERWIN-WILLIAMS CO., PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre Street.
Warehouses: 86 York Street; 147 Bannatyne Street, East, Winnipeg, Man.

1490

SPORTING EXPLOSIVES.

IN the smokeless powders now on the English market, there has been practically no change for the current year, but it is interesting to observe that as time goes on the majority of them are coming to conform more and more to a common standard of loading. Powders of the 42-grain type, and those of the 33-grain type, have this year been new issue of "Loading Instructions" published in London by the Sporting Goods Review. In looking over the new chart it is at once observed that all the 33-grain granulated powders, such as Improved E. C., Imperial Schultze, Empire, or Smokeless Diamond, can be charged practically alike. In the same way, 42-grain powders, Schultze, Amberite, etc., have something nearly approaching a common basis for practically all bores. The "Condensed" powders, leaflet powders, etc., each compound having its own peculiarities, cannot, of course, be grouped together in any such manner, and for them special loading is always required. In sporting rifle powders, we have had the new Cordite M.D. adapted for small-arms, which is a decidedly successful innovation, although the explosive requires very careful loading. There is also Messrs. Kynoch's "Axite," which already has had a run of popularity. The firm is receiving daily large numbers of orders for cartridges which, it is specified, are to be loaded with "Axite."

A novel picture hook is being introduced in England by Crawford, Hughes & Co., Ryder street, St. James, London, S.W. It fits on picture molding and prevents the tilting of pictures by having three teeth on the lower end, two pointed upward and one down.

* * *

Let him who would move the world first move himself.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Florence Steam Boilers.

PEASE FOUNDRY CO., Toronto, have issued catalogue "A," illustrating and describing Florence steam boilers, water heaters and heating materials. The book is very tastefully gotten up, comprising twenty-four pages and cover. The illustrations are very beautiful and the reading matter exceptionally instructive regarding hot water and vacuum heating. Another booklet which this company has gotten out is entitled "A Winter Comfort," being devoted particularly to a description of the Pease warm air furnaces, the book comprising forty-four pages and cover. Still another book is one of thirty-two pages and cover, describing the Economy sectional boiler for steam and water. All of these catalogues are of particular interest to the heating and stove trade, and copies can be secured from the manufacturers by mentioning the name of Hardware and Metal in a letter of inquiry.

Sportsmen's Specialties.

"Marble's Specialties for Sportsmen" is the title of an elaborate booklet of fifty-six pages and cover just issued by the Marble Safety Axe Co., Gladstone, Mich. Safety pocket axes, axe sheaths and protectors, safety pocket knives, hunting knives, fish knives, compasses, waterproof match boxes, rifle sights, fishing tackle, game bags, hunting belts, and numerous other specialties required by sportsmen at this season of the year are thoroughly described and illustrated in the book, besides which there is a splendid department of hints to hunters, the whole making a valuable book for the hardware merchant to have on his counter during the hunting season. If the name of Hardware and Metal is mentioned a copy of the booklet will be supplied to any of our readers by the manufacturers.

Home Happiness.

Gurney Oxford heaters and radiators, and Doric boilers, are the subjects written of and pictured in a most artistic booklet of twenty-four pages and cover, supplied by the Gurney Foundry Co. to dealers who handle their stoves. and to others who desire to learn more of the good qualities of Gurney goods. The booklet is very well arranged, and the reading carries the reader from the earliest attempts at making fire for heating down to the most modern systems of to-day. Inquiries for copies of the booklet should be sent to the Gurney Foundry Co., Toronto, and the name of this paper should be mentioned.

Electrical Specialties.

Hubbell pull attachment plugs are described in a folder just sent us by the R. E. T. Pringle Co., manufacturers of electrical apparatus and supplies, St. John, Montreal, and Toronto. The cuts reproduced indicate the workings of these devices, while the reading matter gives considerable additional information. The company has also issued leaflets describing telephone cross arms, fusible shade holder receptacles, Hubbell shade holders, and the Crown commutator compound. Dealers handling electrical specialties should send for these leaflets and folder, mentioning Hardware and Metal when writing.

AND NO DISCHARGE

Bang the hammer of a loaded Iver Johnson against the table; throw the revolver around as carelessly as you would a handkerchief; handle it as roughly as you may, and there can be positively no discharge —don't do this with *any other make of revolver* if you value your life.

You can't fire it unless you pull the Trigger

IVER JOHNSON REVOLVERS



are the *only* revolvers absolutely safe from accidental discharge—*as safe in the home as the kitchen stove.* The reason lies in the fact that the hammer *never* touches the firing pin, and the firing pin never comes in contact with the cartridge except when the trigger is pulled *all the way back.*

Our Booklet, "SHOTS," mailed free with our descriptive catalogue, *proves* these claims and describes Iver Johnsons with complete illustrations. May we send it to you?

IVER JOHNSON SAFETY AUTOMATIC

Price: Hammer, $5.00; Hammerless, $6.00

Iver Johnsons are sold by dealers the world over, or direct from us if your dealer won't supply you.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

Sporting Goods.

The firm of T. W. Boyd & Son, Montreal, have issued a fine catalogue of 290 pages, profusely and well illustrated, of their immense stock of fire arms, sporting goods, bicycles and general material, and style themselves the headquarters for Winter sporting goods in Canada. They take the output of a toboggan factory, and their snowshoes and moccasins are made by the Indians for them. Mention Hardware and Metal when sending for a copy of the book.

Mutual Fire Insurance.

"Donts & Cants" is the title of a leaflet recently published by the Hardware Dealers' Mutual Fire Insurance Co., of Wisconsin. It announces that this company has saved its patrons during the first eight months of this present year over twelve hundred dollars. The Donts include cautions not to be mislead, not to procrastinate not to serve other interests but the dealer's own. The Cants include admonitions to subscribe to the insurance fund of this company without delay. C. A. Peck, the energetic secretary, located at Berlin, Wis., will be pleased to send one of these leaflets to dealers upon application.

Fireproof.

The Pedlar People, of Oshawa, Ont., have just issued a booklet under the name of "Fireproof," illustrating the uses of their newest lines—steel studs, furring strips, angle strips, suspended ceiling, and other fireproofing methods. This booklet, which contains sixteen pages of neatly printed and well illustrated matter, will be sent to all interested readers of this paper who drop a card to the head office of the Pedlar People at Oshawa, or to any of their numerous agencies.

Scully's Stock List.

The September and October issue of the stock list published by the Scully Steel & Iron Co., Chicago, has been received, the book comprising one hundred and forty-four pages and cover. The machines and tools listed are well illustrated. Readers of Hardware and Metal can secure the copy by stating they saw the offer in this paper.

Canadian Buffalo Forge Co., Limited.

The above company have issued a small booklet to circulate through their jobbing agents, illustrating their blowers, drills, punches, tire benders, etc. An interesting argument advanced in favor of Canadian Buffalo Forge Co.'s goods is that, being made in Canada, there is no necessity of paying duty on repair parts. This pamphlet will be sent to any one inquiring of the Canadian Buffalo Forge Co., Limited, Montreal.

H. S. HOWLAND, SONS & CO. LIMITED

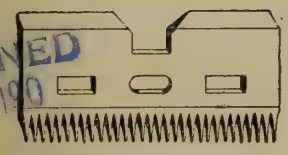
HARDWARE MERCHANTS

Only Wholesale

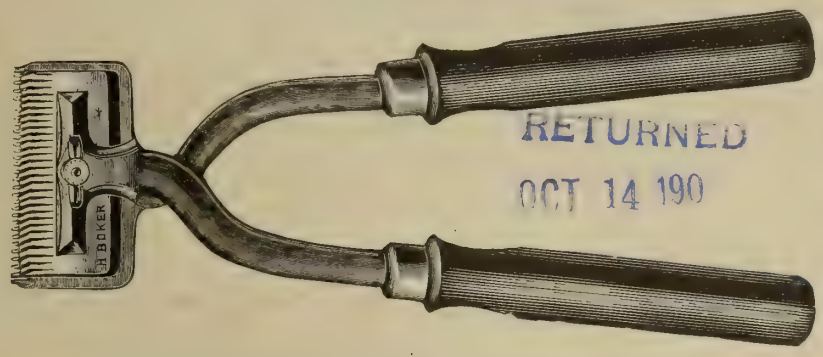
138-140 WEST FRONT STREET, TORONTO

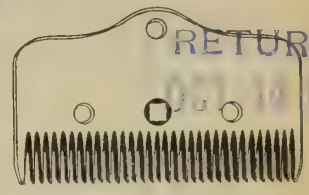
Wholesale Only

Horse Clippers



"Perfection" Top Plate





"Perfection" Bottom Plate

Hand Horse Clippers

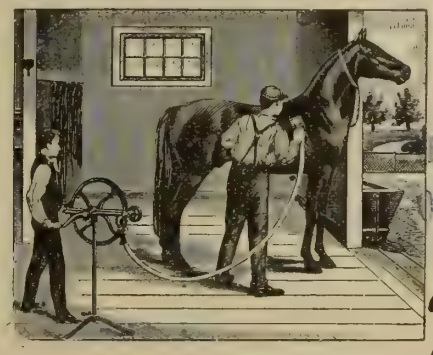
"Dandy" Clipper
"Reliance" "
"Keen Cut" "
"Perfection" "
"Sovereign" Ball Bearing.

"Oak Lake" Galt three-in-one Clipper
" 4073 " "
Burman's Newmarket "



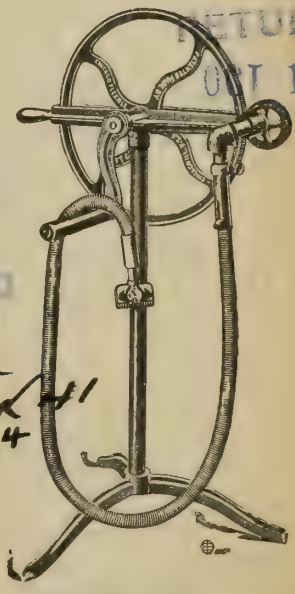
The "20th Century" Clipper

12-inch Driving Wheel, net weight 15 lbs. It is suspended from the ceiling by a rope, permitting all parts of the horse to be reached.
Flexible shaft, 4 ft. 5 inches long.



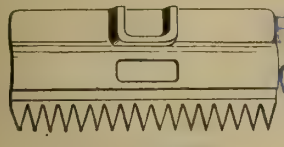
1902 Chicago Horse Clipping Machine

It is made with all cut gearing from solid metal. The teeth are milled, not cast, with hardened steel pinion. It is positive power, no belt to slip, no lost motion, every turn of the wheel is sure to bring 28 vibrations of the knife-blade.

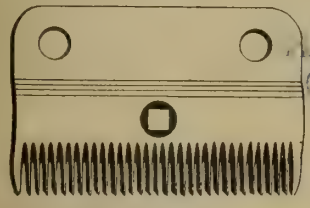


1902 Chicago Clipper

Driving Wheel 19 inches.
Flexible Shaft, 6 ft. 6 inches long.



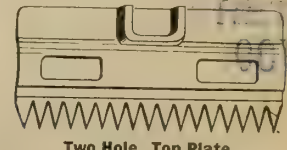
One Hole, Top Plate



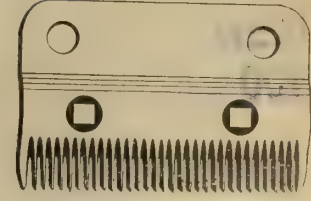
One Hole, Bottom Plate



Stevart's Patent Knife



Two Hole, Top Plate



Two Hole, Bottom Plate

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

Our prices are right

Registers and Ventilators

This is the season when you require Registers and Ventilators on short notice.

We have them ready waiting your call. They will be shipped the same day on which your order is received.

We have only good ones. We keep only that quality.

Remember that you can order a standard size Ventilator or Register from Pease and have it shipped to you the same night.

Write For Particulars.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE Canadian Pacific Railway Company are planning to establish an elevator with a capacity of 1,000,000 bushels at Vancouver. They are also looking into the possibility of operating trains through the mountains by electric energy, for which work 65,000 h.p. is now under development from a waterfall in the vicinity of Calgary.

The Jackson Wagon Works of St. George may remove to Galt.

The London Box Co. are to rebuild their factory which was recently burned down.

The London Machine & Tool Co. have secured a permit to erect a $40,000 factory in Hamilton.

The Dominion Atlantic Railway are now operating the Midland Railway in connection with their system.

The peat works at Fort Frances are now in full operation. A large amount of electrical machinery has been installed.

A cedar mill with a capacity of 40,000 feet of lumber a day is being erected at Greenway Sound, B.C., by J. S. Emerson.

H. Lamontagne & Co., wholesale harness manufacturers, Montreal, have decided to establish a distributing warehouse at Brandon.

The Hampel Paper Box Co., of Brantford, are adding new machinery to their plant and extensive alterations and improvements are contemplated in the near future.

The contract for the construction of the Lake Superior branch of the Grand Trunk Pacific Railway has been awarded to Foley Bros., Larsen & Co., of Winnipeg.

The Pilot Bay smelter situated on Kootenay Lake, near Nelson, B.C., has resumed work after being closed since 1898. The zinc reduction works will be used in conjunction with the plant.

The report of the directors of the Dominion Iron & Steel Co., who hold their annual meeting on October 18th. shows that the earnings for five months amount to $366,062, not including the profits on the steel rail mill.

Port Hope has completed arrangements with a new company who will establish a factory in that town to manufacture building paper, etc. Fifty men will be employed and $50,000 will be spent in machinery and building.

Rhodes, Curry & Co., of Amherst, N. S., have received a contract from the I.C.R. for the building of two hundred box cars, one hundred to be built with a capacity of 30 tons and one hundred with a capacity of 40 tons.

The Ontario Electric Power Co. at Niagara Falls has completed a contract with an American firm to deliver 30,000 horse power at $12 per horse power, and have closed another contract in Welland for 1,200 horse power for $15 per horse power.

The Electrical Supply Co. of Moncton has been organized with John S. McGee as president. The company has taken over a patent adjustable electric lamp, patented by Osten Berry of Ottawa, and will also carry on an electrical supply business.

The Wolverine Cedar Lumber Company of Menominee, Que., have closed a deal for a large tract of timber on the Spanish River, Ontario, estimated to contain more than 100,000,000 feet. The price paid was $5 per thousand, or $500,000 for the entire tract.

Whalen & Bowman, of the Great Lakes Dredging Co., of Port Arthur, have purchased a site on island No. 2 at Fort William for the building of a dry dock and marine railway, together with a foundry and machine shop. The town is granting exemption from taxes for ten years and will also close the street in front of the site. The new industry will employ about one hundred men.

The Canadian Fairbanks Co., Montreal, have just closed a contract for all transmission material used in the new plant of the Boston Last Co. at Richmond, Que. This order includes Fairbanks Universal Giant Hangers, Oneida Steel Split Pulleys, Universal Giant Friction Clutches, shafting, couplings, etc. A similar order has also been received from the Dominion Coal Co. for the installation of transmission material in their plant at Sydney, C.B.

A proposition has been made to Sarnia by Messrs. Richards & Maguire of Cleveland, offering to establish a machinery plant in Sarnia to continue the business of the Canada Machinery Company, which was recently burned out at Point Edward. The offer is to build a plant and maintain a force of 125 to 200 men, with a payroll of $80,000 annually, on condition that the town will supply a site and extend a loan of $25,000 for a period of five years for building purposes.

The annual meeting of the Lake Superior Corporation was held at the offices of the company in Jersey City last week. The annual report of the directors showed the income for the year ending June 30 to have been $585,539. After paying all expenses and interest on the first mortgage, the amount of $34,800 was carried to the credit of profit and loss. In view of the difficulties in connection with re-organization and the inseparable difficulties and delays incidental to getting the plants into operation, the directors and shareholders considered the report highly satisfactory.

Bounties were paid on iron and steel from 1898 up to June 30 last amounting to $5,702,967. For the last fiscal year the amount was $1,540,041, against $908,962 for the previous twelve months. The Dominion Iron & Steel Company received $676,880, which was the largest amount paid to any corporation. The Algoma Steel Company, Limited, came next, with $404,956. The following were the bounties paid out last year for these products: Pig iron, $62,666; puddled bars, $7,894; steel ingots, $614,433;

manufactures of steel, $293,208; lead, $233,844; lead exported for treatment, $96,800; binder twine, $13,789; crude petroleum, $350,047; total, $2,234,685. The amount paid for crude petroleum, at 1½ cents per gallon, would represent a total production of 52,507,050 gallons.

The furnace plant of the Atikokan Iron Company is in course of construction on Thunder Bay, about midway between Port Arthur and Fort William. The furnace can scarcely be ready before late next year. Coke ovens of the bee hive type will be built, but no steps have yet been taken toward construction. To facilitate the smelting of the magnetic sulphuric ores of the Atikokan a large crushing plant and roasting beds will be established at the furnace, waste gases of the stack being expected to do what roasting is needed. At the mine the Canadian Northern has built a spur to the property now under development, and tunnels are being driven into the ore formation, exposing a large quantity of high grade ores. Diamond drilling at depth will determine the extent of the ore bodies, which are now known to be important.

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Companies Incorporated.

The charter of the Ham & Nott Mfg. Co., Brantford, has been surrendered.

The Pembroke Electric Light Co. have secured power to increase their capitalization from $50,000 to $150,000.

The Brakehurst Oil Company, Sarnia, share capital $100,000, purpose to carry on the operations of a mining, milling, reduction and development company. The directors are George Montgomery Trefts, Buffalo, N.Y., Josephine Winfield Brake, and John Hingston Cooper, both of Sarnia.

The Canadian Oil & Waste Saving Machine Co., share capital $50,000, Brockville, purpose to buy and sell machines for separating and reclaiming oil waste and other substances. The directors are Francis Edwin Clayes, William Senkler Buell and James Henry Botsford, all of Brockville.

Canadian Hart Corundum Wheel Co., Hamilton, share capital $75,000, purpose to manufacture and deal in abrasive materials, machinery and hardware. The directors are G. F. Webb, C. S. Wilcox, H. E. Shirk, F. H. Whitton and A. S. Devine, all of Hamilton, and C. D. Warren of Toronto.

The Rothschild Cobalt Co., Haileybury, share capital $500,000, purpose to carry on the operations of a mining, milling and development company. The directors are Daniel Rothschild, Herman Joseph Max Rothschild, of the town of New Liskeard, and John McKay of the town of Sault Ste. Marie.

The Standard Silver & Cobalt Mining Co., New Liskeard, share capital $40,000, purpose to carry on the operations of a mining, milling, reduction and development company. Directors are John Armstrong, George Warrell, John Sharpe, Elijah Field Stephenson and William McNab, all of the town of New Liskeard.

The Blanche River Mining Co., New Liskeard, share capital $40,000, purpose to carry on the operations of a mining, milling and development company. The directors are John Pearce, John Dawson, James Adair, George Scott Royce, Samuel Greenwood, Alfred Isaac Ritchie and Edmund Theodore Ord, all of the town of Liskeard.



No. 25. OSHAWA, ONT. Oct. 14, 1905

A BIG BUSINESS

Don't get it into your head that as we talk Expanded Metal Lath continually, we only sell Expanded Metal Lath. Our "Perfect" Expanded Metal Lath is without a peer in the world, but we also sell other materials which occupy an equally unique position. We leave you to reply to the following questions:—

"Is there anything made in Canada that answers the purpose intended as well as our 700NA Brick Siding? Our 709NA and 709NB Stone Siding? Our 710 Rock faced Stone Siding? Is there a Metal Shingle as good as our Oshawa Shingle? Do any persons, other than the Pedlar People, employ the skill to create and produce Zinc and Copper enrichments with the architectural and artistic results that we have attained? Is there a firm other than the Pedlar People who manufacture ***EVERYTHING*** you require in the general line of Roofing, Siding, Lathing, Furring, Studding, etc., etc.? Some ***say*** they ***do—WE DO.*** Is there another firm in Canada who have distributing warehouses in such central points as Montreal, Toronto, Ottawa, Quebec, Winnipeg, Calgary, Vancouver?

Consequently, ***"Is there another firm who can sell as cheaply and deliver as promptly as the Pedlar People?"***

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

We Know our Business

DOMINION BRAND
TARRED FELT

Which is to make the best on the market in

TARRED FELT, ROOFING PITCH, COAL TAR

If you Know your Business

You'll try our "DOMINION BRAND"

LOCKERBY & McCOMB, 65 Shannon St., Montreal

The Verdict



of the Trade is practically unanimous in ascribing incontestable superiority to the Atkins Celebrated High-Grade Hand and Cross-Cut Saws. Fifty years of experience, the finest of crucible steel, patent gas temper, improved methods of manufacture and expert workmanship, are cardinal points of excellence in the make-up of an Atkins Saw. Every Atkins Saw sold from your store goes out as a silent but effective salesman for your whole line of goods. Atkins saws are a profitable line to handle. Catalog and discount sheet on application.

E. C. ATKINS & CO., INCORPORATED Leading Saw and Tool Manufacturers Factories and Home Office . . . **Indianapolis, Ind., U.S.A.**

CANADIAN BRANCH: 56 King St. E., Toronto, Can. *NORTHWESTERN BRANCH: Minneapolis, Minn.*

On the Crest of the Wave

"Forward!" has been the keynote of our Cylinder Lock construction, to put on top, through merit,

GURNEY CYLINDER LOCKS

That means an abundance of skill, a sharp eye for material and straightforward energy—emblematic of **Gurney Cylinder Locks,** distinguishing them from others. So you see reason for confidence in the makers of these locks, and when you get the prices, reason for confidence in your ability to sell them.

WRITE AT ONCE FOR CATALOGUE No. 7 AND SUPPLEMENTS—FREE.

THE GURNEY, TILDEN CO., Limited

HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co, Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

DISSTON'S CANADIAN FACTORY.

Henry Disston & Son, saw manufacturers, of Philadelphia, have commenced work on the erection of their new brick and steel two-storey factory, at 112 Adelaide street east, Toronto. The new building will be modern and fireproof in every respect, and will be equipped with the latest machinery for the manufacture of circular and band saws, and mill goods. The new factory will be in operation before January 1st, and seventy-five men will be employed to commence with. Goods for the export trade and Canadian market will be manufactured. The Canadian branch of the Disston Co. is incorporated under an Ontario charter, the capitalization being $100,000. The charter was secured before the anti-dumping clause came into effect, so that this tariff legislation was not the means of bringing the Disstons to Canada. Mr. W. E. Radcliffe will have the management of the Canadian branch.

BUILDING NOTES.

A $4,000 skating rink is to be erected at Hull.

A match factory is to be established at Kenora.

The Whyte Packing Co.'s factory at Mitchell is being enlarged.

T. L. Nickle, Madoc, is erecting a large implement showroom.

Senator Choquette is to erect a building in Quebec to cost $11,000.

E. St. Jermain is erecting a large store and dwelling at Hull, Que.

W. M. Child, Regina, is to erect a three-storey business block shortly.

Alderman Allan will build three brick houses in Hamilton, to cost $5,100.

Jas. Clinkskill has had plans prepared for a new cement block at Saskatoon.

J. P. Mullens has purchased a site for a modern hotel, to be built in Hamilton.

The Minerva Mfg. Co. are to erect a large factory on College street, Toronto.

J. Y. Griffin & Co. are building an addition to their factory at Elmwood, Man.

The Sawyer-Massey Co., Hamilton, are to build a new foundry, to cost $20,000.

A new curling and skating rink, to cost $4,100, is being erected at Seaforth.

The Massey-Harris Co. contemplate erecting a large central warehouse at Orillia.

Colonel H. M. Pellatt is to erect a $200,000 residence and a $40,000 stable in Toronto.

Contractor Joncas, Cookshire, Que., intends building a skating rink and a

A factory for the manufacture of piano actions, etc., is to be established at Toronto Junction.

hotel at that town.

The Williams Grace Co., of Winnipeg, have the contract for the erection of a new hotel at Portage la Prairie.

Edward Gurney, of the Gurney Foundry Co., Toronto, has begun putting up a handsome home on Walmer road.

J. W. Doherty has sold the Norwich Brush & Broom Factory to a new company, who intend opening warerooms in Toronto.

Pisch Bros., of Lacrosse, Wis., are are likely to establish a factory in London for the manufacture of a patent cigar box.

The Dominion Government is calling for tenders for the construction of the Indian and Fisheries Building at New Westminster.

It was stated that at least 8,000 people in Hamilton are unable to rent homes. The Westinghouse Co. has decided to erect 300 new houses.

Buildings to the total value of $613,000 were authorized in Vancouver during September, this including a permit for the new post office, to cost $500,000.

Thomas Crooks, Hamilton, is to erect a $50,000 store and office building in that city. Special attention is to be given to the heating and ventilation system.

The Canadian Tool Co. is commencing operations in London. Another firm in the same city to commence manufacturing being the Standard Woven Wire Fence Co.

The Bains Carriage Works, Buffalo, are to be moved to Hamilton. The company will build a factory with the capacity of 100 buggies a day, four hundred men being employed.

Mr. Robert Meighan, of Montreal, has contracted for fireproof hollow window sashes and frames for his residence. Geo. M. Reed & Co. have been awarded the contract.

The Dominion Coal Co. intend erecting several large new buildings at Glace Bay, N.S. The work will include a warehouse, machine shop, foundry, and probably a car shop.

Building permits have been issued in Hamilton to the following: H. G. McMahon, three dwellings, $6,000; Noble & Co., four dwellings, $3,400; W. A. Stephens, two dwellings, $3,500.

The Brantford Felt & Rubber Co. have purchased the factory lately occupied by the Bailey Cutlery Co., and will install the necessary machinery for manufacturing felt and rubber footwear.

The first consignment of steel rails for the new Toronto-Sudbury division of the C.P.R. have been received at Owen Sound from the Lake Superior Consolidated Co.'s mills at the Soo.

The Canadian Electrical Development Co. have entered into an agreement with the Toronto, Hamilton Railway Co., whereby the latter firm will construct a line between Toronto and Niagara Falls.

The Jenckes Machine Co., of Sherbrooke, Que., have placed an order with the Pedlar People, of Oshawa, for nearly eight hundred squares of corrugated galvanized roofing, to be used in covering their new plant at St. Catharines, Ont.

H. H. Rice, of Denver, Col., won first prize for the best paper on the manufacture of concrete blocks and their use in building construction, in a contest recently conducted by the Engineering News and the Cement Age of New York.

Plans for the new street car sheds of the Montreal Street Railway Co. have just been completed by Messrs. Marchand and Haskell, architects. The contract for construction of this building has been given to the Canadian White Co., Limited.

Edmonton is building up very rapidly. Amongst the building permits recently issued we note the following: F. Oliver, addition to office, $2,225; A McDonald Co., warehouse, $12,525; Miss E. MacLeod, dwelling, $1,800; R. W. Hill, dwelling, $13,075; H. Bowen, dwelling, $8,000; Journal Co., office, $2,000; W. A. Griesback, dwelling, $2,200; F. A. MacLean, dwelling, $1,500; P. M. Turnbull, dwelling, $8,000.

The Canadian White Co., Limited, Montreal, have been awarded the contract for erecting at Hamilton, Ont., the new head office building of the Federal Life Assurance Co. Messrs. Finley & Spence, architects, Montreal, have drawn the plans for the building, which will be an eight storey modern steel construction fireproof office building, and will represent the latest type of building of this class. According to the terms of the contract, the building is to be ready for occupancy not later than August 1, 1906.

MONTREAL BUILDING PERMITS.

Thos. Evans, 113 Rushbrooke street, dwelling, $2,000.

Geo. Yeoman, Frontenac and Rachel, dwellings, $2,300.

E. Roy & Co., 149 Mentand street, dwellings, $10,000.

M. Dagenais, 847 Sanguinet street, dwellings, $4,500.

Jos. Bissonnette, 391 Richelieu street, dwellings, $3,000.

E. Gauthier, 390 Cuvillier street, dwellings, $1,800.

M. Laurier, 278 St. Hubert street, dwelling, $8,000.

E. L. Baugh, 107 St. James street, dwellings, $6,000.

M. D. Dineen, 460 St. Antoine street, dwellings, $1,000.

P. Germain, Albert street, Papineau ward, dwelling, $1,500.

P. McGuire, Labelle street, St. Denis ward, dwellings, $2,000.

Alf. Laurier, Montcalm, St. Lafontaine ward, dwellings, $1,000.

L. Ouimet & Fils, 115 Esplanade street, dwelling, $3,000.

Wm. Merryfield, 1743 St. Hubert street, dwellings, $1,800.

Victor Morin, 468 St. Denis street, dwelling and store, $2,500.

F. X. Sirnard, Cuvillier street, Hochelaga ward, dwelling, $1,500.

J. B. Pare, St. Hubert street, St. Denis ward, dwellings, $2,500.

J. A. Cartier, Mance street, St. Lawrence ward, dwelling, $7,000.

Mrs. L. N. Brault, St. Louis square, north side, dwellings, $4,300.

Mrs. L. Cazavant, St. Hubert street, St. Denis ward, dwellings, $2,500.

J. A. Jacobs, Dorchester street, St. Andrew's ward, dwellings, $6,000.

Jos. Lafrance, Mount Royal street, Duvernay ward, dwellings, $6,000.

Germain Club, rear 867 Dorchester street, alterations to public hall, $4,000.

Estate of J. O. Villeneuve, 1176 St. Lawrence street, dwellings and store, $5,000.

Frederick Leroux, St. Dominique street, St. Jean Baptiste ward, dwellings, $3,400.

Lake of the Woods Milling Co., St. Denis street, near C.P.R. tracks, warehouse, $1,500.

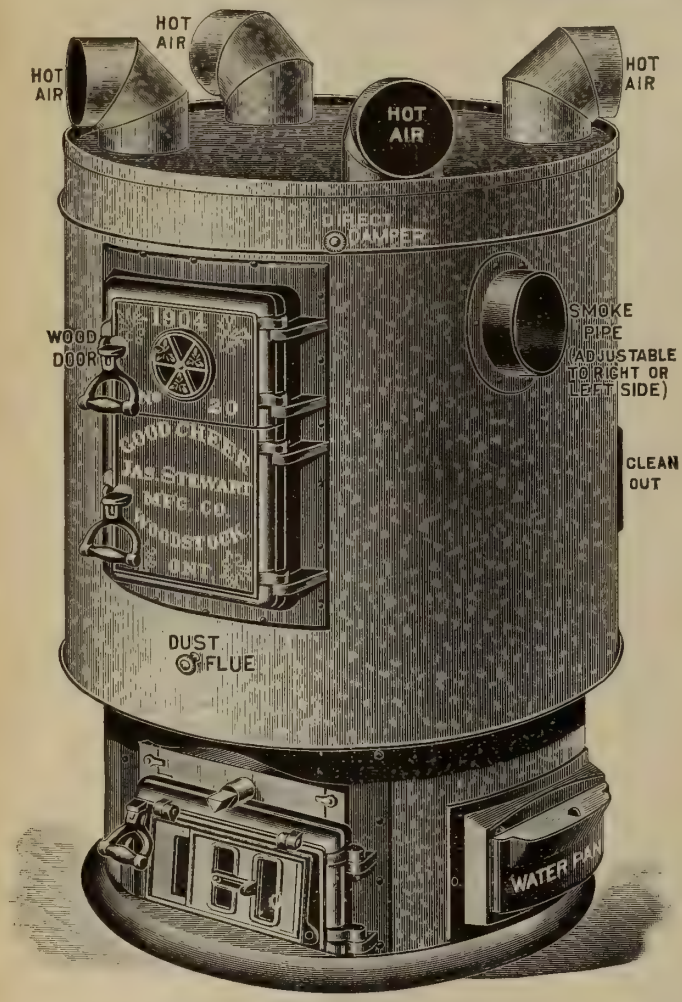
THE "GOOD CHEER" FURNACE

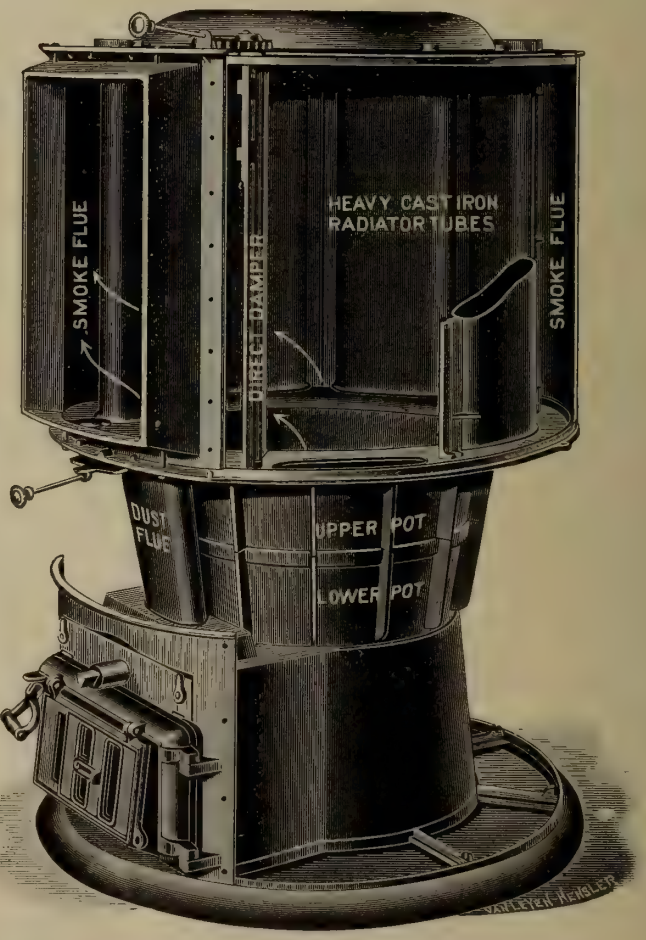
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A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.





Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

STOVES AND TINWARE

LOCOMOTIVE WINDOW DISPLAY.

IN the accompanying cut we show a display recently made in the store window of Mesrrs. W. Conn & Son, Aylmer, Ont. Considerable inventive genius is displayed in the arrangement of the painting in the background, the bedding of rails and sleepers on a gravel floor and the construction of the engine and cab. Aylmer being a railroad town near the railroad city of St. Thomas and being on the Wabash Railroad, the display attracted a great deal of attention and Mr. Ack Conn was highly commended for his work in arranging the window.

In the make-up of the engine nothing was used except goods taken from the stock in hand, the cab being constructed of metallic siding, shelf brackets and flint coat roofing. A match box was used for the step. The track was ordinary barn door track resting on ties made of adze handles. The boiler was a 15-gallon railway milk can with domes made of Gem milk strainers and a No. 3 Yankee stove kettle, a hand bell being arranged on the top and a paint can making up the smoke stack. The whistle was made of a door check, the hand rail was a curtain rod, half-inch rubber tube was used as a sand pipe, while the headlight was a dark lantern and search light. The cylinders were a half-gallon oil can and one-quart milk pail. Bread pans were used underneath to imitate the fire box, while the cow-catcher was constructed of tack pullers and brad-awls. The engine wheels were of door sheaves and 12-inch weld wheels. Three-quarter-inch tees, three-quarter-inch nipples, three-quarter-inch elbows and three-quarter-inch locked nuts were used in the construction of the air pump. Candlesticks and small flags made up the flag staffs at the front of the engine. The boiler supports were sixteen-inch granite basting spoons.



Locomotive Window Display.

DIRECTIONS FOR FURNACE WORK.

EVERY furnace job is a problem in itself, and no rule or set of rules can be set down as being infallible. Good judgment must be used in connection with all rules, but even with the most careful thought a certain pipe, or sometimes the whole job, will refuse to equal the expectations of either the owner or the contractor.

1st. The upward motion of heated air is caused by the lifting power or pressure of cold air. Cold air being a denser, heavier body than warm air, it does not mix with the warm air, but simply pushes the warm air out of the way and takes its place. The result of the operation of this natural law in the confines of a furnace jacket must be a lifting of the heated air into the upper part or bonnet of the casing, thence through the pipes and registers into the room connected with the furnace.

2nd. As the natural movement of heated air is upward, it follows that the greater the elevation of the warm air pipe the more rapid the flow of air.

3rd. Air, like water, will always flow toward the point of the least resistance.

4th. Two bodies cannot occupy the same space at the same time. As cold air and warm air are two separate and distinct bodies, the warm air from the furnace cannot occupy the space of the cold air, already in the room to be heated, without displacing the cold air.

5th. The velocity of the air movement through a warm air pipe depends, first, upon the excess of temperature of air in this pipe and the air in the cold air duct; second, on the height of the outlet above the furnace; third, on the amount of frictional resistance in the pipe itself, and fourth, the pressure resistance in the room in which the outlet is placed.

6th. Air at 32 degrees Fahr. or less is practically without moisture, and when heated above 32 degrees Fahr., doubles its capacity for moisture with each 27 degrees of heat added. It increases its capacity for moisture very nearly four times from 32 degrees to 72 degrees.

7th. Ventilation and furnace heating should always go together; as the warm air from the furnace must displace the cold air in the room, provision should always be made for cold air ducts from the rooms heated.

8th. Unless a furnace flue is large enough and the draft good it is useless to expect satisfactory results from a furnace, for experience shows that though with a poor flue fuel will burn, it will fail to give forth heat sufficient to raise a furnace or heater to the requisite temperature to warm a house. For a seven or eight room dwelling a flue 8x10 on the inside is as small as should be used for hard coal and 8x12 for soft coal, and these are the smallest dimensions at which fair success can be hoped for. For a ten-room house, an 8x12 hard coal or a 10x12 for soft coal should be the minimum, while for larger houses these dimensions should be increased. All flues should be plastered smooth on the inside, and before connecting a heater the flue should be examined to see if the masons have left same stopped up in any place or filled with rubbish at the bottom. No dealer should guarantee a job in which the flue for heater is defective, and should state in his guarantee that said guarantee shall be null and void unless the flue in house is found to be a good one.

Bearing the above facts in mind, let us see how they would apply to the practical solution of a job of furnace work.

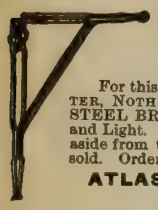
First in importance is the location of the furnace and registers, and considering Rule 3, we learn that air, like water, will always flow towards the point of least resistance. It naturally follows, therefore, in locating a register in a room, great care should be taken in

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,
Cables—"Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited

HANOVER, ONTARIO

Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.

Prices on application. Prompt shipments.

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"HERCULES" BRAND PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada

...FULL STOCK...
Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

favoring that location which will give the least resistance to the incoming flow of air. Cold air being heavier and denser than warm air, it follows that the proper location of a register in a room should be the warmest place in that room, or, in other words, on the side of the room furthest from outside influences. After locating the registers, locate the furnace with reference to the registers in accordance with Rules 2, 3 and 5. Rule 2 teaches us that the greater the elevation of a warm air pipe, the more rapid the flow of air; Rule 3, that air will more readily flow toward the point of the least resistance; Rule 5, that the velocity of the air is dependent on the height of the outlet above the furnace, on the amount of frictional resistance in the pipe, or in other words, the length of the run, and the pressure resistance in the room in which the register is placed. In accordance with these rules, rooms having the greatest exposure in the direction of the prevailing winds, on the first floor, naturally will have the greatest pressure resistance in the rooms themselves, because of the wind; have slow velocity on account of lack of elevation, and should therefore be favored by nearness to the furnace and a larger pipe and register. Rooms which are remote from the furnace, necessitating a long horizontal run of pipe, should be favored by larger pipes. Aim to minimize the frictional resistance in all pipes by avoiding all square turns or abrupt angles. Insist on having at least one inch rise to the running foot of pipe from the furnace to the register. Long runs of pipe, especially when going through cold rooms, should be wrapped with asbestos paper; pipes going through stone or brick walls should have thimbles of one inch larger diameter than the pipe. In the adjustment of the pipe work, bear in mind that according to Rule 1 the pressure of the air is equal on all pipes at the furnace. If, therefore, some of the pipes do not flow as freely as others, the cause of that trouble may be looked for either in the frictional resistance in the pipes, pressure resistance in the rooms into which these pipes lead, or that an adjacent pipe, having the advantage of elevation, is taking more than its proportion of the heated air. Should the trouble be caused by frictional resistance, look for obstructions to the free and natural flow of air, such as abrupt angles, etc., and remove them. If this does not furnish the remedy, then increase the size of pipe. If the trouble is caused by pressure resistance in the room itself, this resistance is caused by air pressure in the room, and some outlet must be provided before satisfactory results can be obtained. A very satisfactory solution to this difficulty can be had by cutting an opening in the baseboard of an inside partition between two studs, and utilizing the space between two studs and plaster walls for the vent duct. The plates on top of the studs must be cut, and the duct be unobstructed to the attic. Generally speaking the air will find its way out of the attic, but in case it does not readily clear itself, an opening can be made in some unused chimney, or otherwise. When inside air is used all doors must be left open and chimneys or fire places must be closed.

The second greatest mistake in business is negligence. The greatest mistake is carelessness.



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.

H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

WHO

is the most likely man to buy a Hardware store or Tinware business? Surely a man who has had some experience in one of these lines, either in the capacity of clerk or proprietor.

HARDWARE AND METAL guarantees to reach 90% of these men each week—can you find another paper that even claims to reach the trade as thoroughly as this? The charge for condensed advertisements is very small:

2c. per word for first insertion.
1c. " " subsequent "



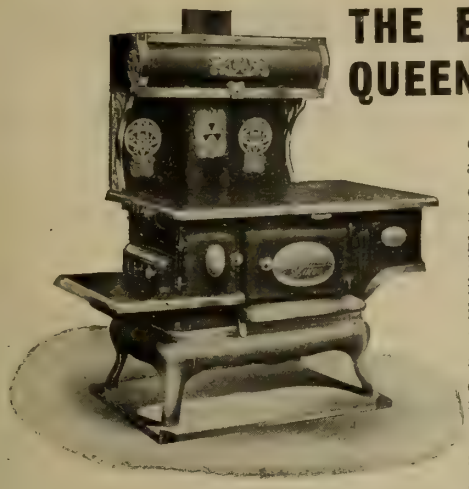
VORTEX HOT BLAST COAL STOVE

for Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.

For sale by

E. T. Wright & Co., Hamilton, Canada.

A PERFECT BAKER



THE EMPIRE QUEEN RANGE

THE FLUES of our range are constructed on the most modern principles. When the baking draft is used the heat is forced round the oven twice and so arranged that the heat is spread uniformly on all sides. The heat, after leaving the fire-box, passes over the top of the oven, down the back, and under the oven ; up the back and over the top of the oven, directly under the inner pot-hole, and into the smoke pipe, thus ensuring the quickest results from the oven and from cooking holes at the same time.

OUR AGENTS can make good use of this feature. Are you our agent ? Write for our new booklet.

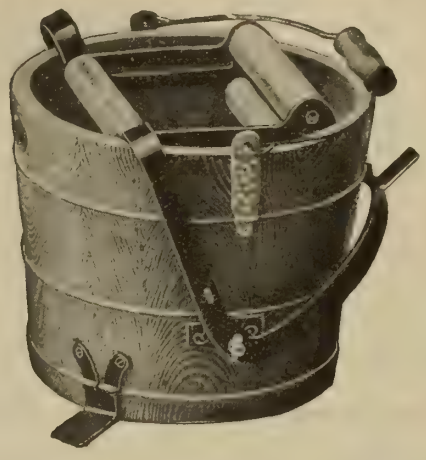
The Canadian Heating & Ventilating Co.

OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS

CIRCLEVILLE, OHIO, U.S.A.

Sole Manufacturers.



All are Essential and All are Embodied in The

Present and Future Success. Arrange your stove line on a basis of lasting success, combined with a price that will enable you to intelligently and profitably look after the trade.

Demand Merit, First, Last and all the Time. Offer to your customers a thoroughly modern article, one that is replete with all practical utilities and conveniences. Do not injure your standing with them by selling an obsolete style of Range, made simply because some maker still uses the patterns of by-gone days.

Look for These Features. They are essential to the proper working and economy of any Range:

A proper end draft, along the entire length of the grate.

A perfectly controlled reservoir, encased in cast iron, and responding quickly when required.

Ash Pan of ample capacity, easily removed and without spilling of ashes.

A cast iron flue back that will not rust out.

Large pouch feed and broiler door.

WALKER PILOT STEEL RANGE

Other Features of this Range are: Balanced Oven and Closet Doors ; Duplex Grates, removed without disturbing linings ; Oval Firebox ; Enameledware Tank ; Oven Thermometer ; Wood extension and a profusion of handsome nickel.

All parts are closely rivetted, oven bottom, lower edges and other parts strongly reinforced, and asbestos is freely used where necessary.

Catalog and Prices for the Asking

Walker Steel Range Company, Limited

Grimsby, Ont.

RETURNED
OCT 14 1905

A★1
Trade Mark



To Montreal
Calt Book 41
Page 5-5

Good Reasons for Selling

DIAMOND EDGE SCISSORS

Because they are made from the finest steel, which will wear long, and always keep its sharp edge.
They are shaped for comfort, and will not hurt the most delicate fingers.
Their processes of manufacture are all carefully inspected, from welding to finishing.

We'll tell you the other reasons if you write.

F. W. LAMPLOUGH & CO., Montreal

Sell Your Customers the

ALUMINUM OIL HEATER

and you won't be obliged to send a man out every little while to clean, re-wick and put in order.

No money in that, is there?

But there's certain money in the Oil Heater that sells at sight and **stays** sold—only the Aluminum holds this record.

Join the procession—sell Aluminum Oil Heaters, and to avoid disappointment place order promptly. A postal will bring full information.

METAL STAMPING CO., Dept. 12--Jackson, Mich., U.S.A.

W. J. McMURTRY, Calt, Ont., Canadian Agent.

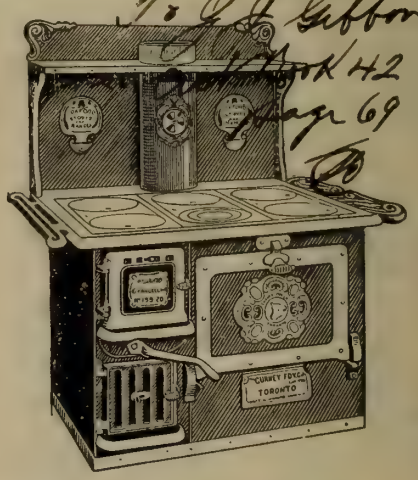
RETURNED
NOV 5 1905

We never asked a dealer to carry any line of goods we produce for which a ready sale and substantial profit was not immediately visible. The **Oxford Steel Chancellor** is the perfected achievement of 60 years' ambitious effort. You can sell it more easily than we can make it.

To G. J. Gibbons
Calt Book 42
Page 69

OUR GUARANTEE BOND GOES WITH EACH RANGE

The Oxford Chancellor Range



is constructed of the finest rolled steel plates, interlined with asbestos mill-board, which gives perfect insulation.

Splendid Oven Capacity. The oven in this range is designed to meet the requirements of a big family. It will contain a large roast, and the heating arrangements are so uniform that the results will be exactly as desired. The drop door, fitted with our patented spring, makes a splendid shelf for basting.

The Draw-Out Duplex Grate is an admirable feature. It makes repairing easy because it obviates all disturbance of the fire-box or water-front. This is one of the talking points that does the talking.

Highly Ornamented. With all its exclusively useful features, the Oxford Chancellor does not play second to any range ever made in adornment. It is handsomely embellished with nickel finishings, which add to its beauty and attractiveness, and you cannot put it alongside any range in your store without selling it first.

Write Us Now for particulars and terms. We aim to be as liberal as any manufacturer can be. If you haven't the Oxford Chancellor on your floor, you will find it most advantageous to put it there.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER**

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta. 70

ADVERTISING STOVES

Written by
Hardware and Metal's Advertising Expert

AMONGST a varied number of stove advertisements I selected two for reproduction from the same city, one illustrating a faulty conception of the elements that compose a successful advertisement, the other illustrating, in a measure, the improvement taking place in retail publicity.

* * *

What prejudices one against Thomas Potts' announcement, to start with, is

—A MAGNIFICENT—

STOVE DISPLAY

of the most popular and reliable

Peninsular and Treasure

Stoves and Ranges

Call and see our special opening offer, $29.00 for a modern four-holed range with reservoir. Burns coal or wood.

GEO. A. ELLIOTT, Jr.

193 Colborne St. Opposite Market.

the inartistic manner in which it is set. This, of course, may not altogether be attributable to Mr. Potts. It depends on how he wrote the copy, for one thing. If his arrangement brought out "McClary's Famous," and gave less prominence to "Stoves and Ranges," then the compositor made a poor job ot it, even considering the disadvantages under which he labored.

* * *

To have been set with taste the space at present represented should have been secured in single column. The scrambled appearance would thus have been removed. Mr. Potts' remarks are too brief, anyway, to warrant the use of the present space. While the "He-who-runs-may-read" idea is all right in certain cases, it is well to remember that all the people are not in a hurry. When the people have time to inquire into statements they will do so, but in Mr. Potts' case there is nothing to encourage a reader to go further. The substance is all on the surface. Secondhand stoves are just about as prominently displayed as McClary's famous stoves and ranges.

* * *

The advertisement of Geo. A. Elliott, Jr., is quite a contrast to the other. Both the subject matter and the typography are superior. The conception one gets from a perusal, also, is clear and convincing. With one exception, harmony is secured between thought and type. That exception is displaying "Peninsular and Treasure" as if it were subordinate to "Stoves and Ranges," when it actually is the reverse.

* * *

The advertisement that came the closest to my own conception of what stove advertising ought to be, was on Souvenir Ranges, in a space four and one-half inches, double column. While it is not necessary to have so much space for "one talk," in the advertisement I refer to it was used to good advantage. The salient features—the name of the stove and the name of the seller—stood out above everything else. The subject matter consisted of seven lines of pointed comment, double leaded, the whole surrounded by a neat border.

* * *

This advertisement could be read quickly and yet could be pondered over as food for thoughtful buyers. There was no mistaking what was for sale, and who was the man to buy from. An adequate white space effect gave symmetry to the various parts. No illustration was employed, which, as I have noted before, is valueless unless it shows the features of the stove solely.

* * *

Another piece of "stove news" that I saw in a Woodstock paper measured up fairly well to at least one phase of the standard. The merchant knew what parts of his range to talk about, and what parts to pass over with a light reference, but, unfortunately, this bit of superior work was rendered inefficacious by a jumbled type arrangement, caused through the necessity of justifying around an irregularly-mounted cut. Had the cut been omitted, and the wording properly set, the advertisement would have been first-class.

* * *

It cannot be too strongly emphasized that merchants who advertise—and that should include every retailer with live blood in his veins—should pay particular attention to the setting up of the ad and the choice of the type by the printer. The display of advertisements is work for the journeymen rather that the printer's devil, but unless the merchant registers a kick when poor work is done the printer may let the work go to the young imp rather than the experienced hand. Study the composition of other advertisements and see that yours compares favorably with the rest.

* * *

An advertisement met with that was rather praiseworthy bore the name of an eastern merchant, who, apparently, reasoned to himself that the stove trade was by no means local. He framed his announcement to appeal especially to outsiders, and closed his remarks with the line, "When in town call and inspect my goods." An artistic illustration graced the advertisement, but the chief idea was subordinated — the error of Messrs. Potts and E. Elliott, Jr.

* * *

A rather novel method of advertising hardware comes from A. W. Humphries & Son, Parkhill. On a regular post card Mr. Humphries had an announcement re binder twine orders printed for his customers, in which he works in some good points about his prices. But the novelty is attached to two columns of wares on each side of the announcement proper. In this space Mr. Humphries enumerates some seventeen articles—all seasonable. This is a good method of securing free advertising.

* * *

A. R. Dundas, Cobourg, sends for review an ad that he ran for two weeks in the Sentinel-Star. The advertisement certainly is businesslike, and I think Mr. Dundas, in making prices the feature, gave the necessary attention to an important phase in publicity. The list of wares is quite extensive, but the same plan of "cost" is carried throughout. While there might have been some economy in space, this drawback is counterbalanced by the impressiveness of the ad and its good position in the paper. Mr. Dundas knows "the business."

WE SELL McCLARY'S FAMOUS

STOVES AND RANGES

We Buy Second-hand Stoves for Cash

WE SELL ON WEEKLY PAYMENTS.

THOS. POTTS

The October Number of

The BUSINESS MAGAZINE

Our New Home Magazine of the Busy Man and His Family.

Naturally, the first number of THE BUSINESS MAGAZINE will be eagerly read, if only out of curiosity. Still, we believe its table of contents will be so acceptable and readable that the saying "Once a reader always a reader" will be applicable to everyone who peruses it.

Here are a few of the good things presented in the first number of THE BUSINESS MAGAZINE :

The American Woman in Business
An account of how some bright women earn money in out-of-the-way trades.

Radium and the Sun
The marvellous constitution of the great solar luminary described.

Pigs is Pigs
A very funny story that will appeal to those having dealings with express companies.

George Westinghouse, Genius
The extraordinary life-story of a great financier and inventor.

Fortunes in Advertising
The way some people have made money through advertising.

The European Parcels-Post
Describing the system in vogue on the continent.

Shopping in Paris
A bright and humorous account of the way it is done.

A Night in a Travelling Post-Office
The thrilling account of a night-journey in a mail car.

Christie's
A story of the greatest salesroom in the world.

Besides these articles there are many more of equal interest.

Be Sure to Read this First Number of a Remarkable New Publication.

The MacLEAN PUBLISHING CO., Limited

Toronto **Montreal** **Winnipeg**

Subscription Form

THE MacLEAN PUBLISHING CO., Limited
TORONTO

Please put me down as a subscriber to the Business Magazine, for which I agree to pay $2.00 per annum.

_____

Let's See!

You carry a stock of wooden sifters. Say, for every three of these, you place in your store one

METALLIC ASH-SIFTER

we will wager that customers seeking such wares will "ask" for wooden sifters, but (when shown) will "buy" ***Metallic Ash-Sifters.*** The difference in cost is nothing compared to the difference in results. The story of the ***Metallic Ash-Sifter,*** with prices, is to be found in our Booklet.

C. M. CUTTS & CO., Toronto Junction, Ont.
Sole Makers



IT'S YOUR TURN TO BUY

We have been telling you how good

Sterne's Asbestos Stove and Furnace Cement

s. Order it. We will send any quantity on approval. Nothing could be fairer than this. And our prices—they are certainly low.

Get Particulars From

G. F. STERNE & SON, MANUFACTURERS, ***BRANTFORD, ONT.***

ARK-EL-ITE
TRADE MARK

$1.50

pays for trial order of 10 six-lb. packages in case of

Asbestos Stove Lining

It is packed in heavy cardboard boxes, no waste from broken bags. The cardboard boxes have finely printed cover and make a very attractive showing.

It is an improvement over Fire Brick for lining and repairing Cooking and Heating Stoves, Ranges, etc. It is easier to handle and nets larger profit to the dealers.

It can be applied in a few minutes, and there is none of the trouble making an exact fit as in the case of Fire Brick.

MANUFACTURED BY

The Francis-Frost Co., Limited.

Makers of Celebrated "Ark" Brand Paints.

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred. Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.

VALUES THAT CONVINCE

We believe we have something especially valuable to offer the trade in our

Furnace Cement
and
Stove Putty

These we manufacture and put up in barrels, half-barrels and small packages. We can ship quickly ; and as our prices compare favorably with competitors' you should write for a quotation.

We shall be pleased to forward the fullest particulars.

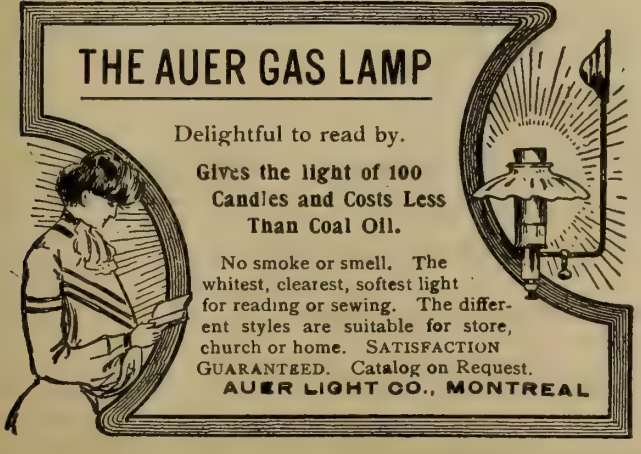
SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man**

THE AUER GAS LAMP



Delightful to read by.

Gives the light of 100 Candles and Costs Less Than Coal Oil.

No smoke or smell. The whitest, clearest, softest light for reading or sewing. The different styles are suitable for store, church or home. SATISFACTION GUARANTEED. Catalog on Request.

AUER LIGHT CO., MONTREAL



Strappings for Binding Cases

WRITE FOR CATALOGUE

J. N. WARMINTON

43 SCOTT ST., TORONTO
207 ST. JAMES ST., MONTREAL



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

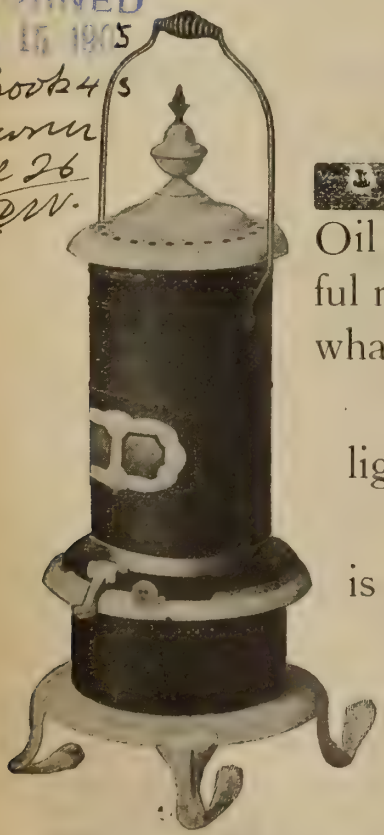
We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

RETURNED
NOV 15 1905
Book 4 s
Queen
Page 26
Dep.



None Better

Why experiment with new, untried and unknown Oil heaters when you can handle a heater with a successful record of years – one on which you take no chance whatever?

Our "FAMOUS" Oil Heater is simple and light.

Has no complicated wicks, burners, tanks, etc., but is a perfect working, economical and durable heater.

We Guarantee the "Famous" Oil Heater

Write for folders and prices.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

The MacLean Publishing Co.

Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

OFFICES:

MONTREAL, - - - - - - 232 McGill Street
Telephone Main 1255
TORONTO, - - - - - - 10 Front Street East
Telephones Main 2701 and 2702
WINNIPEG, - - - 511 Union Bank Building
Telephone 3726
LONDON, ENG. - - - - 88 Fleet Street, E.C.
J. Meredith McKim
Telephone, Central 12960

BRANCHES:

ST. JOHN, N.B. - - - No. 3 Market Wharf
VANCOUVER, B.C. - - - Geo. S. B. Perry
PARIS, FRANCE - Agence Havas, 8 Place de la Bourse
MANCHESTER, ENG. - - - 92 Market Street
ZURICH, SWITZERLAND - - - Louis Wolf
Orell Fussli & Co.

Subscription, Canada and United States, $2.00
Great Britain and elsewhere - - 12s
Published every Saturday.

Cable Address { Adscript, London
{ Adscript, Canada

NEW ADVERTISEMENTS.

Borden Co., Toronto.
Eagle Cooperage Works, Circleville, Ohio.
Caverhill, Learmont & Co., Montreal.

HIGH PRICES FOR METALS.

THE past two months have been remarkable for the strength displayed throughout the metal markets. Not for a long time has there been such a universal upward movement, and, since the metal markets are a most excellent barometer of conditions in the industrial world, we have every reason to feel elated at the long prices which these have been, and are still commanding.

In the course of this unusual activity at least one record has been created, a record which will doubtless stand for years. Reference is here made to antimony, that most useful metal, which, after a meteoric rise of over one hundred per cent., finally struck a record figure, when it commanded 17c. per lb.

The war between Russia and Japan started pig lead moving merrily upward. Though it was predicted that the declaration of peace would quickly bring it down, such a result has not developed, for, in spite of a slight weakening immediately following the close of the war, the market has recovered, and the price now current is the highest for the whole year.

Copper is another metal which has surprised consumers by its antics during the past two months. For no apparent reason it began to rise in value. Very soon it became a difficult matter to purchase copper even at the advanced price, and dark rumors were sent abroad to the effect that most of the surplus American stock had been secretly transported to China, to create a scarcity on this continent. Others charged the bulls on the Exchange with having boosted up the prices. It soon became apparent, however, that the scarcity was a real, and not an artificial, condition, so that copper and brass goods responded to the higher tone, which is still being maintained.

Zinc was bound not to be left out of the general boom, and Hardware and Metal has been obliged to record several advances of late in spelter, sheets and oxide. This, taken in conjunction with the strength of pig lead, has created an interesting condition in the paint markets, resulting in an advance in mixed paints.

The most satisfactory activity of all and the one which most obviously reflected the country's general prosperity, was in pig iron. Beginning on this continent with great buying movements on the part of the big steel interests, it quickly spread to Scotland, where a great deal of pig was bought by American firms. This great demand is said to have eased off during the present week, but the market still remains firm, and all the iron brokers are satisfied with the volume of business.

Another strong metal, though a very inconsistent one, is tin. On the announcement from the Dutch Government that the sales from the Banca mines would be restricted in future, a buoyancy immediately developed on the tin exchange. This has been the predominant note for more than two months now, so that in spite of a persistent bearish attack which occasionally depressed the market, prices at time of writing are at high water mark, and there is reason to believe that they will remain there for some time.

Looking at it from this standpoint, Hardware and Metal feels justified in terming the past two months a period of exceptional activity and prosperity in the metal markets.

CANADIAN CUTLERY TRADE.

CUTLERY is having an enormous sale in all parts of Canada, but particularly in the west where the splendid crop harvested encourages retailers to believe that farmers will be liberal buyers during the Fall and Winter months. Pocket cutlery is having a great run and, as in England, a growing preference is noticed for case goods and pearl handled fruit and table knives. The demand for the higher grade goods is more noticeable this year than in former seasons, this evidencing a state of good times as dealers are shrewd enough to gauge the purchasing likings of their customers.

FIREARMS IN HARDWARE STORES

A QUARTER of a century ago firearms, fishing tackle and general sporting goods were sold almost entirely by exclusive "gun stores," who were in evidence in every small town, and usually obtained old-time profits on everything they sold, says a writer in Hardware. Gradually the hardware merchants added guns, sporting goods, etc., until they have almost entirely driven out the old-time "gun man."

Nearly every up-to-date hardware stock now contains sporting goods. Some hardware merchants have a very complete assortment and if judiciously handled it should be one of their most profitable lines, but many do not handle the line intelligently. Study the line; no one can make a success of goods they are not posted on—carry the numbers staple in that section—have catalogues priced up to give a prospective purchaser the desired information, not only about the goods, but prices as well, if desired—see that your stock is complete for your trade during the season, which in some sections is Spring, others Fall and others Winter—reduce the stock when season is over, so as to have new fresh goods when the next season opens. Make attractive displays; if windows will permit, dress the window with sporting goods and kindred goods entirely. Good assortments well displayed, properly advertised and with intelligent salesmen are not half sold, but nine-tenths sold.

Sporting goods are proving every year more and more desirable for the hardwaremen to handle, and to those who do not find it so, the main trouble usually is lack of salesmanship and poor assortment. Many proprietors and their salesmen trying to sell guns do not know what the difference is between a twist and Damascus barrel, or why the "twist" in a rifle barrel. If one cannot talk his wares intelligently, can he expect to find them salable or profitable? And he who only sells what the trade calls for is not a merchant or salesman, but a storekeeper or order taker.

Modern merchandising is growing to be a science, the same as the professions, and it is only the ones who keep abreast of the times who can expect to succeed Sporting goods are in a sense luxuries and as such should be profitable and if not, the merchant should blame himself and not the line. Do not expect to make 100 per cent. on everything, but many of the small items will bear even more and the average per cent. will be quite satisfactory, better than the general average of the store.

When a customer places a large order for nails follow him up for an order for builders' hardware.

LABOR UNIONS OPPOSE TARIFF.

LAST week Hardware and Metal drew attention to the growing opposition of trades unionists to the Canadian Manufacturers' Association because the latter body continues to interfere in labor disputes. We showed that exactly what this paper had predicted two or three years ago was taking place—that if the Manufacturers' Association did not leave labor matters to be dealt with by employers' associations the manufacturers would incur the enmity and encourage the opposition of the workingmen in securing tariff legislation required to build up Canadian industrial establishments.

Since our article was written, however, further proof of the correctness of our position has been given by the publication of a statement issued by the Committee on Tariffs appointed by the Trades and Labor Congress, the circular being sent to every labor union in Canada urging unionists to appear before the Tariff Commission and oppose the Manufacturers' Association in securing a readjustment of the tariff.

The statement outlines the struggle the workers have to better their condition and says the Manufacturers' Association "has set out to oppose every demand made by organized labor. * * The Manufacturers' Association will seek an increase in the tariff. We will oppose any increase." The circular is scarcely ambiguous. It comes out flat-footed, and clearly indicates that the principal reason for the proposed opposition is because the Canadian Manufacturers' Association, which is advocating increased protection, has in the past opposed demands made by organized labor. The report does not presume to discuss the merits or demerits of increased protection. It simply announces the opposition of organized labor.

In discussing the action of the labor men Mr. W. K. George said the workers' policy was short-sighted as increased protection meant the establishment of additional industries in this country. "The Manufacturers' Association," said Mr. George, "is not seeking to place exorbitant profits in the pockets of its members. Our chief aim is the advancement of Canada, industrially and every other way. The manufacturers have never taken an actual stand against labor except at Ottawa, where we opposed what we considered was unfair legislation—the Union Label bill and some restrictions in the Alien Labor bill. We are not striving to antagonize or grind the laboring man. We want to live in harmony with him, and to do the best we can to meet the competition we receive from countries where labor is cheap or from across the border, where they have the advantage accruing from long establishment, experience, and the economy resulting from the use of labor-saving machinery."

From what Mr. George says the workers seem to have been given reason to look upon the manufacturers as their natural opponents. The labor men see the manufacturers asking Parliament for increased protection against foreign goods and commodities and opposing the Alien Labor bill, which aimed to give Canadian workingmen protection against cheap foreign labor. Then the workers became equally inconsistent by asking for protection against alien labor and opposing higher protection for manufactured goods. Had the Manufacturers' Association accepted the suggestion of the MacLean Trade Newspapers and left all opposition to labor demands to the employers' associations, it is unlikely that the Manufacturers' Association would have been singled out as the chief enemy of organized labor and the manufacturers' request for increased protection would not have met with such unanimous opposition on the part of the Trades Congress.

If the Canadian Manufacturers' Association is to represent the commercial interests of Canada in securing adequate protection for the upbuilding of Canadian industry it is high time that it adopted a "hands off" policy on labor matters.

THE VALUE OF SIDE LINES.

IN these days we are accustomed to see retail stores branch out by adding to their original stock one side line after another, and finally becoming great department stores where everything may be bought from a needle to a load of hay. While not expressing any great enthusiasm over the department store idea, the trade cannot fail to benefit by adopting, to some extent anyway, the methods of merchant princes of the present day. Let us consider, then, some of the lessons to be learned from their experience.

Many up-to-date retail hardwaremen have already adopted the plan of keeping stocks of good-selling side lines, which, in the great majority of cases, have proven to be most valuable business getters. Of course the most congenial side line for a hardware dealer to handle consists in seasonable sporting goods. Indeed, the majority of hardwaremen already handle these lines, especially guns, ammunition and skates. But they do not realize its importance, and make no effort to boom it. It is safe to say that no goods in an ordinary stock will attract so much attention in a store window as a careful display of guns, shells, and other shooting equipment, and such an exhibit would be the most seasonable at this time of the year. A little later on in the season a good hit could be made with a window of skates, hockey sticks, gloves and mitts, suitable for the great winter sport, snow-shoes and toboggans. It must not be thought, however, that these goods will sell themselves. The window must be prepared with the greatest possible taste, and this will require time which may be begrudged by some. But it will beyond doubt be seen that the more attention given to this display feature the better the results.

Another side line which is becoming popular among the trade is silverware. A small stock of well-selected silverware will make a fine appearance on a special counter, and at the Christmas season it will be found a most profitable investment. Some of aur best wholesale firms have learned the importance of this branch to the country dealer, and they keep complete stocks of fine goods.

But the line which will probably give the best returns on a moderate investment will be found to be mechanical toys. These are well worth a place in the hardwareman's Christmas stock, being very saleable and not subject to any depreciation in value. Unsold goods may be safely held over until the following season, as the juvenile mind is always ready to show delight at these contrivances.

From the standpoint of immediate profit, these and other side lines which may suggest themselves to the thoughtful retailer will be good assets. But their chief importance lies in the fact that they are bound to demand attention and attract trade. Then it rests with the dealer himself to hold this trade.

PRISON LABOR CLOSES FACTORY.

PRISON labor has always been recognized as a necessary evil, the great problem being to put criminals at useful labor to occupy their time while serving their terms of imprisonment. For many years the prisoners at the Central Prison have been engaged in making brooms, binder twine, and such woodenware for amusement as sleds, game boards, etc., but a change in policy was decided upon some time ago and in deference to the wishes of manufacturers who complained against unfair competition binder twine will no longer be manufactured at the Central Prison although the prisoners at Kingston will still continue to make it.

The making of brooms by prisoners has always been a sore point with the trade unions, the workingmen claiming that owing to the cheap labor of the prisoners manufacturers are unable to sell the factory made article at a figure sufficient to pay a living wage, let alone the wages desired by the unionists. After many years of protestation the labor

men succeeded in influencing the Government to discontinue the manufacture of brooms and thus another branch of industry in which the prisoners have been engaged has been done away with.

Now it appears that a Canadian factory at London is to be closed on account of its being unable to meet the Central Prison competition in the manufacture of game boards and the Caron Archerena Co. of Ludington, Mich., are withdrawing from the Canadian market.

The problem of prison labor has not been solved yet, although much has been written upon the subject and a great deal of close study has been given to the question. Prisoners must be made to work at something. From the standpoint of the State they must be made to earn their keep and in order to make it possible for the prisoners to become honest men after their term of imprisonment expires the State must teach them how to earn their living in some trade or calling. Some plan should be evolved to utilize the labor of the unfortunates in some public work in which there would be no product to come in competition with the commodities produced in such industries as the one referred to in London. The prisoners might be set to work on the construction of a driveway on the waterfront, on improving the public parks or highways, in making clothing, shoes, etc., for the militia, mail sacks for the post-office, or in some work in which the public alone is concerned.

Objection will, of course, be raised to allowing the prisoners outside the walls, but the plan said to have been tried successfully in Oregon might be found to work in Canada, the idea being to encourage the prisoners to act as their own guards by adding a week or a month to the term of every prisoner for each one who is allowed to escape.

The subject is a deep one and a satisfactory solution has been a long time in being presented. It is most regrettable, however, that industries are forced to close their doors because of the unfair competition of prison labor.

HARDWARE JOBBERS TO MEET.

NEXT Tuesday the Canadian Wholesale Hardware Association will hold their seventh annual convention in Toronto, the call for the gathering having been issued by President C. A. Whitwam, of the Hobbs Hardware Company, London, and Secretary James Hardy. A large attendance is expected as matters of general interest are to be discussed.

ADVANCE IN TURPENTINE.

Montreal, Oct. 13, 11 a.m.—Turpentine advanced one cent to-day. Market firm and demand active.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 2.

ONE of the oldest and most widely known hardware salesmen on the road is George Ramsden, who makes his home in Port Hope and covers Eastern Ontario for Caverhill, Learmont & Co., of Montreal.

The story of Mr. Ramsden's early experiences reads like a romance. Going on the road at the age of eighteen, he found himself the youngest traveler in the Eastern Townships, at a time when teams and stages furnished the only means of transportation in most districts. He also drove through Prince Edward Island, and worked the Lower Provinces by wagon and boat before the Intercolonial Railway was built. After a few years in this territory Mr. Ramsden was transferred to the upper and lower Ottawa as far as Mattawa, where he still visited many places remote from railways. For the past twenty-eight years he has been covering Ontario east of Toronto.



George Ramsden,
Representing Caverhill, Learmont & Co., Montreal, in Eastern Ontario.

Mr. Ramsden obtained his early experience in both heavy and shelf hardware with Crathern & Caverhill, which firm he represented up to the time of their withdrawing from business. He then became identified with the firm of Caverhill, Learmont & Co., and has remained with them ever since.

One of the first certificates issued by the Dominion Commercial Travelers' Association, thirty-one years ago, bears the name of George Ramsden, and is now one of his most prized possessions. He also holds membership in the Mutual Benefit Society, but in the many years he has spent on the road, he has never been compelled to claim its privileges as he has been free from any accidental injury during all that time.

Mr. Ramsden has been most successful in gaining and keeping the confidence of his customers. To answer this end, he has been consistently straightforward in his dealings with them, and has always represented goods in their true light.

Younger travelers will do well to take hints from these facts and if they need any encouragement to persist in such a line of action it will be found in the word which is quietly and mysteriously whispered by his most intimate friends, that "George has made his pile."

SEASONABLE TRADE GOSSIP.

Nut crackers and picks are a Fall and Winter line.

Some hardware dealers are putting in optical goods. There is said to be a very good profit with little risk.

Get a bargain counter ready right now. It will pick up a lot of stray dimes and dollars during the busy Fall season. It does not require much care, either.

How many electric bell outfits have you sold this Fall? Here is a good line for every town. Other small electric goods can be sold, too, if there is no electric supplies store in your town.

Are you up on the hunting and fishing laws of your Province? Many hardware men find it advantageous to print a synopsis of the game and fish laws on the back of their business cards for distribution. They will usually be preserved carefully.

Sell a good line of cutlery. A pocket knife that breaks the first time it is used is not a trade-winning brand. You may have to ask a little higher prices than with the cheaper lines but the trade will soon learn that the best values are in the medium and high priced goods.

Many hardware men send out canvassers at this time to work the trade for cream separators, sewing machines, washing machines, barb wire and fencing orders. A good man can usually make a profit for the firm by doing this. Fencing is a good line to work. There is money in it and it is needed by every farmer.

Canadians, as a rule, are ardent lovers of outdoor sports and eager and enthusiastic participants in everything of that nature. Shooting and fishing, camping and hunting, boating, snowshoeing and tobogganing, lacrosse and hockey, are all their own by inheritance and they have found no trouble in adopting and adapting themselves to all others. Under these circumstances, the sporting goods trade flourishes and will continue to do so.

PERSONAL MENTION

Ontario.

Mr. W. W. Carter, hardware merchant, of Flesherton, called on Toronto hardware jobbers this week.

Mr. D. H. Howden, wholesale hardware merchant, London, spent a couple of days in Toronto this week.

Mr. William Vallance, of Wood, Vallance & Co., Hamilton, was a visitor in Toronto the early part of the week.

Mr. S. L. McKay, hardware merchant, Kingsville, passed through Toronto a few days ago on his return from a trip to Cobalt.

James Fennell, hardware merchant, Berlin, is in Toronto on business connected with a varnish factory he is interested in.

Mr. F. C. McMaster, hardware merchant, Havelock, has moved into new premises and he is making extensive improvements to the new store.

Mr. James Chalmers, a very popular hardware merchant of St. Mary's, renewed acquaintanceships with many friends in Toronto this week.

H. L. Walker of Port Hope has purchased the hardware business of D. A. Fraser of Norwood. Mr. Fraser intends locating in the west next Spring.

Mr. C. A. Whitwam, of the Hobbs Hardware Co., London, president of the Canadian Wholesale Hardware Association, was a visitor in Toronto this week.

Mr. Frank Eames, Gananoque, who has been in charge of the plating department at the Toronto Bolt & Forging Co. for the past few years, has taken over that branch of the business himself.

Mr. S. N. Burt, who recently purchased the hardware business of J. Woodsworth, 842 Yonge street, Toronto, reports that business is quite brisk, and enlargements are contemplated in the near future.

The price of harness is to go up on account of the recent advance of 15 per cent. in the price of harness leather. A meeting of the Master Harness Makers' Association will be held in Toronto about the end of October.

F. J. Taylor, manager of Western Foundry Company, Wingham, is back at his desk again after six months absence due to nervous prostration. His many friends in the trade will be pleased to hear of his return to business.

Mr. J. W. McDonald, of McDonald & Hay, North Bay, spent a few days in Toronto during the past week, being called here to give evidence in a case regarding the seizure of some furs said to have been taken out of season.

Mr. Joshua G. Beard, an ex-alderman of Toronto, died suddenly in Troy, N. Y., recently, and the news will be received with regret by a large number of old Torontonians who knew him many years ago. He was formerly engaged in stove manufacturing.

Mr. F. B. Hope, formerly with the Hobbs Hardware Co., London, and Frothingham & Workman, Montreal, has purchased the hardware stock of E. R. Rodgers, Toronto Junction, and is now engaged in taking stock and completing the turn-over of the business.

We find that the report that Mr. W. R. Hobbs has severed his connection with the Plymouth Binder Twine Agency is quite without foundation. Mr. Hobbs has just returned from Europe, and although owing to his several interests he is unable to give the Plymouth Agency his detailed attention, he still retains his control of that company and will give it his supervision as heretofore.

Quebec.

E. F. Slocum, of the Pintsch Gas Co., was in Montreal during the week just past.

A. Arel, of Beauharnois, paid one of his periodical visits to Montreal this week.

H. L. Dennison, of Digby, N.S., was in Montreal this week, accompanied by his wife.

Pierre Noel, plumber, of Quebec, was in Montreal a few days ago on a purchasing trip.

Mr. McFarlane, of McFarlane Bros., Campbell's Bay, was in Montreal on business this week.

Mr. A. Robinault, plumber, of Valleyfield, visited the plumbing supply houses in Montreal this week.

Mr. P. O. Casavant, of St. Chrysostome, was a visitor in the Royal City during the past few days.

IT HAS NEARLY EXPIRED.

Only a few days more and the new venture of The MacLean Publishing Company, **The Business Magazine,** will see the light. That means that the remarkable offer made to HARDWARE subscribers a week ago will only hold good for those few days. If you are a subscriber to THE HARDWARE AND METAL you should not omit this opportunity to get the new publication for half the published price—that is for **one dollar** per annum. Send in your name at once to

THE MacLEAN PUBLISHING COMPANY.

H. W. Aird, treasurer of the Canada Paint Co., Montreal, spent a couple of days in Ottawa this week.

Mr. Hope, managing director of Kynoch, Limited, Birmingham, Eng., is a visitor in Montreal at present.

Chas. Baker, tinsmith and plumber, of Prescott, Ont., was in Montreal this week, placing orders for supplies.

Ed. Bonneterre, tinsmith and plumber, of La Prairie, Que., paid a hurried business visit to Montreal this week.

J. E. Seale, general merchant, of Morin Flats, was in Montreal last Wednesday in connection with his business.

Mr. Larose of John Millen & Son, Montreal, is dangerously ill, and the doctors hold out but little hope for his recovery.

J. R. Tirrell, the popular city traveler on the staff of Caverhill, Learmont & Co., Montreal, is spending a few days at Sorel.

Mr. Gervais, of the firm of C. O. Gervais & Freres, general merchants, St. Johns, Que., paid a visit to Montreal this week.

Chas. Milot, general merchant, of St. Monique de Nicolet, called on the Montreal jobbers during the week, purchasing some Fall stock.

Mr. Ten Eyck, Toronto representative of the Atkins Saw Co., Minneapolis, was in Montreal this week and reported his trade to be booming.

Mr. M. Moody, of Matthew Moody & Sons, Limited, manufacturers of agricultural implements, Terrebonne, visited Montreal a few days ago.

W. A. Allan, of Allan, Whyte & Co., Glasgow, Scotland, who has been in this country for a few weeks, leaves Montreal on his return trip next week.

Mr. J. Bardsley, of the Bardsley Hardware Co., New York, was in Montreal this week, calling on Mr. J. Drysdale, who represents the firm in the Canadian metropolis.

J. J. Sophus, of McLean & Sophus, machinery experts and manufacturers' agents, Montreal, has just returned from a successful business trip to New York and Boston.

An important exchange in Montreal's retail hardware trade was almost carried through this week, but a slight hitch in negotiations has delayed its consummation.

The stock of Navert & Lancette, 417 Centre street, Point St. Charles, Montreal, has been purchased by Francis Martineau, who has placed Mr. Bryere in charge of this branch of the business.

Mr. Arthur Picard, of O. Picard & Fils, tinsmiths and plumbers, Quebec, called on the Montreal jobbing houses this week in connection with a large heating contract recently booked by his firm.

Mr. Douglas, purchasing agent for Rhodes, Curry & Co., Limited, Amherst, N.S., was in Montreal this week, accompanied by his wife. Mr. Curry, president of the same company, was also in the city.

W. W. Brown, who has for the past ten years been connected with Drummond, McCall & Co., Montreal, is leaving that firm at the end of the month to accept a position in the invoice department of the Ogilvie Milling Co. Mr. Brown has been a valued man on the staff of Drummond, McCall & Co. ever since his coming to this country, and his services will be greatly missed by that firm.

Western Canada.

The firm name of Davis & Wilson, hardware merchants, Boissevain, Man., was changed to Davis & Hicks on the 11th of September last, Mr. Wilson retiring. Two more hustling and enterprising business men than the present partners would be hard to find, and if an up-to-date store counts for anything they should get a good share of business.

United States.

Mr. William F. Wagner, general manager of Wm. Jessop & Sons, Limited, in the United States, together with Mr. Edward L. Hand, who represents them in Philadelphia; Mr. E. W. Salisbury, of Warren, Salisbury & Nightingale, their agents in Providence; Mr. E. B. Ridgley, their representative in Detroit, together with Mr. F. W. Babcock, of the Standard Oil Co., resident of Providence, sailed on the Cunard steamer Caronia, October 3rd, to attend the 282nd annual gathering of the Cutlers' Company at their banquet in Sheffield on October 12. On this occasion Mr. Sydney Jessop Robinson, managing director of Wm. Jessop & Sons, Limited, will be installed as Master Cutler—a position of great honor and of social and commercial influence.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Pig Iron is stronger and is now quoted at its highest price for the year, $3.80 to $3.90 per hundred pounds.

Merchant Steel, tire has advanced to 2.12½ and toecalk to 2.67½.

Galvanized Iron in some qualities has advanced.

Scrap Lead is now quoted at 2¾c. and scrap zinc at 3½c.

Turpentine is remarkably active, and has advanced to 97c. single barrels, and 96c. for two barrels or over.

TORONTO.

Middlesboro Pig Iron has advanced and is now quoted at $22.

Linseed Oil has advanced one cent per gallon.

Scrap Zinc is up ¼c., now being quoted at 4¼c. per pound.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 13, 1905

THE long continued fine weather has had a somewhat deterrent effect upon trade, for, although the volume of business has been good, it would have been increased beyond a doubt had colder weather occurred. As soon as a break up in the present fine weather is experienced there will certainly be large repeat orders for Fall goods and this will stimulate trade very considerably.

The most notable feature of the week is the added strength of wire nails. The very extensive building operations throughout Canada have depleted existing stocks and consumers will shortly be called upon to pay higher prices. Manufacturers have already advanced their figures to the jobbers and these cannot long sell at current prices except at a positive loss.

Lanterns are going out in fine volume, but these are mostly repeat orders, so that the jobbers have not yet advanced prices in spite of the withdrawal of figures by the manufacturers.

All hardware staples are in excellent demand and a great impetus has been given to the market and Christmas specialties owing to the near approach of the season for these goods.

Rifles, shot guns, and ammunition are still well to the fore in the orders received by local houses, but they are more and more being crowded for first place by skates, sleigh bells, and horse blankets.

Axes—These goods are going out nicely, orders being received in good numbers. We quote prices as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles— Our prices are: Axe handles No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Sales have been normal and prices are unchanged being still quoted: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—We quote: Cold blast, $4.50, No. 0, Safety, $5.00.

Rivets and Burrs—In common with all hardware staples these lines are enjoying a good run. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws — We quote prices as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—There is a normal demand, with prices as follows: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Horse Nails—Good orders are being shipped freely, current prices being: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—Considerable activity has developed during the past week and there is every indication of an early advance, such having already been made by the manufacturers. We quote: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—Price is still $2.20 per keg, f.o.b. Montreal.

Horseshoes—The volume of business is most satisfactory, showing good orders from all parts of the country. Our quotations are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Ammunition is of course in splendid demand. Prices generally quoted being as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—The demand is pretty well distributed throughout the country and is very satisfactory. The good crops which have just been harvested have given encouragement to building activity with the result that a steady, though not phenomenal trade is being done by local dealers. There are no changes in price, which are just as given in our current market quotations.

Cordage—Conditions are rather quiet and prices remain steady.

Cement and Firebrick—There are numerous jobbing orders constantly coming to light, but no job of any size is now going on which would call for particularly large quantities of these goods. We quote prices as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain— We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—Sales are somewhat disappointing this season, but prices remain steady as follows: Little Star, $4.85; Hudson, $5.00; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—A splendid demand is shown by the large shipments which are being made daily by all local wholesale houses. Prices remain from 25c. to $2.50, according to quality.

Sleigh Bells—A good volume of business reported earlier in the season still continues. We quote as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes— The market has quite awakened, and it is evident that the hardware trade will in all parts of the country make this one of their features during the coming winter. Prices range from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Oct. 13, 1905.

OCTOBER is largely a sorting up month in the hardware trade, and while many shipments are hurried on account of the closing of navigation, the bulk of the business in winter lines is not sent in until November when merchants who have not stocked up fully in horse blankets, sleigh bells, chains, skates, etc., will send in their final orders. A good deal of business is being done, however, in these lines at present and this together with a heavy business in builders' hardware and heavy goods, such as bolts and nuts, is making the October business most satisfactory to the jobbers. Merchants throughout the entire country are very optimistic and a splendid trade amongst farmers is looked forward to during the winter.

The demand for guns and ammunition is still holding on while rifles and cutlery are also being ordered in considerable quantities by merchants who stocks have run short on some lines owing to the heavy demand for these goods. A great many merchants are also ordering silverware and other specialties for the holiday trade.

Although there has been a tremendous run on wire nails during the active building season which is nearing its close, manufacturers have been well able to handle the business and no advance in prices has been made on the local markets on account of shortage of supplies. Building paper and weather strip are two lines which are in very active demand. There are no change in prices to report, the quotations on lawn mowers for 1906 not having been agreed upon as yet.

Sporting Goods—Imported shells are being called for in large quantities. Rifles are increasing in demand, while the call for shot guns and ammunition keeps up well. Fishing tackle is also being bought liberally.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chains and other Fall lines are selling well. 1-4 inch, $6.50 5-6 inch, $4.45 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Ladders are being called for actively and more than the average Fall trade is being done. We quote: Step ladders at 10c per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Barb and Coiled Spring Wire—Trade is falling off, the bulk of the season's business having been done. No change in quotations.

Wire Nails—Demand continues very keen, but quotations remain the same. While cost of materials is advancing there is no talk of a rise as yet.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Axes—Blades and handles are being bought largely and a most satisfactory winter trade is looked for.

Horseshoes—Prices continue unchanged with the outlook for business excellent. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow. No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—Blacksmiths are ordering in large quantities and dealers have no complaints to make.

Cutlery—Case goods and carvers have been the favorite lines. Some dealers are still sending in sorting orders.

Skates and Sleigh Bells—Merchants are ordering well, particularly for sleigh bells.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—The possibility of higher prices is giving an impetus to trade. Prices remain as before.

Bolts and Nuts—An increase is looked for by some on account of the advancing prices for iron. Mills have plenty of business.

Cordage—Sorting orders are being received. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—A scarcity exists owing to the heavy demands of the past season, and prices are very firm in consequence. We quote: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—Demand is increasing. Quotations are firm, but prices unchanged. We quote as follows: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Business is active, the heavy building being done calling for a large quantity of goods. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool—The demand for hides continues good, easily absorbing all arrivals. Prices, however, are causing a good deal of dissatisfaction as it is almost impossible to do business on a profit basis. On present prices sufficient margin is not in evidence to cover expenses. U.S. prices with freight added are about same parity as Canadian quotations, making it impossible to advance. We quote:

Hides, inspected, No. 1 per lb.		0 12
" " " 2 "		0 11
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelt, best city slaughter		0 95
Rendered tallow, per lb.	0 0½	0 0¼
Unwashed wool, per lb.	0 1½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	C 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, October 13, 1905.

ANOTHER week of great activity in metal has just closed. Once more nearly all metals have been stiffening and while not so many advances are reported for this week there is every reason to believe that the immediate future will see the withdrawal of present prices.

Copper is still holding up firm without any sagging movement. There is no prospect of any change in prices.

Antimony declined slightly in tone, but not sufficiently to permit of jobbers reducing their prices.

Tin is very firmly held at the price quoted and the market is high. The early part of the week witnessed a slight weakening in this metal, but it has now fully recovered. Cable advices received from the Old Country on the day of writing, show advances in price.

Pig lead is still on the upward move and at the quotations we give this week it has reached high water mark for the year.

The iron and steel market continues very strong and the big companies are now insisting on a time limit to change of specifications on contracts accepted by them. This betokens a rising market, as, generally, specifications may be changed very easily by the buyers.

Pig iron remains at our last week's quotations. Trade is fair, but no very large orders have been booked. The market in Scotland is easing off somewhat and it is said that prices will not go higher for some time at any rate.

Galvanized iron is remarkably firm with a decidedly upward tendency. In fact all sheet metals are very strong and some of the biggest jobbing houses are considering the advisability of immediately raising their prices.

Owing to the activity in the primary market a couple of grades of merchant steel are now quoted higher by the producing mills.

Zinc is still very firm at prices given last week. There is a report current that the mines have so many orders on hand as to prevent them from selling at present.

Canada Plates—In common with all grades of sheet metal Canada plates both galvanized and polished are enjoying great demand. The strength of the market is such that an advance may occur at any minute. Our prices are 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—No falling off has been reported in the demand for copper and as

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

F. HYDE & CO.

KING, QUEEN and WELLINGTON STS. MONTREAL

Deseronto Iron Co.

LIMITED

DESERONTO, ONT.

Manufacturers of

CHARCOAL PIG IRON

BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"

BRAND.

Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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MONTREAL, QUE

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Canada Iron Furnace Co.

MIDLAND, ONT Limited

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GALVANIZED FLAT SHEETS

THE "VANDA" BRAND

For all purposes requiring the best quality.

It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited

Wholesale Merchants

Ormidale Block, Vancouver, B.C., and Liverpool, England

Direct Importers of:

Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc.

there is not yet any surplus of supply our quotations remain firm at the following prices: Ingot copper, 17 3-4c.: sheet copper, 24 3-4c.

Ingot Tin—After somewhat easier conditions for a few days tin has again taken a jump and our figures quoted last week are still in order. We give the following prices: 36c. to 36 1-2c. per pound.

Pig Lead—This metal is in the midst of another boom and it has now reached its highest price for the current year. We are quoting $3.80 to $3.90 per hundred pounds.

Boiler Tubes — We quote prices as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c., 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—The Old Country market is now easing off a little with the result that no further advance in price is expected at the present time. The Canadian trade is fairly active, but no great tonnages are reported. We quote:

"Disc," No. 1	$16.50	delivered Montreal.
"Dom.," No. 1	17.50	" "
Usual difference in price for lower grades.		
Ferrona No. 1	$18 00	delivered Montreal.
" No. 2	17.50	" "
" No. 3	16 50	" "
" No. 4	16.00	" "
Londonderry	$18.75 to $19.25	" "
Glengarnock	18.25	" "
Gartsherrie	19.25	" "
Carnbroe	18.50	" "
Carron No. 1	20.00	" "
" (special)	18.50	" "
Ayresome No. 1	18.75	" "
" No. 3	17.75	" "
Summerlee	18 75 to 19.25	" "
Clarence No. 1	18.50	" "
" No. 3	17.25	" "
No. 1, Cleveland	17.50	" "

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—Some further advances have taken place this week and we are now quoting as follows: Sleigh shoes, $1.97 1-2, tire, $2.12 1-2; spring, $2.75; toecalk, $2.67 1-2; machinery iron finish, $2.07 1-2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—There is still a remarkable firmness in this market. Indeed there is a decided disposition to raise prices and this has already been done in one case. Gorbell's "Best Best" 28 gauge is now quoted from $4.15 to $4.40. A general advance may be looked for. We quote : Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet. 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's

MACHINERY STEEL

IRON FINISH

SINGLE OR DOUBLE REELED

COLD ROLLED

Large assortment in stock.

Close Prices for Import.

A. C. LESLIE & CO.

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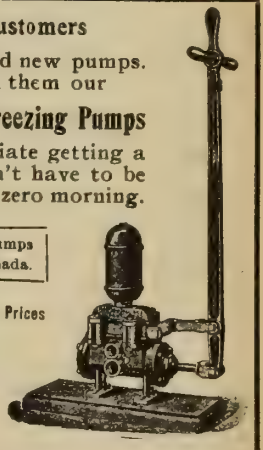
Ask your customers

if they don't need new pumps. If they do sell them our

Standard Anti-Freezing Pumps

They'll appreciate getting a pump that doesn't have to be thawn out every zero morning.

—McDougall Pumps
—Made in Canada.



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DRILL STEEL

Just the reason why you should have a supply.

Communicate with any of the following:

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NOVA SCOTIA STEEL & COAL CO., Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS-MARTIN

OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.
Contractions count as one word, but five figures (as $1.000) are allowed as one word.
Cash remittance to cover cost must accompany all advertisements. In no case can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.
Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED—A tinsmith and furnace man; steady job for right man. Box 104, Melfort, Sask. [41]

SITUATION WANTED.

BY cut ery man, with fourteen years' experience in the wholesale and retail cutlery business; could take charge of cutlery department in either wholesale or retail store; Western Canada preferred; references given. Box 275, HARDWARE AND METAL. [41]

WHOLESALE AGENTS WANTED.

ONE of the largest and oldest European manufacturers of Cream Separators and Dairy Machinery is desirous to arrange with one large and first-class firm for each of the Provinces in Canada for the sale of their goods. Send particulars and references to A. B. C., c/o HARDWARE AND METAL, Toronto. [41]

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Port Burwell Breakwater," will be received at this office until Friday, November 3, 1905, inclusively, for the construction of Breakwater at Port Burwell, in the County of Elgin, Ontario, according to a plan and specification to be seen at the office of the Resident Engineer, Confederation Life Building, Toronto, at the office of the Resident Engineer, London, Ont., on application to the Postmaster at Port Burwell, Ont., and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for seven thousand dollars ($7,000.00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, October 3, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (42)

ARMSTRONG BROS. TOOL CO.
"The Tool Holder People"
Manufacturers of Armstrong Patent Lathe and Planer Tools and other machine shop specialties.
106 N. Francisco Ave., CHICAGO, ILL.

SAVED—LOST.
One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

"Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—This line will almost certainly be advanced within a few days as one of the largest local interests is contemplating the withdrawal of current prices. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony— There has been a slight weakening in tone but we are still quoting: 14 3-4 to 15c. for Cookson's.

Tin Plates—Jobbers have again been forced to give higher prices for plates, but have not as yet advanced their figures which are still: Cokes, $3.75; charcoal, $4.

Ingot Zinc—This is well held at the advanced figures reported two weeks ago. As it is said that the mines are not accepting any orders for definite delivery it is likely that another advance will take place shortly. We quote: 6 3-4c. to 7c.

Sheet Zinc—We are still giving the following figures as the ruling prices: No. 8 and No. 9, cask lots, 7 1-2c.; less than cask lots, 7 3-4c.

Bar Iron—The advance reported last week still rules, and in fact, these figures have if anything been strengthened during the past week. Our quotations are $1.87 1-2 base, f.o.b. Montreal.

Scrap Metal—The mills are not yet buying locally, to any extent, the inference being being that they had good stocks on hand previous to the recent advance in raw materials. Under these circumstances, wrought iron is an uncertain quantity in anticipation of the entrance of the mills into the market very shortly. The price will then be set. Old rubbers are scarce, and may possibly command higher figures if the manufacturers should display any activity. We are quoting: Copper wire 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 1-2c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 6 1-2c. to 6 3-4c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 13, 1905.

BUYERS are getting used to high prices of metal and are purchasing more freely than they have been doing since the recent advances in the various metal quotations. Business is improving, every line being included in the activity. The recent advance in bar iron has held quite strong and the volume of business being done is most satisfactory. The only advance we have to report this week is the increase in the price of Middleboro pig iron which is now quoted at $22 per ton in Toronto. Antimony and spelter have both been especially active during the past week, while copper, lead and ingot have also shown considerably activity.

Pig Iron—Prices strong and an advance has been made on Middleboro owing to the increased cost of production. Great strength is shown in the existing market. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 00
Londonderry, at furnace	16 50 to 17 00

Pig Iron—Very strong and an adheld firm and a large volume of business is being done. We quote as follows: $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—Market is active and demand very keen. Quotations have fluctuated, but are now steadier.

Tin Plates— Demand is active with considerable strength shown in prices.

Galvanized Sheets—Trade is very active and higher quotations are looked for.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Stocks continue light and buying heavy at unchanged quotations. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Demand is more active, the market showing more strength than a week ago. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Business being done is quite large, no falling off in the demand being reported. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Greater activity is shown than a week ago and prices are firm.

Old Material—Scrap zinc has advanced 1-4c., but as large shipments are on the water the jump is expected to be only temporary. Copper is very strong, but lead is not so much in demand. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9c. $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $7.50 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 1-4c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Possibility of a strike in both the anthracite and soft coal fields is giving considerable strength to business, even at this early date. The scarcity of cars is the chief difficulty to be overcome. We quote as follows: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, October 12, 1905.

OUR monthly blast furnace returns show that production in September, in spite of the fact that it was a short month, was 1,898,873 gross tons as compared with 1,843,673 gross tons in August and 1,741,935 tons in July. Returns from all the steel companies make their pig iron product 1,262,033 tons in September against 1,186,050 tons in August, an increase in spite of the fact that the Pittsburg district produced only 449,632 tons in September as compared with 488,119 tons in August. The returns indicate that the merchant furnaces did not do as well in September as expected, their production having been 657,623 tons, while they made 636,840 tons in August.

The capacity at work has increased in September and stood on October 1 at 445,468 tons per week as contrasted with 412,563 tons on September 1.

There is the promise, therefore, of an increased production, which the country needs so sorely.

There has been a good deal of buoyancy in the pig iron markets in all parts of the country and prices have been further advanced. A growing number of furnaces hesitate about committing themselves heavily for the future, in view of the considerable rise in costs. Some of the large foundry interests have bought quite heavily. In the west the International Harvester Co. have purchased between 45,000 and 50,000 tons, 20,000 tons from an Alabama interest, 7,000 tons from Virginia producers, and the balance from northern furnaces. Three cast iron pipe concerns have taken very close to 50,000 tons between them, and there has been some very good buying by the general foundry trade, a Pittsburg melter taking 11,000 tons.

Quite a number of eastern open hearth plants are negotiating for additional quantities of basic iron, one of them being in the market for 1,200 tons, and the others for somewhat smaller lots. While the buying of Bessemer and basic iron in the central west has been rather light during the past week, it is known that two large steel interests are figuring on the purchase of some large blocks for the first six months of next year.

Some further goodly orders have come to the rail mills, including 45,000 tons additional from the Northern Pacific, 35,000 tons from the Great Northern, 29,000 tons from the Minneapolis & St. Louis and 13,000 tons from the Kansas City, Mexico and Orient. Manufacturers of frogs and switches have ordered between 10,000 and 12,000 tons, and if is reported that one of them has been forced to place a small order for girder rails abroad in order to secure prompt delivery. Another maker in this branch is studying the question of drawing a very considerable supply of girder rails from Germany. A fair proportion of the New Haven order has been allotted, but the whole of it has not yet been given out.

A good deal of business is pending in bridge material, fully 60,000 tons being under negotiation. The Atchison road has just placed 16,000 tons, and the order for 7,000 tons of material for the Saybrook bridge of the New Haven road has been also taken by the American Bridge Co. Small quantities of foreign structural material are being ordered for prompt delivery.

In the eastern skelp trade, an order for 5,000 tons, the first for many months, is regarded as the harbinger of better times.

The lighter lines are active and in good shape, and even the tin plate trade is showing signs of renewed life.

Reports from Europe continue very encouraging. There has been a smart advance in the prices of plates, structural material and bars in England, and the revival there is reflected by quite a pressure upon our producers here to sell material. This, however, they decline to do beyond well defined lines.

LONDON METAL MARKETS.

From Metal Market Report, October 11, 1905.

Pig Iron—Cleveland warrants are quoted at 52s. 9d, and Glasgow standard warrants at 51s., making prices as compared with last week 9d higher for Cleveland warrants and 9d higher for standard warrants.

Tin—Tin opened firm at £147, futures at £146 2s. 6d, and after sales of 170 tons of spot and 170 tons of futures closed firm at £147 2s. 6d for spot and £146 5s. for futures, making price as compared with last week £1 9s. 6d lower on spot and £1 10s. lower on futures.

Copper—Spot copper opened steady at £71 10s., futures £70 5s., after sales of 100 tons of spot and 200 tons of futures closed quiet at £71 10s. for spot and £70 5s. for futures, making price as compared with last week 5s. lower on spot and 10s. lower on futures.

Lead—The market closed at £14 12s. 6d, making price as compared with last week 5s. higher.

Spelter—The market closed at £28, making price as compared with last week 7s. 6d higher.

MINES AND METALS.

The first Wabana, Newfoundland, ore received on the northeast coast of England was recently unloaded at Connal's wharf, Middleborough, for the Northeastern Steel Co., Limited. The cargo amounted to 4,500 tons and was obtained from mines owned by the Nova Scotia Steel & Coal Co. and the Dominion Iron & Steel Co.

* * *

By a vote of 236 for and 93 against, the Nanaimo coal miners have decided to return to work. The agreement between the company and the men is in the nature of a compromise, each side conceding something. It is for a period of two years, which means that for that period of time Nanaimo will be free from the evil results of strife between capital and labor.

* * *

The Dominion Coal Company, which has been making a number of improvements during the past summer, has decided to substitute electricity in place of steam in their various Cape Breton mines. This power will be used for hoisting, hauling, and other purposes, and the plant will, it is understood, be a large one. Tenders are already being asked, and the contract will be awarded next week. From now right to the end of the season of navigation it is expected that the company's shipments to Montreal will show quite a large increase over the corresponding period of last year.

Profits that go to other tradesmen would come to you if you brought "Eastlake" Metallic Shingles to the attention of intending builders more aggressively. Why not get after these people?

The advantage of "Eastlake" Metallic Shingles over wood shingles is such a simple story of fact that prospective builders have but to listen to be convinced.

Their fireproof qualities, resistance to rust, storms and lightning, and their longer wear appeal direct to the pocketbook.

The free samples which we will gladly send you make it very easy to get orders when a prospective builder is once made to realize how much better "Eastlake" Metallic Shingles really are than wood shingles.

There's money in this trade.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto Winnipeg

We also manufacture:
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts.
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

406

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
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Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Oct. 13, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

WHOLESALE hardware trade is very active at present, there being an especially heavy movement of heavy goods before the close of lake navigation. Price changes are not numerous this week, but they are important. Wire nails have declined 15c. per keg and they are now quoted at $2.60 per cwt. for all quantities. Cut nails are still quoted nominally at $3 per keg and owing to the high price there are none selling. Barb wire has been advanced 15c. per cwt., as also plain twist and staples. Until the close of navigation business will be very heavy.

Lanterns—Wholesale prices are steady and unchanged, but retail trade is still demoralized. We quote:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Barb wire has been advanced 15c. per cwt. Plain twist has also been advanced 15c. and staples have been marked up a similar amount. We quote:

Barbed wire, 100 lb		$3 00
Plain galvanized	6 to 8	3 39
"	9 2 50	2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		3 00
Staples		3 50
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business continues very active and large quantities are being booked for delivery before the close of navigation. The price has declined to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c
Pure fibre, plain	60c.
" " tarred	80c

Ammunition, Etc.—Sorting orders are still coming in. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—As mentioned last week there has been an advance in solder and it is now quoted at 21c. per lb. with concessions for large quantities.

Iron and Steel— Prices are quoted as follows :

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 60
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX " "	11 50
" XXI " "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ¼ inch		
"	¼ "	2 45
Black iron pipe, ⅜ inch		2 65
"	⅜ "	3 00
"	½ "	3 80
"	¾ "	5 50
"	1 "	7 45
"	1¼ "	8 95
"	1½ "	12 30
"	2 "	

Petroleum—No change since the advance noted last week. We again quote:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74 76	27c.
Gasoline, 70-72 (Indian)	25c.

(In barrels f.o.b. Winnipeg.)

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST., WINNIPEG, Manitoba

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

MALTHOID ROOFING

USED ALL OVER THE WORLD,

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

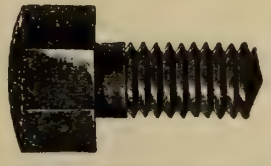
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

TRADE MARK

This design a guarantee of quality.

WATERPROOF WRAPPING PAPER

For Express and Long Distance Packages. Put up in rolls 36 in. wide, 250 and 300 yards in a roll. Clean paper on both sides—waterproof substance in the centre—therefore it will not soil or stain delicate goods, as ordinary waterproof paper will. Practically odorless. May be used either for case lining or wrapping packages.

CANADA PAPER CO.

SAMPLES AND PRICES WITH PLEASURE. TORONTO LIMITED MONTREAL

Paints and Oils—Business continues brisk at unchanged prices. We quote:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	0 96
Less than barrel lots	1 01
Linseed oil, raw	0 60
Boiled	0 63

Window Glass—We quote as last week.

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

It is time to put up stoves, and the pushing dealer ought to get lots of trade in this line, as new parts are generally in demand, to say nothing of furnishing pipe, elbows, stove boards, coal hods, etc.

INTERESTING EXPERIMENTS.

IN these days, when the question of electric railroads is up in all countries that have the natural conditions for them, the following comparing experiments with steam and electric locomotives may be of interest to Canadians :

On the wide track road which runs from Sannesund up to Hafslund station in the southern part of Norway, and which has a grade of 1.30 metres, with a smallest radius of 1.60 metres, there are run both electric and steam locomotives, and the company operating the road has had the following experience : A steam locomotive of 90 tons weight pulls only with the greatest difficulty two freight cars loaded with 10 tons up the hills, and when the rails are wet from rain the locomotive frequently has to back up and make a new start to go up. On the other hand, the electric locomotive of only 22 tons weight pulls six such loaded freight cars easily up the hills, even when the rails are wet, and on a side-track with a rise of 1.26 metres the electric locomotive pulls four loaded cars. When the steam locomotive with its cars has come to a stop on the above-mentioned grade, its ability to get a new start discontinues, as the wheels slide on the rails, but the electric locomotive, after such a stop, has no difficulty in getting a start with its full-loaded freight cars. The experience obtained on this road thus confirms the ability of electric locomotives to go up heavy grades, and they should therefore to a large extent be practical for helping steam locomotives with larger trains up grade.

STILL SHOWING HER HEELS.

NOT only was Great Britain's export trade during the first half of the present year larger than that of any of her competitors, but the increase in comparison with the same period in 1903 was great.

This increase was £13,200,000 in Great Britain, £9,700,000 in the United States, £10,800,000 in Germany, and £7,700,000 in France.

In spite of the great expansion which has taken place in the trade of her competitors, Great Britain is still the centre of the world's trade and commerce, and she is likely to be so for some time to come. With her smaller population she can hardly be expected to maintain it for all time, but it is a source of gratification to know that in the race for foreign business the Mother Country is still showing her heels to the nations that are trying to outstrip her.

GRAND TRUNK PACIFIC TENDERS.

It is now announced that the successful tender for the two hundred and ten mile section of the Grand Trunk Pacific between Fort William and Lake Superior Junction involved the sum of about $3,000,000. This is for grading and construction of the roadbed alone, the great cost being occasioned by the extremely wild country through which this branch line will pass, one place necessitating a cutting of 128,000 yards.

The successful tenderers are Foley Bros. & Larson, who will, it is stated, sublet about two-thirds of the work to other contractors, probably stipulating that they purchase their supplies and implements from their firm, which is one of the largest in the west. As their profit on these will be in the neighborhood of forty per cent., their total returns should be very considerable.

Foley Bros. & Larson are practically a Canadian firm, for, though their interests have lain chiefly in the United States, since the completion of the Canadian Pacific Railway, they have, nevertheless, a large branch doing business in the Canadian Northwest, with Winnipeg as their headquarters.

PURCHASE OF A CAN FACTORY.

The Acme Can Works, Montreal, have bought out the British American Can Co., Sarnia, Ont., and removed the plant to Montreal. This purchase completes one of the best equipped can factories in America and will enable the Acme Can Works to fill their orders with increased despatch. The business of the Acme Can Works during the past few years has expanded to such an extent that a new building will shortly be erected, 85x100 feet with three stories, and enable them to store at least 8,000,000 cans. The daily output of the plant will be 165,000 cans. In addition to the manufacture of cans the Acme Can Works are installing a plant for the manufacture of wire and solder, which lines they have been obliged to import heretofore. When completed it is considered the plant will be the most modern on the continent and fully able to attend to the requirements of the trade in the busiest of seasons.

AUTOMOBILE TRADE.

The hardware merchant who overlooks the automobile business is making a mistake. It is an excellent thing, if a possibility, for a dealer to own a machine of his own, and if he does, to buy one for which he can secure the agency. His own machine will then answer a double purpose. It will permit of his getting about the country rapidly and also be a sample for him to sell by. The automobile business, like electricity, is in its infancy. There is a great future in it. The young man who makes a study of it is certain to find himself in demand, and the dealer who early takes hold and pushes the trade, is going to reap a reward.

Nova Scotia Trade News

Halifax, N.S., Oct. 11.

TRADE conditions generally have improved greatly since last report. In fact it might be said that a boom has set in in the hardware business. One dealer in speaking with your correspondent to-day said that the rush of so many orders was most unexpected. Buyers had been holding off till the very last moment hoping for more favorable prices, and it seems that the idea struck them of sending their orders in all at one time. Naturally the dealers were a little surprised at the sudden change, but they are greatly pleased nevertheless.

In lumbering goods the trade is particularly bright. The orders coming in are for tree saws which now replace the axe in many of the large lumbering concerns throughout this Province. Heretofore the axe was used almost exclusively. In cutting a tree with an axe several feet were lost, as it would be taken off some distance above the stump. Now the tree is sawed close to the ground and the operator saves many feet of the best lumber. Another feature is that it leaves the forest in better condition for travel for the teams. The western part of the Province is practically doing away with the axe altogether. Peeveys are also finding good sale, as well as coil chain. This is used principally by the lumbermen for booming logs. Saw bits for rotary saws, lacing and leather belting are included in the orders to hand.

With regard to prices, metals are very strong but in other lines there is no very marked change. Sheet lead, sheet zinc and pig lead are very firm. The demand is good, but dealers show no inclination to sell, neither do they care to quote prices on these metals. The jobbers say that if they let their stock go, they cannot replace it for the wholesale prices now quoted.

The steamer Phoenix arrived at North Sydney on Saturday from Glasgow, Scotland, with a cargo of brick, fire clay and manganese ore for the Nova Scotia Steel & Coal Co. The steamers Olaf Kyrre and Lark, the former from Spain and the latter from Sweden, are at North Sydney discharging iron ore. The latter ore is the heaviest ever received there, its weight being three times as great as that of the Wabana article, bulk considered, and it contains one-third more iron. Owing to its great weight considerable difficulty has been experienced in discharging the Lark, the main shaft of one of the cranes on the ore pier giving away as a result of the strain.

The find of clay on the property of Charles L. Campbell at Baddeck is said to be of good commercial value, as it contains a composition found in no other mineral. It has been called "Baddeckite" by the Nova Scotia Mines Department. An agent of the Standard Pipe Works at St. Johns, Que., has been at Baddeck recently inspecting the deposit, and has taken a sample of the clay back to the works for the purpose of testing it. If the test is satisfactory the deposit, which is a large one, will be developed.

The Transcontinental Railway Commissioners who were in Sydney last week visited the steel works and saw the rail mill in operation.

Geo. McAvity, C. N. Skinner, A. I. Trueman and A. H. Barnhill, of St. John, and James Barnes, of Buctouche, are seeking incorporation as the New Brunswick Coal Co., Limited. The capital stock is to be $25,000.

British Columbia Trade News

Vancouver, B.C., Oct. 6, '05.

HENCEFORTH it will not be for lack of information that a duty on lumber will be denied the mill men of British Columbia, for a more exhaustive presentation of their case than that placed before the Tariff Commission could not be made. In fact the Commission devoted the greater part of the time they sat in Vancouver to hearing arguments pro and con. The lumbermen traversed the ground made familiar by numerous attempts to impress the Federal authorities of the injustice of having no protection against importations of rough lumber, while the mills of the coast States have every protection accorded them by the U. S. tariff.

The ground taken that the lumber industry is apparently singled out as the only one accorded absolutely no protection was emphasized. The preservation

of the market of the Canadian Northwest for British Columbia mills was urged as imperative if the lumbering industry were to prosper and increase. The Northwest, it was pointed out, looked to this Province for a market for a large part of its produce, and a fair return was that the lumber trade of the Northwest should be held for the B. C. lumbermen. In connection with the effect of a duty in raising prices, the millmen argued that there was so much opportunity to engage in lumber manufacturing that it was not at all likely that prices would be raised. As to shingles, while admitting that very few were imported from the U.S. while B.C. mills sent a very large quantity into the markets of the Eastern States every year, it was pointed out that quality was the factor which made the demand for the B.C. shingles across the line. As soon as the quality fell to a level of that product on Puget Sound, the U.S. shingle mills could invade the Canadian field, unless a duty was put on to anticipate such a contingency.

The boards of trade of Victoria and Vancouver strongly upheld the case of the lumbermen, urging the importance of the lumber trade in the commerce of the Province, and comparing the situation here with that in eastern Provinces, showing that a large part of British Columbia commerce was made up of products shipped out of Canada, and that Eastern Canada was but a small customer for that which this Province produced, with the single exception of the lumber. Incidentally, some argument for better subsidy terms was made a factor of the argument, while in answer to one of the commissioners, a lumber delegate gave the opinion that reciprocity with the U. S. in lumber would be no great aid, as the mountain mills were so situated that they could not compete favorably even if the U. S. market were thrown open. The point was also impressed that the U. S. mills simply made the Canadian territory a dumping ground, slaughtering there what could not be absorbed locally. This has the effect of getting rid of a surplus which would otherwise have to be carried at heavy cost, and also of providing means to keep the mills going all the time.

Alderman Williams, of Vancouver, representing the Trades and Labor Council, presented the views of the workingmen opposing the proposed duty on two grounds, that the price of lumber would be raised and that the millmen were not entitled to sympathy, as they employed cheap Oriental labor, while the Puget Sound mills employed higher priced white labor entirely.

* * *

To make Vancouver a great shipping port, as its natural advantages fit it for, was the tenor of a memorial presented to the Transportation Commission by the Vancouver Board of Trade. The fact that here is a great harbor, capable of accommodating unlimited quantities of shipping, landlocked and protected from storm and open all the year round, was duly impressed. Pointing out the circumstance, which the board regretted, that a large part of the best water-front of Vancouver harbor was in the hands of a great corporation, the C.P.R. Co., the memorial urged strongly that a broadly conceived plan to make of this port a great harbor for world's commerce should be adopted, not only with present requirements in view, but looking to vastly increased demands of the future.

Members of the commission went very minutely into the statements as to the ownership of the waterfront of the harbor, and asked questions concerning the conditions on which the C.P.R. Co. had disposed of any portions of its harbor frontage. It was brought out that penalty clauses in all conveyances expressly prohibited leasing the water frontage for wharfage for any opposing line of steamers to that controlled by the C.P.R.

* * *

By the next Australian steamer to sail, the Miowera, no less than 800 tons of agricultural machinery from Eastern Canada will be sent to the Commonwealth. The unusually large shipments may in part be accounted for by a desire to anticipate the duty handicap which it is the avowed intention of the Australian Federal Government to place on freight charges as well as invoice values on goods from Eastern Canada. This matter has been referred to previously, and if present reports are final, the effect will be serious on exports from this port to Australia, for eastern manufacturers will find it an economy to ship from Atlantic ports, thus saving the duty on the heavy freight charges across the continent.

A LONG TRIP

FOR 25 CENTS.

From the Atlantic to the Pacific is a long trip, and if you were to call on every hardware merchant, store and tinware dealer and plumber it would take about three years and would cost you about ten thousand dollars.

HARDWARE AND METAL makes the trip every week.

Have you a message you wish delivered?

Have you a business for sale?

Do you wish to secure a new clerk?

Do you want anything in which a hardware man or plumber would be interested? If so, place it in the paper he reads.

The cost is a mere bagatelle.

2c. per word for each insertion.

1c. per word for subsequent insertions.

* * *

Commenting on the reported decision of the Minister of Justice that no interference would be the policy with respect to the B. C. Government's tax on commercial travelers from the east, a member of the Cabinet said that the matter would probably be discussed before the next session of the Legislature. It is strongly held here by business men that there is nothing unfair in the tax, considering that such a large trade in this Province is secured by eastern houses, while local wholesale houses and manufacturers, in common with all business houses in the Province, are taxed direct on their trade and stocks by the Provincial Government. It is, perhaps, not very generally known in the east that direct taxation exists in this Province, and every business concern is assessed and taxed by the Provincial Government in its efforts to eke out an insufficient subvention from the Dominion treasury.

Business Changes

Ontario.

George W. Kitchen is advertising his blacksmith business for sale at Paris.

Leduc & Gauthier, tinsmiths and roofers, Ottawa, have dissolved partnership.

H. Howard & Co. have sold out their hardware business at Listowel to R. K. Ross.

Wm. Wyatt & Son, London, are advertising their stove and tinware business for sale.

Quebec.

Bernier & Bedard, roofers, Montreal, registered.

Picard & Lalonde, electricians, Montreal, registered.

Ed. Pascal, blacksmith, St. Frederic, has been burned out.

Lefaivre & Taschereau have been appointed joint curators to L. C. Giguere, hardware merchant, Quebec.

Western Canada.

J. A. Watt, contractor, Calgary, has assigned to C. S. Adams.

G. D. Wallace, hardware merchant, Cambrose, has been succeeded by Wallace & Burgar.

W. Briggs, machinist, Portage La Prairie, has sold his business to Portage Iron Machine Co.

Joseph Sparling, agricultural implements, Roland, is advertising business for sale.

New Brunswick.

Frank B. Wilson, blacksmith, etc., and W. L. Wilson, carriage repairer, have been succeeded by Wilson Bros.

A PROGRESSIVE FACTORY.

A firm that has made remarkable progress during the last few years is J. S. Loughead & Co. of Sarnia, manufacturers of hubs, spokes, and bent goods. The firm was established in 1867 in Sarnia at a time when that section of the country was very sparsely populated, but amid all the vicissitudes of trade the business has steadily grown until now it has one of the largest and best equipped factories of its kind in Canada. The firm have made a reputation for putting nothing but the best material into their goods and everything that goes out of the factory carries with it a guarantee of good material and workmanship. The business is now managed by Mr. F. J. Loughead, son of the founder, and a prominent citizen of Sarnia. The firm have the best transportation facilities both by water and rail. They have a very complete and attractive catalogue which will be sent free on application.

SNOW SHOES.

The first snow shoe catalogue to come to our notice is that just issued by Frothingham & Workman, Limited, Montreal. This firm make a specialty of snow shoes, and the popularity of this feature has been so great that they are planning for a great extension of business in this line during the coming season. Six different grades of snow shoes are illustrated in their catalogue, which will be sent to any of our readers on request.

PAINT, OIL AND BRUSH TRADES

LINSEED OIL TARIFF.

CANADIAN producers of linseed oil are expected to bring the matter of increased protection for their industry before the Tariff Commission when it sits in the east. According to the trade statistics for the fiscal year ending June 30 last the imports of vegetable oil from Great Britain were $609,-387, an increase of $282,055, linseed oil making up a large part of this increase owing to the closing of the Canadian mills.

The Dominion Linseed Oil Company has four mills, one each at Baden, Elora, Owen Sound and Montreal. The company is capitalized at $450,000, and the claim is made that after losing $25,-000 in the previous year, it has been considered wise to close down. There are two other mills, one at Montreal and one at Winnipeg. The situation, as explained by Mr. Livingston, president of the Dominion Linseed Oil Company, is that before 1878 the duty was 17 per cent. Now it is 25 per cent., but the preference reduces it to 16 2-3 per cent. on imports from Britain, the chief source of supply. Seed is grown in the Northwest and a portion of the domestic supply went to each mill, but there was not enough to keep all going and some seed had to be imported.

Owing to the high freights to the west on the imported article, the Winnipeg mill has not felt the competition so much, as its supplies are close at hand. Britain's supplies of seed used formerly to come mostly from the British East Indies, but South America is now a great producer, and also supplies Britain though the South American product does not yield such high-class product as the British East Indian seed. Millers complain that oil from South American seed should not get the benefit of the preference, even coming from British mills, but in reply British millers state that it is mixed with oil from British East Indian seed and the preferential duty is applied. Then this year's conditions have been peculiar; the Rockefeller control in the United States market cornered the seed there and put prices up, at the same time drawing some Canadian seed by their high price, thus reducing our supply of raw material. Then the British prices for oil have been abnormally low, so that the ad valorem Canadian duty furnished little protection to the Canadian mills, especially with the high price for Canadian and American seed, caused by the Rockefeller corner. The British product is practically barred out of the United States by their duty of 20 cents a gallon, equal to 24 cents an Imperial gallon. This is the case to be put before the Tariff Commission by the linseed oil millers.

A NEW PAINT.

BRITISH trade journals describe a new white paint, patented in Germany, which is claimed to far excel white lead and other similar products in fineness and smoothness of surface, covering power, permanence, and cheapness. It is said to be obtained by saturating burnt lime containing magnesia with a hydrocarbon, and firing until all the carbon is burned. The material is then ground fine and colored ready for treatment with linseed or other saponifiable oils; with mineral oil, partial saponification takes place, resulting in a good worklike paint. A dolomite limestone, containing from 20 to 50 per cent of magnesia, is said to be best for the purpose, although a limestone having less than 20 per cent. may be enriched by adding the desired quantity of magnesia, but with not such good results as are produced by the dolomite. Other pigments can be mixed with the material to produce paints of any required shades.

The advantages claimed for the paint are that it dries quickly without driers, is unaffected by light, and not changed by ammonia, sulphurated hydrogen, or sulphurous acid; that the coating hardens like enamel after some months, possesses a dull gloss, does not blister in the sun, and is washable, yet retains its original smoothness. The paint is suitable for walls and woodwork of all descriptions.

WOOD PRESERVER AND PAINT SAVER.

This compound is a waterproofer and one of the finest preservatives of wood ever devised. It also supersedes paint, and is better than tar, on all such structures as fences, posts, hurdles, poultry houses, cow sheds, portable buildings, etc. It can be laid on as quickly as tar or whitewash, and is as suitable for old as for new wood. Is good, also, for the metal parts of agricultural machinery; 112 lbs. anthracene oil, 14 lbs. black resin, 5½ lbs. strong liquid carbolic acid. Boil the oil and resin till dissolved, then whilst hot, pour the carbolic in, cover over till cool, and strain through a metal meshed sieve. Coloring matter could be added if desired.

PAINT ITEMS.

A large gushing oil well has been struck on the Douglass farm near Leamington, this being the fourth big gusher that has been completed in the last two weeks.

The Pendray Paint Works at Victoria, B.C., are to be rebuilt. The new plant is to be in full operation by the first of the year.

ELASTILITE VARNISH
"FAMOUS FOR FINISH"

Equally good for outside or inside use. Sold once always asked for. Considered a leader by our agents.

Manufactured only by

The Imperial Varnish & Color Co. Limited

TORONTO, ONTARIO, CANADA.

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WINNIPEG, MAN., care Mason & Hickey

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GOLDEN OAK TURPENTINE STAIN

FOR MANUFACTURERS' USE

An entirely new Golden Oak Stain and one much used by the largest United States Manufacturers; especially adapted to the needs of manufacturers of furniture of all kinds. For developing and enhancing the beauty of all decorative woods it has no equal. We make a Golden Oak Wood Filler, the correct thing for this Stain.

Bbls., Half-Bbls., 5 and 10-Cal. Kits, 1-Cal. Cans. **Prices upon Application**

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.



COVERT MFG. CO.,

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DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

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Every Canadian who wishes to trade successfully with the Old Country should read

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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Get your GLUES from

The GROVE CHEMICAL CO., Limited

Appley Bridge, Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter.

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OBERLAHNSTEIN, ON THE RHINE, GERMANY

ESTABLISHED 1862

MANUFACTURERS OF

TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc

SPECIALTY

YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.

"The Absent-Minded Beggar"

is the dealer who keeps tab on the saleability of his paints and varnishes and then, forgetting the fact that "slow-sellers" are a drag on the business, orders them anew for "another chance." He should have dropped them from his list and ordered more of the favorites. Some dealers' orders for

"Island City" Brand

Paints and Varnishes are larger every time. These dealers know a thing or two and pick winners. They make money as a result. Their hardware-neighbors say they are lucky. The luck consist in their "judgment." —they think it out; then **act.**

P. D. DODS & CO. Toronto, Montreal, Vancouver, Winnipeg

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.



Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of Hardware and Metal,
232 McGill Street,
Montreal, October 13, 1905.

NO remarkable features have cropped up during the week with the exception of turpentine which has shown a wonderful activity. It has advanced 4c. per gallon over last week's prices and is very firm at 97c. and 96c., according to quantity. A further advance is promised very shortly. Even at the present figures turpentine is much cheaper here than in the western markets and circumstances generally would justify the rise which is momentarily expected.

Gum shellac is not very well defined, manufacturers frequently quoting higher or lower than the current market price. On the whole, however, the disposition has been to sell higher rather than lower so that our figures may be considered fairly steady.

Linseed oil has been fluctuating in the foreign markets, but dealers here have recovered from their scare with the result that there has been no further drop and our figures as given last week remain steady.

The general trade is good, Fall business being well up to expectations.

Turpentine—The market is very strong and prices are now the highest since last May. This is accounted for by labor difficulties in the southern pine belt and the decreased shipments coming north. Every week shows a falling off in arrivals which is gradually becoming more pronounced. The difference between Toronto and Montreal prices is accounted for by the fact that there are better stocks in the east. We are now quoting: Single barrel 97c. per gal. Two barrels or over 92c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Local dealers seem to have recovered their confidence and a check has been put to the decline in value. We are now quoting as follows: Raw, one to four barrels, 45c.; 5 to 9 barrels, 44c.; boiled, 1 to 4 barrels, 48c.; 5 to 9 barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—We quote: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—Prices have not yet been withdrawn in this line, but the general opinion seems to be that such a contingency cannot be long delayed. Our prices are as follows: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc—(Ground in oil) — We give the following prices: 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—We give the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—The firmness previously reported is still apparent. We are still quoting: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—Producers are not steady in their quotations, but jobbers are still holding the following prices firm: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—The advance quoted last week has been maintained. We give prices: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Prices are generally from $1.20 to $1.40 per gallon.

Castor Oil—The demand is very brisk which has kept prices firm at 8 1-2c. to 9 1-2c., according to lot.

Refined Petroleum—As predicted by Hardware and Metal prices have undergone a change during the past week and are held firm at one cent advance all round.

ONTARIO.

Office of Hardware and Metal,
10 Front street east,
Toronto, October 13, 1905.

PRICES this week are practically the same as quoted in our last report, there being no feature of exceptional importance to note at present. General business in all paint materials continues very brisk, building still being quite active. Some large sales of lead are being made but there is no movement of any size in this direction, although prices are stiffening and are bound to increase shortly.

Turpentine has made another advance of 2c. on the southern markets and is very stiff here at last week's figures of $1.00 for single barrels and $1.10 in five gallon lots. A further advance is considered likely owing to the increase in the south and the shortness of stocks on the local market.

Linseed oil has advanced one cent, price being considerably higher in England. The quotations are being held to very strongly.

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

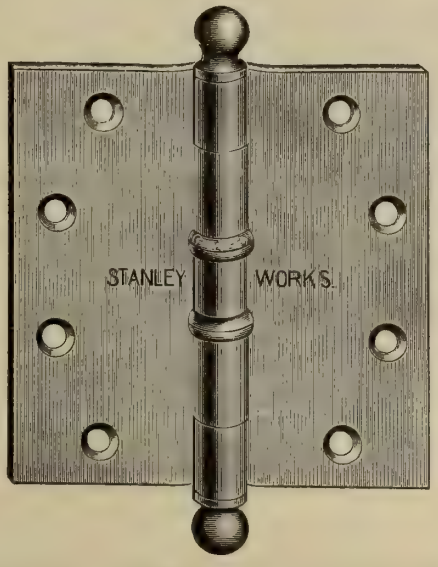
Stanley's Ball-Bearing Hinges

FOR ALL THEIR IMPORTANT WORK. DEALERS SHOULD HAVE THEM IN STOCK.



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.

GUESSES AT THE RIDDLE OF LIGHT

THE SELLER'S GUESS

"If business **is conducted** on **supply** and **demand** and **the demand** is **here** who is **to get** the supply?" Similar to any other commodity, **the channel** through which an **essential** like

MAXIMUM LIGHT GLASS

will be bought is the **retail store**, offering as the latter can **first-hand** demonstrations of **efficiency** and the **quickest service** to the **purchaser**, besides **being associated** with **Builders' Incidentals**. There is **no riddle** to selling what one is by the law of commerce the **natural medium for**. That is just a matter of adaptability—**profitable choosing**.

SOLE CANADIAN AGENTS:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

ALUMINUM!

How to use the C.P. Co's. Aluminum

The directions are simple. Have a clean brush, clean surface, stir the Aluminum and go to work. For further particulars see the label upon each tin and be sure the package bears the name of

The Canada Paint Company, Limited

LIQUID ALUMINUM

SPECIALLY PREPARED
READY TO APPLY

Our Liquid Aluminum will give a silvery surface to Mail Boxes, Radiators, Steam Coils, Stovepipes, Gas Fixtures, Range Boilers, Metal Ornaments, Church Steeples and is useful for interior and exterior decoration.

THE CANADA PAINT COMPANY'S LIQUID ALUMINUM is not affected by heat, cold or moisture. It is a thoroughly reliable article in every respect.

Window glass holds quite firm at the advance reported a week ago.

Petroleum still remains at the old figures, but an increase is looked for at any moment, business being very brisk.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c.; boiled, 50c.; 5 to 9 barrels, raw, 46c.; boiled, 49c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Much business is being done at the old figures, shipments by boat being very large. We quote: Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c; 18 1-2c. ex warehouse.

Crude Petroleum—Prices are very firm and further advances are likely. We quote: Pennsylvania, $1.36; Ohio, 92c.; Canadian, $1.32.

Glass—Last week's advance holds firm on account of the low stocks held on the local market. For prices see current market quotations.

The entire stock of tinned goods and enamelware should be examined for the discovery and renovation of damaged articles.

WINDOW GLASS—MONTREAL.

No shipments have arrived this week, though it is hoped that some of the vessels just coming in will have at least a small quantity of glass on board. Although prices are reported to have been once more advanced in the west, local importers have not raised their figures during the past week. It is probable that the western merchants are now amending their prices to correspond with changes made in the old country some time ago, and which were not followed by the local dealers. Belgian and English dealers state that they are determined to ship all the orders they have sold but they refuse to accept orders for shipment next spring at prices now current. We quote: First break 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break. 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

NEW USE FOR TREACLE SEDIMENT

If the residue which settles to the bottom of raw treacle is distilled, it gives, among other products, an oily distillate, which is a very complicated mixture and for which no use has hitherto been known. Two uses have now been discovered. One depends upon its affinity for volatile compounds of sulphur, which is very great and enables it to do good service in purifying either illuminating or heating gases from bisulphide of carbon and sulphuretted hydrogen. It is also an excellent solvent for naphthalene, and can be used either to dissolve that solid for industrial purposes or to obtain from it gases which contain it.

WOOD EXTRACT VARNISHES.

Hitherto, says Flandrak, the extracts obtained from quebracho, chestnut, oak, mimosa, and other barks and woods with a tannin basis have not been suitable for the manufacture of varnish, owing to the susceptibility of the product to alteration under the influence of water. This defect he has obviated by employing alcohol as the solvent, the extracts thus obtained serving as a wood varnish, drying glossy, and filling and contracting the pores of the wood in such a manner as to harden the surface. A thin coating of lacquer varnish is then sufficient to preserve the glass. — Rev. Prod. Chim.

Now is the time to push those paints. The season is drawing to a close. As long as the weather is good there should be a steady paint trade but you cannot tell what minute the conditions will be unfavorable.

ENTERPRISING WOODSTOCK STORE.

GARDNER & CO., Woodstock, are known to the trade as one of the most enterprising and progressive hardware firms in Western Ontario, and we are fortunate this week in being able to present illustrations of both the exterior and the interior of their new store, through the courtesy of Mr. Albert Karges, whose name is familiar to many of our readers on account of an article which appeared in Hardware and Metal over his signature some months ago. The store was rebuilt this Summer, after having been destroyed by fire last Spring. The illustration only shows the doorway and windows, above these being an arrangement of glass which provides for the throwing of light to the back of the store. A very plain and attractive sign is also attached to the top of the first storey.

The store is 100 feet long, with three floors and basement. The top flat is used as a tin shop, the second as a storeroom for glass and over stock of builders' hardware, stoves, graniteware and tinware.

The windows are only fair samples of the dressing done by Mr. Karges, but the arrangement of both is very commendable. The construction of the log-cabin of binder twine is very ingenious, roofing paper naturally being used for the roof of the structure, while screens make very good doors and windows. Garden and farm tools and ware goods fit in very nicely, making the whole window one which will attract the attention of the farm visitor in town. The display of the semi-circle of saws above the rows of chisels, and the arrangement of planes, drills, squares, hammers and other tools on the floor of the window is also especially attractive, not only to city artisans, but to farmers who do their own repairing.

The illustration of the interior does not do justice to the store, as it cuts off two large plate glass wall cases, 10 feet long and 8 feet high, and about 25 feet of the best part of the store shelving on both sides. On the left hand side of the main floor there are two ten-foot silent salesmen, 50 feet of ash counters, and a steel tool rack, which will hold 250 articles in good order. The shelving is 90 feet long and 11 feet high, 75 feet of it being fitted with hardwood shelf boxes, finished with hard oil, and numbering over 1,400. The sizes are suitable for shelf hardware. At the rear of this shelving a display of paint is made and a number of Bowser's self-measuring oil tanks for paint and machine oil are installed. On the left wall there is 60 feet of shelving for graniteware and tinware, behind this being the office, elevator and vault. The interior display can be seen fairly well, in the showcases cutlery, flatware, revolvers and small goods being displayed to advantage, while neat shelves on the counter are used to bring sad irons and food choppers to the attention of customers. The illustration hardly does justice to the display of gas stoves and ranges, they being given a crowded appearance by the nearness of the camera. The display of lawnmowers and ice cream freezers on the floor, and hammocks hanging from the ceiling indicates that Summer goods were kept well to the front when they were seasonable. The attractive office, the seats for the customers, the metal ceilings, and the general cleanly appearance of the store speaks much for the proprietors and for the store assistants.



Interior of Gardner & Company's Store, Woodstock, Ont.

TWO ATTRACTIVE WINDOWS.

The F. Hamilton Co., King street E., Hamilton, are showing an attractive sporting goods window, the central feature of which is a revolving stand on which are shown pads, sweaters, and other boot ball supplies. A neat assortment of revolvers and safety razors is also shown, while fishing rods and tackle, shot guns, ammunition and shells, re-loading tools and hunting jackets, are also shown to advantage in the window.

Another attractive window shown in Hamilton is that of Ramsay's hardware store, on the market square, a seasonable exhibit of edge tools, shears, hunting knives and pocket cutlery being displayed. Revolvers, cartridges and shells, rifles and shot guns, are shown in an attractive manner, while a neat display of fishing lines and tackle and Pflueger's luminous bait rounds off the window in a way that should attract the attention of passers by.



Window of Gardner & Company's Hardware Store, Woodstock, Ont.



The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

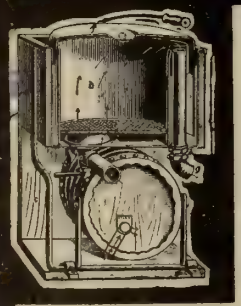
of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



SECURITY

is a pleasant sensation to the plumber who knows his work to be free from defects



A "Thomson" Smoke Test Machine

will protect you by locating any leaks or defects in material, enabling you to remedy same and leave your contract secure from reflection.

The simplest and most efficient apparatus for testing plumbing. Procurable from your jobber, or direct from us. **Price, $25.00.**

Manufacturers of
HIGH-GRADE

PLUMBING AND HEATING GOODS



J.M.T. Cushion Disc Bath Cock

Use J.M.T. Cushion Compression work. They stand the test and last.

THE JAMES MORRISON BRASS MFG. CO., 89-97 West Adelaide Street TORONTO

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

Article XVIII.

HINTS ON HOT WATER PIPING.

IT very often happens that portions of a heating system do not work in a satisfactory manner, even though the boiler and radiators have been correctly figured and mains, for the most part, are properly run.

In such instances it will be found that some radiators will be scarcely warm, while the balance of the system will, perhaps, be very hot, and while the difficulty may be the result of other conditions, it can usually be traced to an improper distribution of the water, that is, that radiators favorably placed will receive some of the water that should go to other radiators more unfavorably situated.

Now, as to the conditions that constitute an unfavorable situation for a radiator, it is perhaps wise to say a few words, which will be the more easily understood if considered in conjunction with the illustration shown in Fig. 1, in which is indicated a hot water flow pipe supplying water to two radiators, one about twice as large as the other, though placed close together, presumably in separate rooms.

It will be obvious that when water, like any other body, has attained a certain velocity or momentum, that the natural tendency will be to go straight ahead, until it is turned by an elbow or other similar obstruction, and that that tendency is stronger that is the other tendency to rise at the first outlet, providing that the outlet is to a radiator on the same level as the one connected straight ahead.

If, however, the small radiator were at a higher level and connected in the manner shown, the two "tendencys" would about balance in power, and a different arrangement would be required, as will be shown in a future article.

In this case, however, we have a radiator with, say, 50 square feet, and a larger one with 80 square feet of heating surface, supplied with a 1½ in. pipe, (the boiler being at fairly close range), the former having a 1 in. connection taken off the top and the latter a 1¼ in. connection taken off the end of the T, and this would work well.

Suppose, however, that the position of the radiators were reversed, then two propositions may be considered; first, to cut the 1½ in. pipe a little shorter, so that the "T" can be placed far enough back to allow the large radiator to still be connected off the end, and the small one off the top, in which case the connection to the small radiator would be increased to 1¼ in., because of the increased distance the water would be required to travel, and hence the increased friction between it and the sides of the pipe, and friction is one of the greatest factors with which the fitter has to deal in designing a hot water system.

The alternative connection would be to run the pipes as shown in the illustration, making a 1 in. connection serve the small radiator as at present, even though it is placed further away, and instead of a 1¼ in. branch for the large radiator, take a 1½ in. branch, and reduce to 1¼ in. just before rising through the floor. With such a connection the small radiator would have the advantage of the tendency of the water to run straight ahead, but this advantage would be offset by the increase in friction due to the greater length of 1 in. main which serves it, and the large radiator, while losing the advantage of being connected from the end of the main, has the distinct advantage of a connection into the top of the main larger than is necessary to supply it under normal, or favorable, conditions.

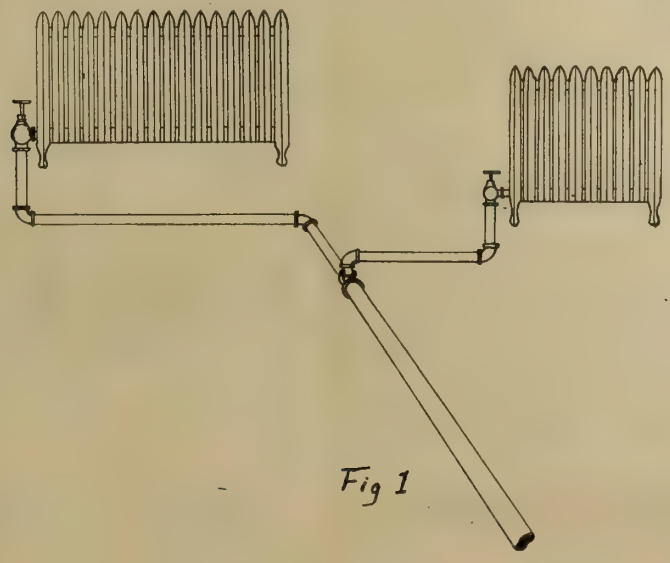


Fig 1

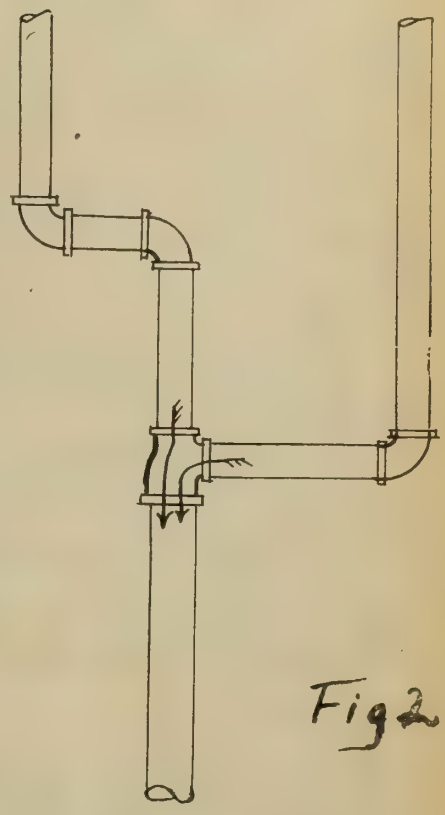


Fig 2

The great point sought to be made clear by the writer, who will deal with various phases of the question from time to time, is that the fitter must consider carefully not only the size of boiler and the size and location of every radiator, but if he wishes to have a plant that will work perfectly, he must pay attention to the formation of every connection, and see to it that, where circumstances demand it, a radiator is either favored, or the reverse, and in this way, and in this way only, can he expect to have each heater do its fair share of work.

Another fruitful cause of difficulty is the method of connecting together the returns from two radiators.

Fig. 2, which represents either a horizontal main, or riser, to an upper floor, connecting two radiators, shows the pro-

per method of connecting return pipes, the object being to prevent currents, coming from different directions, from conflicting, or, in the language of the steamfitter, "bucking," because, as is well known, the slightest obstruction will stop the circulation in one or both radiators; in this case the return from both radiators gently unite at the "T," as indicated by the arrows, and flow together to the boiler.

Fig. 3, however, illustrates a connection which will not work, the return water from two radiators coming squarely together practically stand still, unless one radiator is considerably larger that the other, when it may work to the disadvantage of the smaller one, or, if the two radiators be equal in size, one may work sometimes, and the other at other times, but neither can ever work freely when it is attempted to operate both, so that under no circumstances should a connection of this kind be placed on a return pipe.

While such a connection will work very well on a flow pipe, connecting two radiators, because the currents divide instead of unite at the "T," it is advisable, if only for the sake of appearance, to run both flow and return pipes alike and as indicated in Fig. 2.

CENTRAL HEATING.

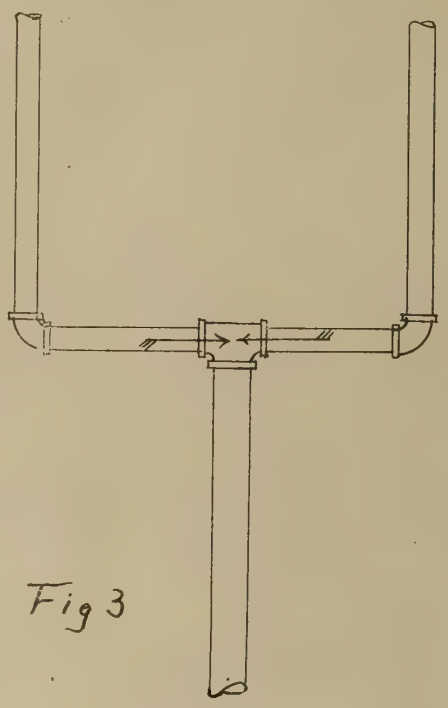
IF a general inclination towards an improvement is an indication of its near approach, central heating is not far away, that is, for ordinary application, says the Architect and Builder. In special cases of grouped buildings and for parts of towns there are already numerous plants in the United States extending from a mile or so of pipe to over fifteen miles and the supply of some 500 houses.

The advantages of central heating in the way of doing away with discomforts are obvious. There will be no coal to be brought in, no ashes to be taken out, no dangerous boiler, no man to mishandle it, no dirt, no noise, no filling up the cellar with stuff that makes the parts that are free unfit for their uses. But the advantages are not only negative. Connection with a well ordered system implies heat in the doubtful days of early Winter and early Spring, without consideration of the policy of "starting the furnace" or "letting the furnace out." It means full heat at any hour of the day or night. It means also, if steam is the means of heating, that water for baths and household purposes may be heated from the central station. And a due humidity of air by the emission of steam could be (perhaps has been) regulated by an automatic contrivance.

As to cost—there is in the first place a saving for the consumer in boiler installation, attendance, costly coal, and perhaps fire insurance, all of which is to be reckoned as an offset to the cost of heating from a centre. And, on the side of cost, there is but one item—a great item—the street mains, which is not an actual economy for the community in the way of reduced waste of natural resources; and this economy must find its bearing upon the consumer in the end. With operations on a large scale, the cheapest kind of fuel is used, and the cost of handling it is likely to be kept down by placing the station with regard to easy supply. There is a saving in the cost of attendance, for, when the boilers needed for a district are combined in one plant, few hands comparatively are needed to operate them. And the skilful operation of coupled boilers can make savings which cannot be got out of single boilers, which have to be adapted to the coldest weather and half the time are not working economically. There must also be a saving to the community in the reduction which central heating stations would make in the aggregate cost of boiler insurance.

The great economy, however, which is to be effected by the introduction of central heating is the utilization of exhaust steam. The use of steam for the production of power means the generation of nearly ten times as many heat units as can be converted to mechanical energy. That is to say, nearly 90 per cent. of the steam generated is discharged from the exhaust pipe. Railway and lighting companies throw away in this manner heat which, if it were applied, would soon pay for the first cost of laying street mains by means of which to use it and make it profitable.

It follows that the economical application of central heating is in combination with the production of light and power. Whatever may be the doubt about the safety as an investment of a central heating plant which stands alone, there seems to be no doubt whatever that as a by-product, utilizing steam heat that would otherwise be wasted, it is a safe "proposition."



The more comprehensive the combination the better. Power and heat or lighting and heat are each better than power alone or lighting alone; but the combination of power and lighting and heat in one station is better still. All concentration for one thing reduces personal attendance, and it increases the opportunity of using economizers and superheaters which are more applicable to large and steady running plants than to small plants which run unevenly. But there is another and a large field of economy opened up by the manner in which the separate functions of a combination play into each other's hands. There will often, for instance, be a coincidence in the periods of high requirements of power or lighting (and therefore of much generation of steam) and the periods when heat is especially wanted. Thus the season of maximum light requirement is also the season for heat supply; and the heavy morning demands for heat correspond with the "peak-load" periods of an electric railway.

The question as to the form of heating seemed to be rather in favor of steam before the issue recently by Mr. Bernard Green, superintendent of the Library of Congress, assisted by Prof. S. Homer Woodbridge, of a report upon a central station for power and heating for the thirteen existing and projected Government buildings on the Mall and in the vicinity of the White House. This report charges heavily in favor of hot water.

The choice of system depends rather upon the preponderance of advantage than the absence of disadvantage in either system. Both have objections which must be met, and the American District Steam Company, of Lockport, N.Y., who have put in a large number of plants, claim (in a pamphlet printed four years ago) to have met some of the principal objections to steam which are stated in the report of Messrs. Green and Woodbridge. These objections are in the way of difficult maintenanee due to expansion strains, corrosion, condensation, etc. These it is possible for ingenuity to meet. The objection to hot water is the water itself, and it is difficult to get over the pressure of water raised to a height, the force of its expansion when freezing, and its determination to leak if it can and to find its way downstairs without making any noise about it. These objections are of less importance in public buildings which are in the charge of skilled attendants night and day. And for residences heated by an individual plant these are objections of less importance than the difficulty of managing steam without a skilled attendant, and the danger of mismanagement. But when the boiler is not in the householder's hands the balance of advantage to him seems to be in favor of steam.

Apart, however, from the care of having a destructive agent like water continually racing through the house within confining walls from which a pin-hole would constitute a means of escape, the case for hot water, in the report of Messrs. Green and Woodbridge, is very strong.

They propose to drive water through the pipes with centrifugal pumps at such a speed that the water, which will be sent out at a temperature of 150 degrees will only lose 30 degrees in the course of its circuit. With a temperature thus varying little and a pressure nearly constant, there will be little strain in the pipes, and if the system is reasonably tight and the same body of water is continuously used, there should be no corrosion. The system should last and the heating promises to be equal.

W. Mashinter, Toronto, has a large job on hand in installing a central heating plant to supply the new Stair office building at Bay and Adelaide streets, and the Star Theatre, with heat. The Webster system is being installed. A dynamo will also be used to supply power and light for the two buildings.

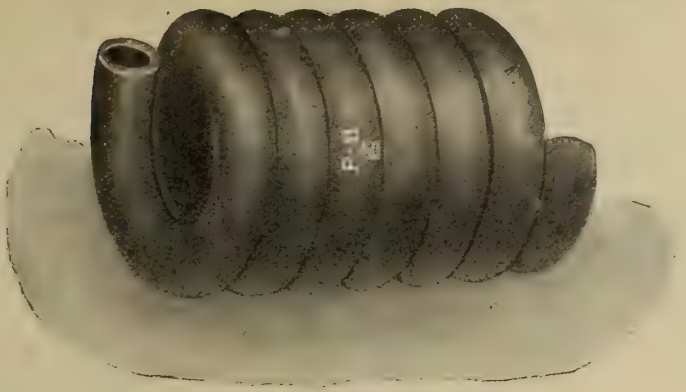
PIPE THAT IS PIPE

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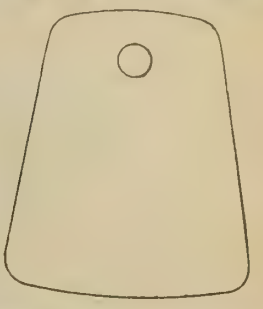
P-H

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TRADE PENBERTHY MARK.



AUTOMATIC INJECTOR



Talking About Injectors

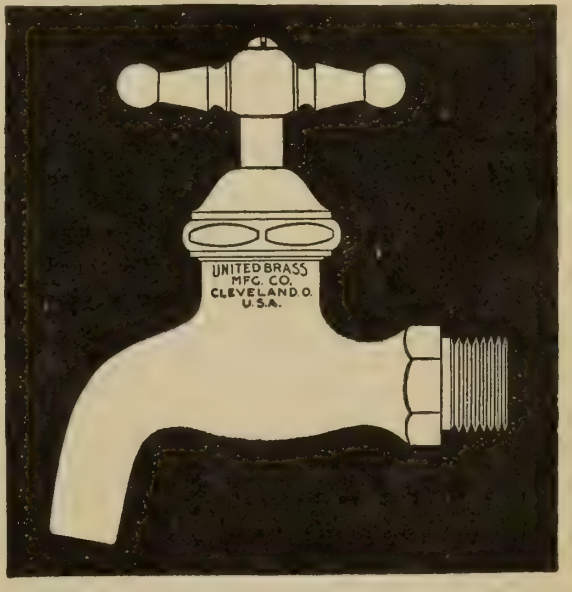
Is there any wonder that we experienced engineers always recommend using a Penberthy Injector? We have tried them all, "cheap imitations," "the just as good kind," etc., but with us it is—"Get a Penberthy and you can trust it."

ABSOLUTELY RELIABLE.

Tried and Tested—Always Satisfactory

United Compression work used by Leading Plumbers Everywhere

Unite with United Brass Goods The Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

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WROUGHT IRON PIPE

We carry in store all sizes from $\frac{1}{8}$ inch to 8 inches.

Quality the Best.
Orders Welcomed.

Shipment prompt.
Correspondence Solicited.

WM. STAIRS, SON & MORROW, LIMITED

HALIFAX; N. S.

GALVANIZING METALS.

GERMAN papers report that Cowper Coles, an Englishman, has invented a new process of galvanization, and has recently demonstrated the same with samples of iron, copper, aluminum, and other metals. The objects to be galvanized are simply heated to 260 degrees in a bath of zinc vapor, the duration of which depends upon the desired thickness of the coating but which is always short. After heating the objects are thoroughly coated with a layer of zinc, which on the surface has formed an alloy with the other metal by penetrating into it a considerable depth.

A copper rod can in this way be almost entirely transformed into brass, while the temperature employed remains far below the melting point of both metals. A great advantage of the coating, which is so perfect that such zinc-galvanized screws and bolts afterwards fit perfectly into the nuts, while with other methods they have to be polished. It is also very convenient that the objects to be galvanized have not first to be cleaned.

The retorts in which the heating takes place are of iron and are heated from the outside. Another peculiar advantage is that the zinc does not adhere to the walls of the retort, but that these, after months of use, are entirely clean. The explanation for this is that the walls of the retort are heated most, so that no zinc vapor condenses on them. Experiments to use the process with metals other than zinc have been so far made with copper and antimony, and have been partly successful, but not to a degree to make them of practical use.

PLUMBERS' BANQUET.

Toronto plumbers have decided to hold their annual banquet on Thanksgiving night, Thursday, Oct. 26th. The event will be held in the assembly hall of the Temple building. In previous years this event has occurred at some other time than when the convention was held, but this year the Toronto association will be out in force, and they are inviting every delegate to the Thanksgiving Day convention, to partake of their hospitality. Not only delegates and members of the association are invited, but every master plumber in Ontario, whether he be a member of the association or not, will be given a hearty welcome to the banquet. Representatives of the supply houses will, of course, also be present.

PLUMBERS' CONVENTIONS.

Plumbing supply men are to gather in Toronto on Tuesday, Oct. 24, the occasion being the first annual convention of the Central Supply Association. Every member is expected to be in attendance, as new price lists caused by the heavy advances in metals, are to be considered, the likelihood being that advances will be made on many lines.

Two days later the Master Plumbers' Association for the Province convenes, and as the location is most central and low railroad rates are in force, the gathering is expected to be one of the largest in the history of the organization. The events of the past three or four months provide ample business of importance for the delegates to deal with, and as the association has successfully passed through a most critical period there should be an old-time Thanksgiving celebration by the members in attendance. "Reciprocity" is to be the watchword. Let every member be present.

AN INGENIOUS DEVICE.

An ingenious and useful device for lighting incandescent gas mantle lights, and even ordinary gas burners, is on show at the Citizens' Gas Control Co., Montreal.

The device is called the Pneumatic Self Lighter, and consists of a valve placed underneath the burner and a push button, the two being connected by a small tubular wire.

The mechanism is so constructed that the distance between push button and valve may be anything. All that is required is to push the button as one does with an electric switch, and the gas is lit instantly without the aid of matches or tapers, thus removing the possibility of fires. The company which is inviting inspection to the device is introducing it for the first time in Canada. It should meet with a large sale.

VENTILATION AND HEATING.

EXPERIENCE has clearly demonstrated that in this climate no system of ventilation can be successfully operated by itself and independently of the method of heating that may be adopted. It is, in fact, a vital element of success that the two systems be most intimately combined, for they are clearly interdependent, and when properly applied are so interwoven in their operation and results that disunion is certain to bring about failure. For the purpose of ventilation, the fan was first applied upon a practical scale about the middle of this century, but only to a limited extent, and it was not until the fan and the steam heater in marketable form were introduced by B. F. Sturtevant that the so-called "blower system" became a reality. The system, of which these two elements are the most important factors, as originally installed by this house, has naturally been known as "The Sturtevant System." This system is at once practical, successful and economical; for, air being the natural conveyor of heat, it, may, when properly warmed and supplied, perform the double office of heating and ventilating. As applied, the Sturtevant system forces the air into the apartment by the pressure or plenum method. When a fan is arranged to exhaust or withdraw the air from an enclosed space, the term vacuum, or exhaust method, is almost universally applied.

PLUMBING GOSSIP.

Messrs. Riley & Bryan have opened a plumbing shop at 185½ Queen street west, Toronto.

* * *

It is understood that Messrs. Barr & Anderson have been awarded the contract for all the plumbing in connection with the new post office building now under construction at Vancouver. The figure involves a large amount, in the vicinity of $10,000.

* * *

Berlin is now negotiating with the natural gas companies to extend their mains to the German town. The proposal is to sell the natural gas at 35c. per thousand feet, and give the town 30 per cent. of the revenue.

* * *

R. J. Cluff, Toronto, Ontario sales agent for Warden King & Son, Montreal, paid a hurried visit to the Quebec metropolis on Monday, also visiting Buffalo on Wednesday.

* * *

J. C. King, of Warden King & Son, Montreal, visited Toronto and Buffalo this week.

* * *

H. Labatt, of the Canada Brass & Supply Co., London, spent a few days in Toronto during the past week.

* * *

Owing to the recent death of C. E. Stephens, the late firm of Stephens & Hawkins, electrical engineers and contractors, have been succeeded by Messrs. Hawkins & Hayward, who will continue the business at Victoria, B.C.

* * *

Bob. Harrison, Toronto, the popular vice-president for Ontario of the National Association of Master Plumbers, has been keeping it dark from his friends, but it's getting fairly well known now, and he won't be able to smother the surprise until he meets his out-of-town friends on Thanksgiving Day. Telephone Main 4401, or drop "Bob." a card, asking him how the baby girl is getting on.

* * *

Elliott Brothers, Kingston, are installing a heating system in the opera house in that city.

* * *

Harrison & Robertson, Toronto, have a large job on hand in installing a steam heating system in the new opera house in Peterboro. The out-of-town business of this enterprising firm is growing at a tremendous rate, thus speaking volumes for the quality of work performed by them.

* * *

The Borden Co. are now ready to furnish their "Made in Canada" solid adjustable die machines and hand stocks, and Mr. M. E. Murray, their genial Canadian representative, has commenced a canvass of the trade interested in pipe fitting tools. Mr. Murray expects to visit Montreal next week.

* * *

Geo. C. Ellicott, plumber, of Hamilton, was a visitor in Toronto this week.

* * *

Robt. Patterson, Toronto Junction, has a large job on hand in installing the plumbing and a steam heating plant in the Consumptive Hospital at Weston. The work will amount to several thousand dollars.

* * *

Sovereign radiators are becoming popular in Toronto, and are now being specified on the contracts for heating many of the best residences in the course of erection throughout the city. Two down town buildings where the Sovereign line has been installed are the new Peterkin building on Bay street, and the new branch of the Bank of Hamilton.

People of To=day Do Their Own Thinking



Hence the Large Demand for

THE NATURO CLOSET

They are seeing and reading with interest the truths we are telling them throughout the country in the numerous periodicals about our closet.

The result is natural, they want it. We receive inquiries and invariably refer same to our customers, letting them handle the business.

To secure the same benefit, you need only to instal a sample line of NATURO Closets.

Do you want trade thrown your way ?

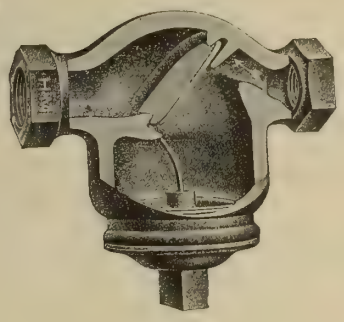
The NATURO Company

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Salem, N.J.

MUELLER WATER STRAINER

PATENTED



C—109

For fire purposes water is often pumped direct from the source of supply instead of after it is filtered, and in such instances enough sand and dirt are carried to the faucets to do them serious injury.

The Mueller Water Strainer screens out all sand and dirt from unfiltered water. It prevents injurious substances from coming in contact with the faucets.

The Mueller Water Strainer is made of cast iron, has a brass gauze screen and brass plug and is made for all sizes of pipe up to 3 inch.

Each strainer bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. ***New York, N.Y., U.S.A.***

Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea,

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works : Swansea, Toronto, Ont.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 13, 1905.

NO material change has taken place in the Quebec plumbing markets this week, but everything has stiffened in value. It is questionable whether so much firmness has been manifest at any other time this year.

Heating contracts are, of course, the biggest end of the business at this time of year, the activity being spread over the whole Province. Plumbers from outside points are reported in big numbers at the local supply houses, and nearly all of them are ordering supplies for large heating jobs. The long continued fine weather, however, is said to be holding back several good orders for heating residences and indications are that the next six weeks will be quite as active in this line as the present.

There are prospects of a quite serious scarcity in iron pipe, with the result that much strength has been added to that part of the market. Even apart from the reported scarcity, the general activity and high prices current in the iron and steel markets both in America and Europe would tend to higher figures in any case.

Range Boilers—Business is being maintained at its high level, and with no change in prices, which are quoted as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Another advance in pig lead, during the week just passed brought it to its record price for the year. Pipe, however, remains unchanged. We are quoting: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c per hundred lbs. extra.

Iron Pipe Fttings—A buoyant tone is evident. There is every sign of an early advance, but for the present we quote as follows: Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—This has been the feature of the market during the past week, some firms reporting a scarcity in their supply which will be hard to replace, except at higher figures. The big iron and steel manufacturers are not allowing any deviation from specifications on contracts now being booked, showing the imminence of a withdrawal of prices. We now quote as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—Big orders are on hand and shipments are now being made with great regularity. Our prices are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—Everything is in favor of a continued firmness in this line. Tin is as firm as ever, and lead has experienced another rise, but we are still quoting: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 13, 1905.

A HEAVY business is being booked by the local supply houses for heating goods and for lead pipe. A very large share of the orders come from the west, one house reporting orders for two carloads of lead pipe during the past week, both shipments to be made to Winnipeg. With this exception the demand for all lines of plumbing supplies is about equal, the volume of business being as great as was ever experienced in the history of the trade of this city.

Despite the general activity there is no particular shortage of goods reported. Some houses state that certian sizes of baths are hard to procure, while others say that traps are scarce. This condition is not general, however. Marble is also scarce in some quarters, while there is reported to be a heavy call for one-pieced sinks.

In heating goods the demand is exceptionally brisk, particularly in iron pipe and fittings and for boilers, heaters and radiators. The coming of cold weather will give this trade an additional impetus, the one difficulty being that the heating contractors are unable to secure a sufficient amount of labor to handle the large business in the short time it is desired.

No changes in prices have occurred but the general firmness in the metals markets indicates that advances must be made very shortly and it is likely that after the meeting of the Supply Association next week that higher figures will be quoted on several lines, more particularly on lead, iron, glass and copper materials.

Lead Pipe—Prices are very firm and an advance is looked for shortly. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Demand is active with producers keeping well up to their orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fttings—A strong demand exists for both iron pipe and fittings, but a scarcity of supplies exists. We quote as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers—Increasing business is reported owing to the completion of building contracts. The discount continues at 15 per cent.

Galvanized Iron Range Boilers—Trade is quite brisk and prices are strong. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—Prices of pig iron being very strong ,and the call for goods being heavy, an advance is looked for, possibly next week. We quote as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 1-2 inch, $15.75; 3 in. $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Firmness in the lead and tin markets keeps solder quotations very strong. Business being done is heavy. We quote: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware—The heavy demand for some lines has caused a scarcity, but on the whole, the manufacturers of Canadian ware have kept well up to the demand. Prices continue unchanged. We quote as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50; spemial, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet,

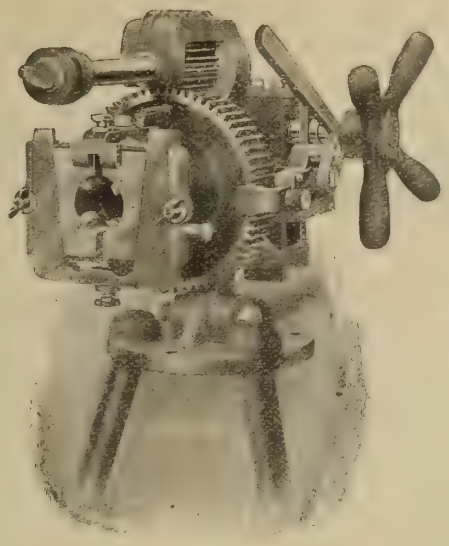
RAMSAY'S ALUMINUM PAINT

The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

Ramsay's Aluminum is right Aluminum.

A. RAMSAY & SON COMPANY

Est. 1842 MONTREAL PAINT MAKERS



½" —2"

"Solid Adjustable" Die Machine

Ask for Catalog J.

More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

Simplicity and Durability.

The Borden Company

16 Sheppard St., TORONTO, CAN.

FAIRBANKS STANDARD SCALES

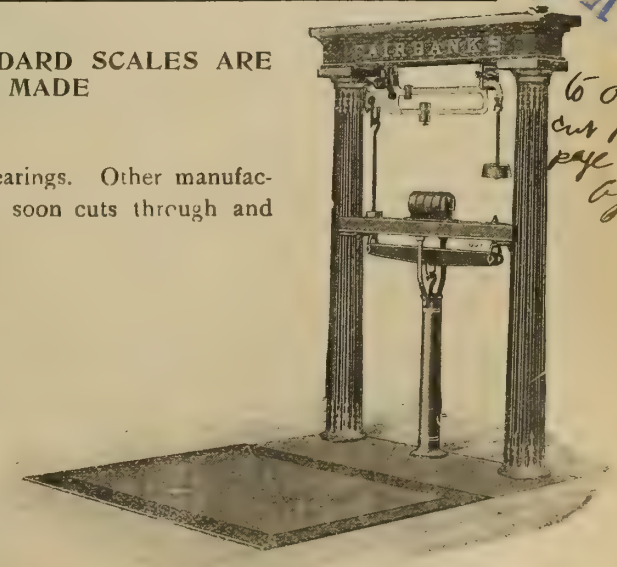
Reason No. 3

WHY FAIRBANKS STANDARD SCALES ARE THE BEST MADE

All Fairbanks Scales have renewable steel platform bearings. Other manufacturers use chilled cast iron and the thin skin of metal soon cuts through and the scale works hard.

Reason No. 4

Particular attention must be paid to scale castings, and we know of several manufacturers who buy their castings from outsiders. How can they expect uniformity in these? Every part of Fairbanks Scales is made under our supervision in our own factory.



THE CANADIAN FAIRBANKS CO., Limited,

Montreal Toronto Winnipeg Vancouver

We make Electric Fixtures, Sockets, and Cut-Outs

Munderloh & Co

Electrical Supplies of all kinds. MONTREAL.

2 1-2 inch ram, first quality, $19; special, $17; 3 inch ram, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.00.

ELECTRIC REFRIGERATION.

APROPOS of the article on the use of electricity for refrigeration contained in the last issue of Commercial America, the following description of a small electric refrigerator, taken from the Scientific American, has interest:

Ever since the perfection of the cold storage plant, money and brains have been expended in producing an iceless refrigerator. It was generally conceded that there was a demand on the part of dairymen, soda fountain proprietors, saloon keepers, butchers, and grocerymen for something that would make them independent of the iceman, and this seems at last to have been accomplished. Besides being a great convenience, the new refrigerator has a number of other recommendations, notably its cleanliness. Because of the great amount of moisture in the interior of the refrigerator, and because of the material usually stored within, the walls tend to become foul unless cleaned with scrupulous care at frequent intervals. This condition is brought about all the more quickly where the ice is not pure. Moreover, the charging of the ice receptacle every day is a nuisance. All this is done away with by means of electric refrigeration.

The electric refrigerator is a self-contained and automatic cold storage plant in a small way. It almost takes care of itself. The switch controlling the electric current is the only part that must be manipulated.

A refrigerator of this kind has been in operation for some time as an experiment in a Philadelphia grocery store. When the store is opened in the morning, the current is turned on and remains so during the day. Although the box is being constantly opened and closed, the temperature is maintained at 34 degrees. About the best temperature obtainable by the ordinary method of icing is 40 to 42 degrees. When the store is closed for the night the current is shut off, and the temperature remains constant all night. The difference shown by the mercury between the closing and opening hours is never more than one degree. During all this time no operating expenses whatever have been incurred.

The largest soda fountain in Philadelphia has been in operation for several months, and the materials drawn therefrom have been uniformly several degrees colder than could be secured with the use of shaved ice, and yet no ice has been used in it. A motor of one-half horse-power in the cellar operates a refriegrating plant, which not only keeps the fountain at a frigid temperature, but also does some additional work of a similar character in the cellar.

The iceless refrigerator is much the same in appearance as any large refrigerator. In a compartment at one end a motor and all the necessary compressors and other paraphernalia are contained. The place usually occupied by the ice is given over to a tank containing brine, which is the means of cooling the interior of the refrigerator. The principle is identical with that of the large refrigerating establishments, but this is the first time that the system has been reduced to an automatic basis. No expert knowledge of either electricity or refrigeration is required in order to operate one of these outfits. The types now being manufactured are of the sizes which are likely to be required by storekeepers who would ordinarily make use of at least two hundred pounds of ice daily. The next step will be the manufacture of one which will be available for the larger householder, and will be operated by a motor of one-eighth horse-power.

Another notable feature of one of these equipments is that where it is desired to have ice for use on the table, these machines will make it while performing their ordinary functions. One of the refrigerators has facilities for making two ten-pound pieces of ice per day, and another with a little different arrangement will make a number of small cubes.

NATURAL GAS IN ONTARIO.

WESTERN Ontario is being favored with a supply of natural gas from the Niagara district, the cities of St. Catharines, Hamilton, Brantford and Galt being certain to secure cheap gas this fall, while other towns and cities will have to wait for their supply until next Spring. With the development of the field near Leamington a further supply should be available soon and London, St. Thomas, Chatham and the more western centres may be supplied at an early date.

The low price at which the natural gas is sold is bound to encourage its consumption amongst the great mass who have been unwilling to pay $1 or more for the poor quality of gas supplied in some of these cities, and live merchants are stocking up heavily with gas fixtures, mantles, globes, etc., as well as gas stoves, water heaters, grates, and other lines suitable for use in heating the house or cooking meals. Later on a large trade is looked for in gas furnaces and manufacturing plants are expected to use the gas as fuel extensively.

Two companies, the Ontario Pipe Line Company and the Ontario Gas and Fuel Company, are competing in the district and only 35 cents per thousand is being asked for the gas. Many streets have been piped and the work of making connections with the private residences is being pushed forward rapidly. Until this is done the sale of fixtures and supplies cannot be very extensive, but another month will see a general activity.

In Hamilton a Gas Supply Company has been formed, Ald. Hugh Wallace, plumbing contractor, being one of the stockholders. Only gas heating, cooking and lighting supplies are carried in stock and a sufficient trade is looked for in this line to make the enterprise a permanent one. The introduction of natural gas provides an opportunity for similar enterprises in other towns.

The piping of the natural gas throughout Western Ontario and its sale at such a reasonable rate also suggests the possibility of carrying the natural gas found in Alberta and Saskatchewan to Winnipeg and other large centres in the west, fuel being very expensive and being required in large quantities throughout the prairie districts. The increasing use of natural gas is of special interest to plumbers and hardware merchants, as well as to manufacturers of stoves and brass goods.

A popular bath in England is arranged for use in cottages and rooms where space is limited. The bath is enclosed in a cabinet which forms in itself an attractive piece of furniture, and the woodwork can be made to match any other in the same room, the cabinet being arranged to contain bath mat, bath towels, bath gown, sponges, soaps, and other bath requisites. It folds upward and is well balanced so that it can be easily enclosed in the cabinet and put out of sight. Another arrangement of a similar kind has the bath swing in under the sink in the kitchen.

One of the largest single orders for fire hose placed by a private corporation in the Dominion has just been announced. Some weeks ago the Canada Car Co., Montreal, invited tenders for providing their enormous plant with fire hose. The quantity required totalled 4,400 feet. A large number of tenders were received, and the result has just been given out. The successful tenderers are the Canadian Rubber Co., of Montreal, who will supply 4,400 feet of their new three-stripe "Star" Underwriters' 2½-inch cotton fire hose, with couplings attached.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

J.C.M.

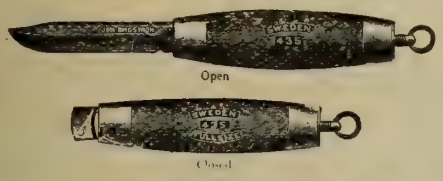
Galvanized Dead Flat Sheets

made from British Siemens Martin Steel only; most reliable for working up. Apply for samples and prices to:

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

KLONDIKE HUNTING KNIVES

"Genuine John Engstrom"



Best quality Razor Steel.
Crocus polished blades, curly grain handles, brass linings.

Lengths of blades, ⅞ to 5 inches.

Lengths closed, 1¼ to 5½ inches.

Ask your Dealer or Jobber for **Klondike**, or write for particulars.

SMITH & HEMENWAY CO., Mfrs. Cutlery and Hardware.
Can. Office: Coristine B'ld'g, Montreal, Can. **296 Broadway, Dept. 435, NEW YORK**

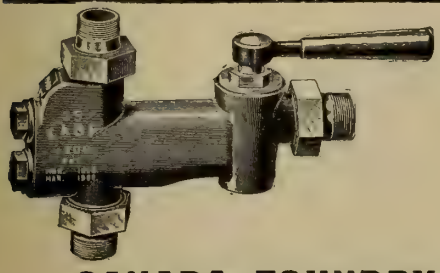
HARDENED AND TEMPERED

SPRINGS

Send Specifications to ——— **ANY SHAPE.**

The WALLACE BARNES CO., BRISTOL, Conn

NEW CATALOG JUST ISSUED.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.
Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.
District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

---

TIN PLATES

"ELYN" "LYDBROOK" "GRAFTON"

I can supply these famous brands at **Lowest** prices.

Write for prices and ascertain.

J. A. HENDERSON, Agent for **T. W. & J. WALKER,**
Board of Trade Bldg., **MONTREAL.** **WOLVERHAMPTON.**

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
WE MAKE THEM.
SEND FOR CATALOGUE TO
American Shearer Mfg. Co., Nashua, N.H., USA

Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

Our No. 3

HAND DRILLING MACHINE

has ball bearing on end of spindle.

The Ball Bearing is the great Modern Friction Eliminator.

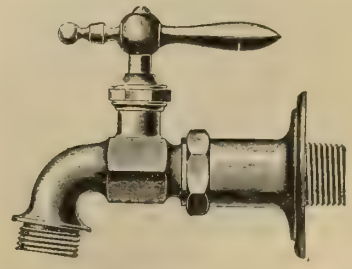
Speed and pressure combined generate friction.

In a Hand Drill the speed and pressure are focused on the end of the drill spindle, just where we have put the Ball Bearing.

Only $1.00 advance on list price for machine with Ball Bearing.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

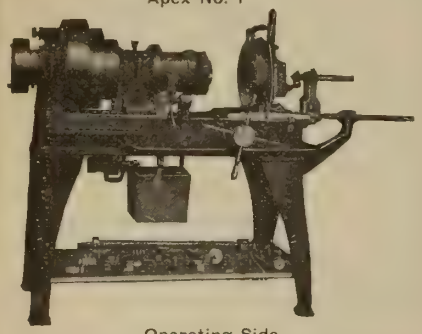
ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, CLEVELAND OHIO, U.S.A.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

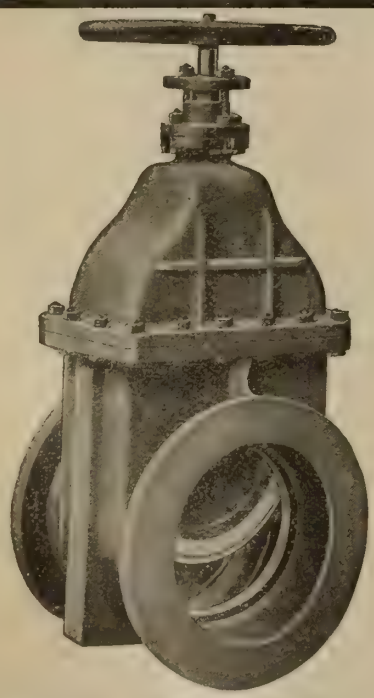
This machine is especially adapted for making nipples. The gears are all machine cut and enclosed within a cone on the machine, thus being protected from chips and dust, and out of the way of the operator. The cone is a three step, giving six speeds to the machine. Capacity of this machine from ¼ to 2 inches inclusive.

Write for Catalogue.

THE CANADIAN FAIRBANKS CO.

Sole Agents for Canada Limited

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Weber Iron Body Gate Valves

Are recognized as the leading Gate Valves "MADE IN CANADA."

Every valve is tested and packed before shipment Send for Catalog.

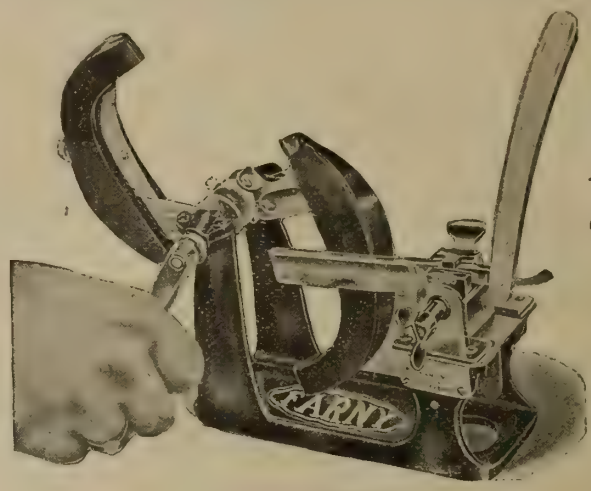
The KERR ENGINE CO.,

Manufacturers Limited

WALKERVILLE - ONTARIO

TWO NOVELTIES OF MERIT.

F. Alfred Reichardt & Co., New York, are introducing two novelties to the hardware trade, both of which have considerable merit. The Farny razor sharpener, which is illustrated herewith, is a novel machine for sharpening razors and keeping them in order, so that shavers can always be ready for use without being sent to the barber for honing. The machines does its work in about thirty seconds, and there is no mechanical skill or experience needed by the operator. All that is required is the turning of a crank and the sharpener does the rest. The Farny handstone, made of carborundum, is a novelty which should sell well, carborundum being the hardest material in the world after the diamond. The handstone is moulded into shape that will fit the hands and feet, and glides over the surface of the skin, producing the effects of softness of silk velvet, while pumice or sand-stone roughens and scratches.



Farny Razor Sharpener.

RETURNED
OCT 14 1905
To Owner
Cut Book 41
page 69



Farny Handstone.

RETURNED

THE MAN OF THE FUTURE.

AT the final meeting of the Electric Club, of Pittsburg, before the Summer intermission, Mr. Frank H. Taylor, second vice-president of the Taylor, second vice-president of the Westinghouse Electric Co., and one of the strong men in the manufacturing world, gave an inspiring address to the young men of the club, which was published in the Electrical Journal. The advice is of a kind to stimulate and quicken every thoughtful young man.

Mr. Taylor says, in part: "We cannot all be great, but it is honor and joy enough for most men to be loyal and faithful captains, without whom the work of the great general must go for naught. There is no reason why any of us should fail in efficient service, provided we keep just a few true things in mind. My observation has extended over a time long enough to assure the man of twenty-five that by a diligent and intelligent pursuit of the work that lays at his hand, he will prosper. Look forward to your careers with joy and cheerfulness, with courage and confidence. Lead simple, normal, happy lives, ready tice work carefully and deliberately. I at any moment to grasp firmly the first clear opportunity for wider experience.

"Do not feel as if you were undergoing a mysterious kind of punishment during your apprenticeship. Live here as if it were your home. You will get the needed experience of life just where you are. Your intellectual development, like your physical development, does not depend on the amount and variety of food you take in. A sound digestion is the essential thing. Above all things, your experience needs to be digested properly.

"I recall that I went at my apprendid first one disjointed thing and then another, and finally I was rewarded for the thought I gave to the subject by finding that these separate things settled themselves in their proper places, and I caught the essential binding link so that all that went on around me became part of a complete scheme, the unity of which was revealed to me. I think if I were an apprentice in a great company's works I should hunt up some place where work had congested and I would ask for a chance at the job. I would master it in such a way that I would forthwith be intrusted with a continuance of duties that would tax my

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

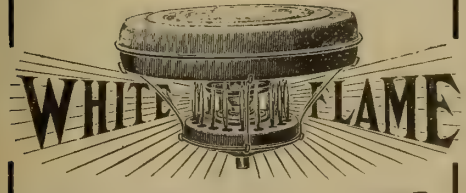
Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

Fall and Winter Sellers

Time for Trade to
ORDER NOW
to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58; Sept. 30, page 72, or send for Catalogue.

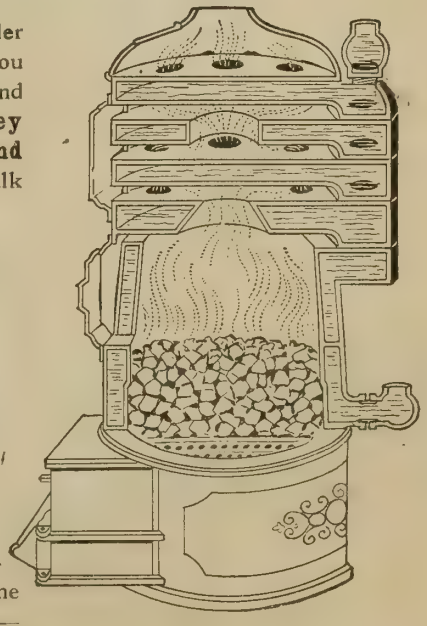
WALTER GROSE, MONTREAL } Sales Agent for the Dominion

In your town there are a number of people who had trouble with their heating system last winter. It cost too much for fuel and even then they couldn't keep comfortable.

It's getting late, to be sure, but you can still put in an

OXFORD HOT WATER HEATING SYSTEM

for each of them if you get their order at once. Find out who they are—if you haven't heard of them already—and suggest it. Write for our **Gurney Oxford Book of Hot Water and Steam Heating Apparatus** and talk it over with them.



Explain the Improved Fire Pot Construction in the Oxford ("B" Series) Hot Water Boiler, the overhanging fire-pot walls, the bell-shaped flues in the large first water section, the metal to metal connections in which the Oxford Steel Push Nipple does away with the use of all gaskets and washers, the Triangular Revolving Grate Bar, and the many other special features of this, the Best Heating Apparatus ever produced. You will get the order if merit counts.

Get number and size of rooms and write us for estimate. We will help you make the sale.

Don't forget that there are some new buildings going up next Spring—Go after them early.

Oxford Hot Water and Steam Radiators

all fitted with the Oxford Steel Push Nipple, making an absolutely unleakable metal to metal connection, are best for all purposes.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 124
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL — 29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT GALVANIZING ONT. WIND ENGINE & PUMP CO. TORONTO, ONT. LIMITED.

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL

TELEPHONE, MAIN 3389

resources and insure my growth. A mark is put upon such a man.

"Continued growth is the essence of success. Keep growing so long as you remain on this earth. A power to grow continually, even if it be gradually, is the first requisite for a successful life. To grow we must keep humble and not think we know it all. Next is the importance of keeping in the current of vital events. Swim always in the broad river in company with men bigger than yourself. Be generous enough to recognize the better man. Keep out of the pleasant eddies of life or you may circle back to the worn out methods of your grandfather. You will always need exact knowledge, but let it be broad. I would not undervalue the extreme specialist, but as a leader he is apt to be too one-sided. The class leader at college sometimes turns out to be a misfit in later life. I saw one once who seemed to be strong, but in action he was like one driving wheel on a locomotive that was a little larger in diameter than its fellows! On the other hand, you must not remain in the background, constantly playing safe. With your fresh minds and fresh ambitions you need a good share of daring to succeed. Come out in the open and make a few blunders, take your licking, and thereby gather lessons for the future.

"Don't be ambitious for wealth as such. Don't barter your life for it. It is beyond your control. Manage your future organization so that the owner of the individual will be better recognized. Provide for a business condition where all competent men can develop wholesome, robust lives, and can find happiness and contentment in their work. In order for the full development of your own powers, as well as those of others, be generous to those with whom you work. Never pull a man back in the race. Rejoice to see the best man win."

HANDSOME NEW PREMISES.

C. M. CUTTS & CO., Toronto Junction, Ontario, are erecting handsome quarters on the corner of Dundas street and Pacific avenue, just a stone's throw from their present premises. The new building will be 50x150, two stories high and is expected to be ready for occupation by the first of the year. A representative of Hardware and Metal was shown the plans of the building and in company with Mr. Cutts paid a visit to the building itself—that is, the first floor.

The plans call for something unique and the sign points to Cutts & Co. having one of the finest-constructed and most modernly-equipped hardware stores in the Province. The lower floor will have two entrances and three show windows. There will be no counters. Instead oak shelving will run the full length of the store, thus giving greater floor area. Stoves, furnaces, mantles, paints and oils, and general hardware will be on the lower floor. Besides there will be a glass room, workshop, office and vault. Mr. Cutts will also have a private office done up in antique style. The ceiling of the lower floor will be rather striking in appearance, as varnished Georgia pine is to be used, with no plaster whatever.

The second floor of the building will be composed principally of offices. The basement may be used partly as a storeroom and partly as a workshop.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. Limited

TWEED, Ontario



Dark days are coming. Buy the best **Light Producers.** We make twelve different styles of Lanterns. For sale by all prominent dealers.

ONTARIO LANTERN & LAMP CO.
LIMITED

Hamilton, Ont.

Are you interested in any of the lines that are advertised?

A Post Card will bring you price list and full information.

Don't forget to mention Hardware and Metal.

Perfectly Flat Galvanized Sheets

Is a marked characteristic of

GILBERTSON'S

COMET

Brand

Sold by all jobbers who are up-to-date.

It sells readily. Is selected carefully; soft and smooth. Prices lower than other high grade brands.

MAKERS:

W. GILBERTSON & CO. Limited.

PONTARDAWE, SOUTH WALES.

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

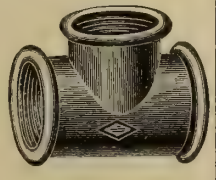
Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO





DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

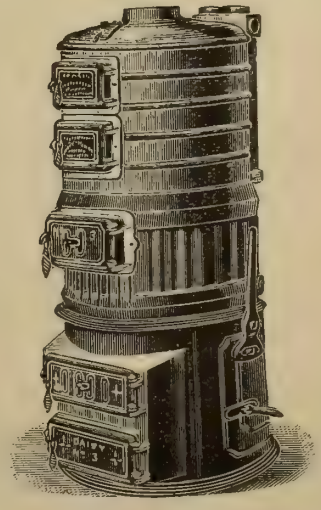
SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.
Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

One Step in Advance

of other makes aptly describes our

"BLACK DIAMOND"

READY ROOFING
BUILDING PAPER

WRAPPING PAPER
TARRED FELTS

SHEATHING

That one step means a lot in the way of satisfaction. It stands for Best Goods, Quickest Service, Lowest Prices. Are you handling the "McArthur" goods? If not, why not? We'll send prices with pleasure. What is your address?

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for North West Provinces.

CURRENT MARKET QUOTATIONS.

Oct. 13 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

	Montreal.	Toronto.
72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 87½	1 95
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality, best warranted		0 18
"I" " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 09	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs.	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¼ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.	
Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	{count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 25
Part casks	7 50

LEAD.

Imported Pig, per 100 lb.	4 00
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06¼
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00		16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25

Plate E II

4½ feet	2½ in.	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00

Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—		
¼ inch		2 86
⅜ "		2 89
½ "		3 14
¾ "		4 02
1 "		5 78
1¼ "		7 84
1½ "		9 46
2 "		12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " " "	1 75
No. 7 Fuller's "	2 10
No. 4½ " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 " 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND EBONY HANDLED RAZORS



FULLY WARRANTED

Manufactured from finest Clauss hammered steel.

Hardened by our secret process,

Honed and set ready for use.

Crocus-finished back, tang and shoulder.

High blue-polished blades.

CLAUSS SHEAR CO.

WRITE FOR TRADE DISCOUNT TORONTO, - ONTARIO

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.
Pure	5 75
No. 1	5 25
No. 2	5 05
No. 3	4 12½
No. 4	4 05
Munro's Select Flake White	5 65
Elephant and Decorators' Pure	5 50
Tiger brand, pure	5 75
Decorators' Special for exterior use	5 00
Monarch	5 75
Decorator's Pure	5 50
Essex Genuine	5 00
Sterling Pure	5 75
Island City Pure	5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, case, from	assorted to 1 gal., $2.50.	
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each— Per M.

11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07¾	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz.	6 00 9 00
American	"	12 00 18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz.	1 00 1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross	50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English	per doz.	2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz.	5 00 9 00
man	"	0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz.	0 55 1 00
Axle	"	0 22 0 33
Screw	"	0 22 1 00
Awning	"	0 35 2 50

PUMPS.

Canadian cistern	1 80
Canadian pitcher	1 40

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	" 0 95	1 65
English	" 2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and	5 "
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Size United Inches.	Window. Star Per 100 ft.	Box Price. Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓ %. Terms 90 days net, 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley s discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65	2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		0 22	0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin per doz.	2 75	3 25
Bronze, Genuine "	6 00	9 00
Shutter, porcelain, F. & L. screw per gross	1 30	2 00
White door knobs per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

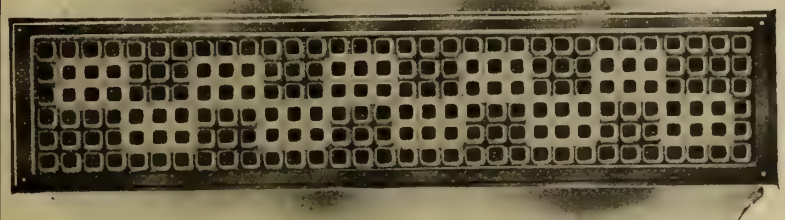
Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	...	7 80
" "	"	....	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal		0 10½
Pure Manilla		0 15
"British" Manilla		0 11½
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea		0 16
Jute		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set		0 75
" No. 50, nickle-plated, "		0 80
Common, plain		4 50
" plated		5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000		7 50
"Eureka" tinned steel, hooks "		8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's...per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	...	0 85
" 18 x 30	....	1 00
" 18 x 36	....	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'	4 50	11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel. discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

Want Ads.

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Capital and Surplus, $1,500,000. **Offices Throughout the Civilized World.**

Executive Offices: Nos. 346 and 348 Broadway, New York City, U.S.A.

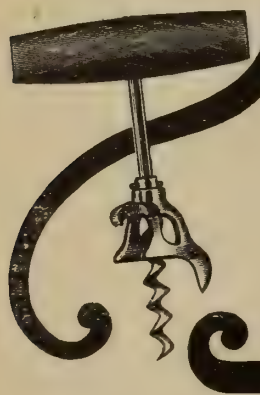
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VANCOUVER, B.C. WINNIPEG, MAN.

THOS. C. IRVING, Gen. Man. Western Canada. Toronto.



WALKER CORK SCREWS

over seventy varieties to select from. Every one tested and guaranteed. Our large window display stand will help sell them.

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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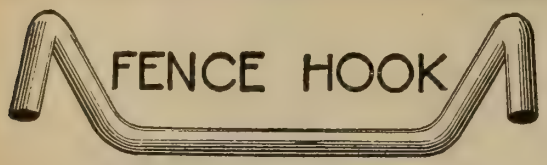
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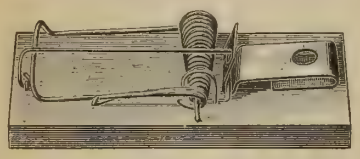
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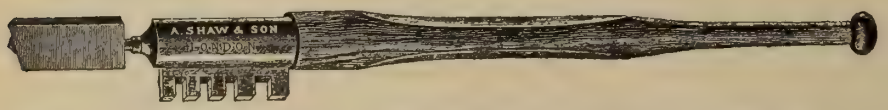
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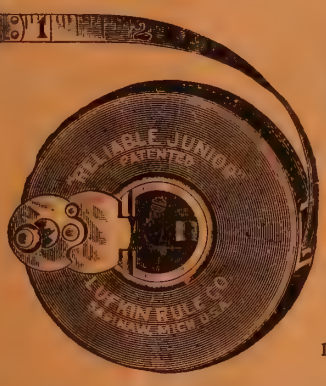
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B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

Dominion of Canada Sales Agents

United States Steel Product Export Company

Sheet Steel and Tinplate Company Department.

SADLER & HAWORTH

"Extra" *"Standard"*

HIGH - CLASS

IT PAYS US TO MAKE
Good Belting
IT WILL PAY YOU TO BUY IT.

LEATHER - BELTING

"Diamond" *"Agricultural"*

WAREHOUSES & FACTORIES AT MONTREAL and TORONTO.

CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, OCTOBER 21, 1905 NO. 42

ANVILS BITS
HENRY BOKER
MANUFACTURER OF
ARROW BRAND
REGISTERED TRADE MARK
HARDWARE
SPECIALITIES OF ALL DESCRIPTIONS
PLYERS VICES
FOR SALE BY LEADING WHOLESALE HOUSES

FLEUR DE LIS.
"FLEUR DE LIS"
is no longer a stranger, but has proved its claim to be at least equal to any brand except "QUEEN'S HEAD." Quality guaranteed and price low.
JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Canada's Most Expert Radiator Manufacturers.
IF YOU HAVE NOT YET USED
"SOVEREIGN RADIATORS"
for Hot Water and Steam Heating, try them now. If they don't come up to our claims we will pay all expenses, and take them back. A good RADIATOR like the "SOVEREIGN" can't lose on this proposition and the Customer will be just one more friend of ours—our guarantee is good.



Taylor-Forbes Company, Limited
Branch: 21 Richmond St. W., TORONTO, ONT.
Head Office: GUELPH, ONT.
Branch: 9 De Bresoles St., MONTREAL, QUE.

See Classified List of Advertisements on Page 79.

MACHINISTS' TOOLS

RETURNED
OCT 21 190
To Owner
Cut Book #1
page 88

A complete Stock of the Newest Tools

L. S. Starrett's and Brown & Sharpe's makes of Tools

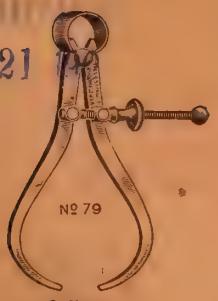



Srew Driver


Caliper Rules

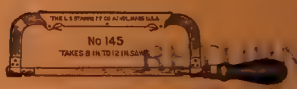

Combination Square


Micrometer Gauges



Calipers


Plumb Bob



Hack Saw


Speed Gauges


Combination Sets



Nippers

TOOLS—Every Machinist Tool stamped Starrett or Brown & Sharpe is warranted accurate and satisfactory.

Write for Prices

RICE LEWIS & SON

LIMITED

TORONTO.

ALWAYS READY FOR USE



Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2 50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

No Smarting after Shaving. With ordinary careful use will

KEEP AN EDGE FOR YEARS WITHOUT HONING.

Booklet coming—if you will ask for a copy, with trade discount.

FOR SALE BY LEADING JOBBERS.

FIRM OF
A. L. SILBERSTEIN, MAKERS OF "Griffon" Cutlery

459-461 BROADWAY, NEW YORK.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

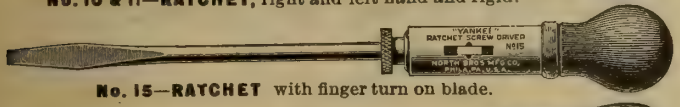
OTTAWA, ONT.

Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.

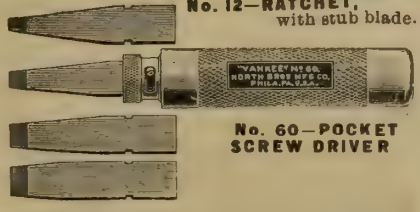


No. 30—SPIRAL RATCHET—right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.

No. 12—RATCHET, with stub blade.



No. 60—POCKET SCREW DRIVER



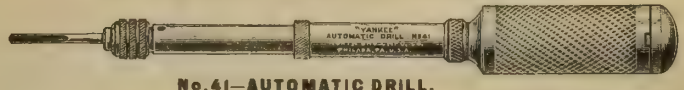
Countersink, for spiral ratchet screw driver.

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

DRILLS



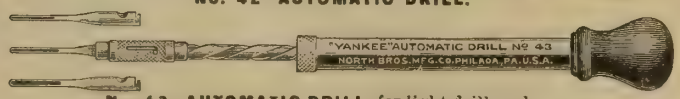
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



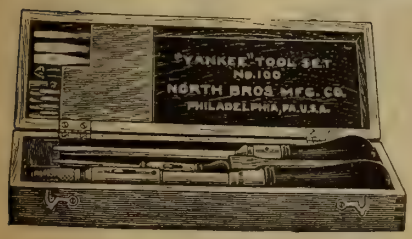
No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.



SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.



No. 10—**"New Process."** Design attractive. Construction first-class.

No. 21—**"Standard."** Cheaper in quality, but well proportioned and handsome in appearance, and a strictly up-to-date heater.

New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

Write for Prices.

The Thos. Davidson Mfg. Co., Limited

MONTREAL.

Copper Sheets

HOT ROLLED COLD ROLLED

Plain, Tinned, and Planished.

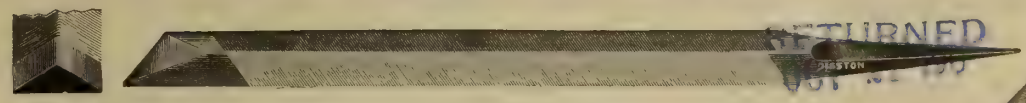
We Solicit your Enquiries.

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

FILE FAME



"DISSTON'S" FILES are famous all over America, as the most durable on the market. Do YOU sell them? If not—why not?

You can, of course, sell files that are not as good as "DISSTON'S" but you run a risk. You may not lose by it, but there is a possibility. On the other hand, if you sell "DISSTON'S" files there is no possibility. You cannot lose trade, because they cannot possibly fail to give satisfaction.

HENRY DISSTON & SONS

LEWIS BROS LIMITED





An entirely new system in our Mail Order Department enables us to ship your goods same day order is received.

We can handle your mail orders the way you want them handled.

Won't you try us with a small one?

In sending us your orders, you have the largest and most complete stock in Canada to choose from.

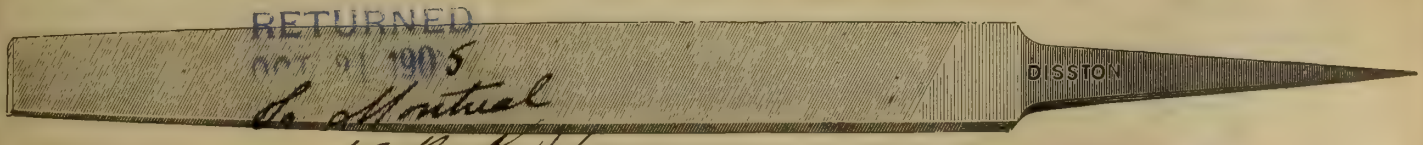
Start to-day.

Made of best quality crucible steel. Carefully forged throughout. Correctly sharpened teeth. Hardened by an improved process.

A trial will demonstrate their superiority.







WRITE FOR PRICES

OTTAWA
TORONTO

LEWIS BROS., LTD.

MONTREAL

VANCOUVER
CALGARY

"TRUE BRAND" CUTLERY

POCKET KNIVES
SCISSORS and
RAZORS

REGISTERED TRADE MARK TRUE

POCKET KNIVES
SCISSORS and
RAZORS

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.



BROWN'S PATENT STEEL WIRE CHAIN

If you are interested in Chains examine carefully the perfect mechanical construction of the Brown's. It is the most perfect chain made. We make it in 13 sizes. We use it exclusively in all our Halter, Dog, Tie-out, Cattle, Trace Chains, etc. You will make no mistake in handling our line exclusively.

The B. Greening Wire Co. LIMITED

HAMILTON, ONT. MONTREAL, QUE.



SALES LESSON II.

"You can prove!" When the enquirer asks you to prove that "Dillon" Strand Wires are resilient (Point No. 1), take a piece of the fencing, hold it vertically, and press down on it near the centre. Every strand and stay, too, will spring down and return to its original position, no matter how many times you repeat the test. Tell your enquirer that if the fence was on posts you could climb over it, sit or stand on it, and the result would be the same. Tell him that only High Carbon Hard Spring Wire, Well Galvanized (the "Dillon" make-up exactly), can successfully stand such strains, which are about equal to those the weather imposes. "The DILLON HINGE-STAY FENCE is made to last."

OWEN SOUND WIRE FENCE CO., Limited

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) Montreal and Winnipeg

Have You Seen Them?

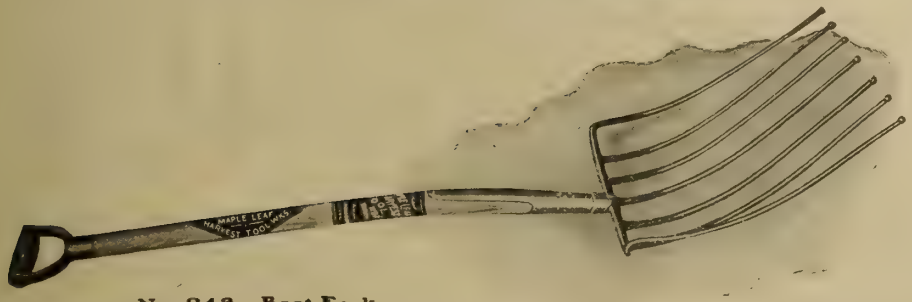
For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork.



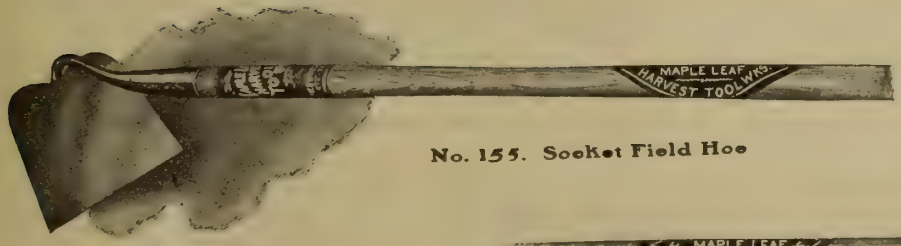
No. 138. Spading Fork.



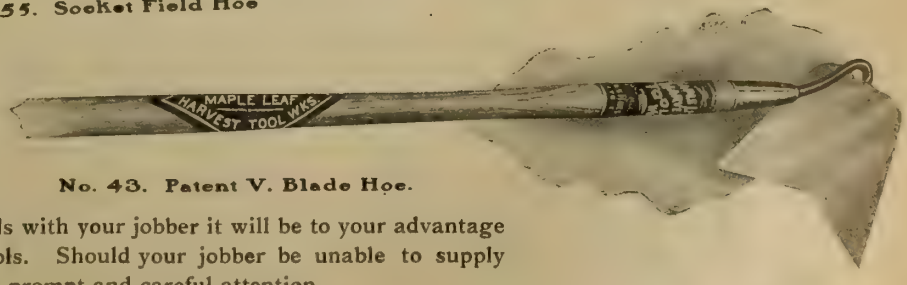
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

TO THE HARDWARE TRADE:— When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Strappings for Binding Cases

WRITE FOR CATALOGUE

J. N. WARMINTON

43 SCOTT ST., TORONTO
207 ST. JAMES ST., MONTREAL

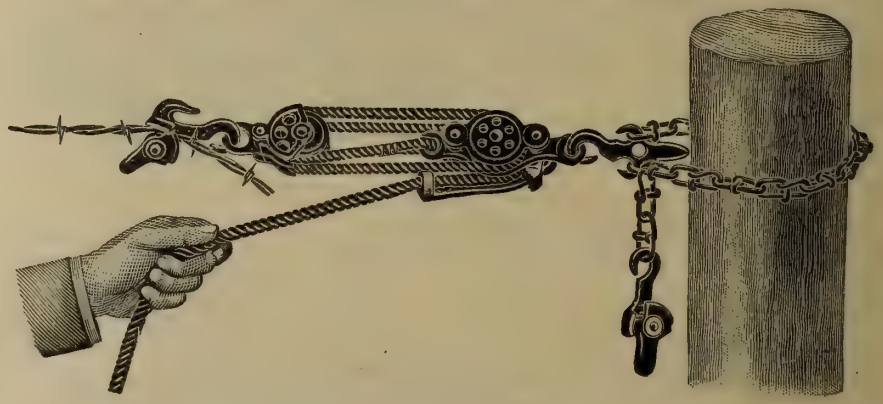
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

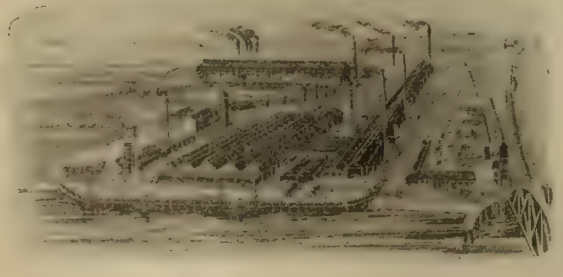
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



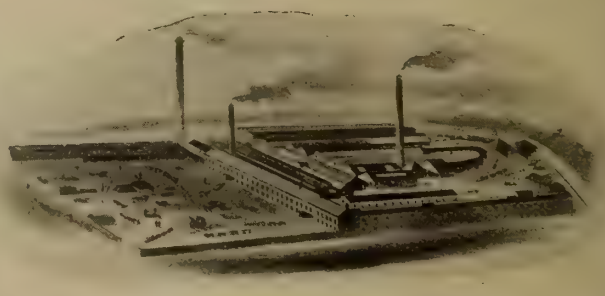
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

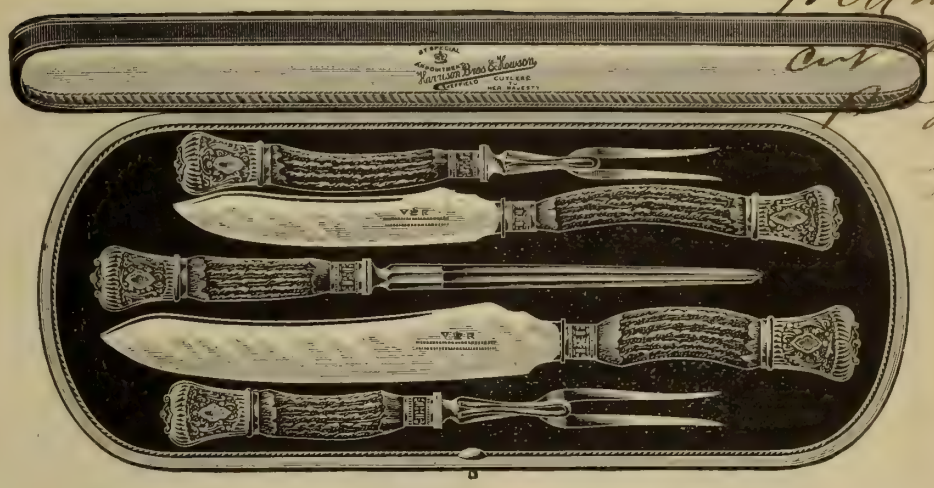
IN ENGLAND

One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal

RETURNED
OCT 21 1905

THE THANKSGIVING DINNER goes off better when the man of the house has a sharp carver. Thanksgiving Day and Christmas festivities will soon create a demand for carvers and other cutlery in cases.



No. 5386 in 3 and 5 piece sets. Scimitar blades, stag handles, silver electro plated mounts.

In these lines our stocks and variety are large, the best goods of the best makers being represented. Our travellers will soon be out with samples. Nothing so good as seeing the actual article when buying cutlery. If our travellers do not regularly visit you, let us know and we will have one call.

THE LARGEST LINE OF CUTLERY IN CANADA.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants,

MONTREAL, CANADA

F. & W.

FOUNDED 1809.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



14540.—FRUIT DISH.

Manufacturers of all Kinds of

GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE



31197.—E.P.N.S. CAKE BASKET

Give that man a **UNION PLANE** when he asks you for a

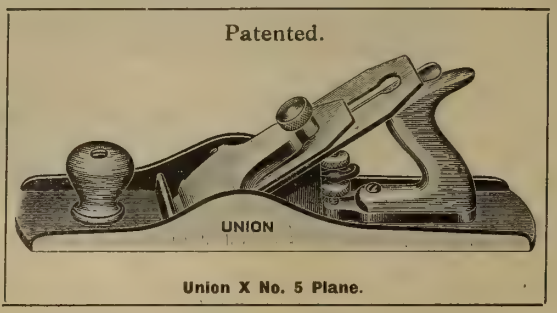
GOOD PLANE

They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Loc'-ing Lever adjustment and Solid Frog.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

New Britain, Conn., U.S.A.

DOMINION WIRE MANUFACTURING CO. LIMITED

MONTREAL AND TORONTO

ANNEALED WIRES

FOR BALING

HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

FLAT HEAD
ROUND and OVAL HEAD

SCREWS

BRIGHT—BRASS
BRIGHT and BRASS

TINNED WIRE for Mattress, Broom, Bolting and Binding

STEEL WIRE HOOP

COPPER WIRE—ALL—BRASS WIRE

MADE IN CANADA

"BAILEYS" ADJUSTABLE PLANES

FOR 40 YEARS THE BEST MADE

The Cutter has a firm resting place on the frog clear down to the bevel. The frog in turn rests on machined surfaces and is fastened by two screws to bosses cast in bottom of plane on either side of a very strong rib making in effect one solid piece from cap to bottom.

THE PLANE IRON in Bailey's Plane is made from best quality **ENGLISH STEEL** of equal thickness throughout, tempered and ground by an improved process.

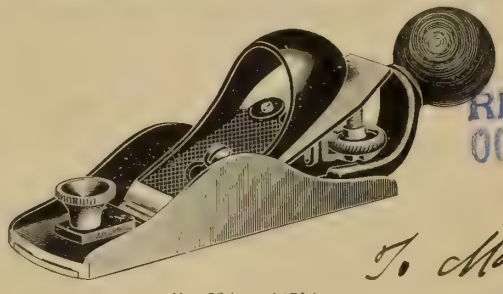
RETURNED OCT 27 190



No. 75



No. 102



No. 9¾, and 15½

RETURNED OCT 27 190

T. Montreal Cur Book 42 page 15

THESE GOOD PLANES ARE MADE BY

IT'S EASY TO SELL BAILEY'S PLANES

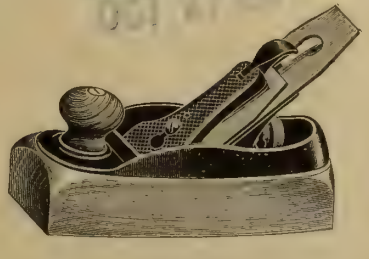
STANLEY RULE & LEVEL COMPANY

EVERY BOX BEARS THEIR LABEL, AND EVERY PLANE IRON IS STAMPED "STANLEY."

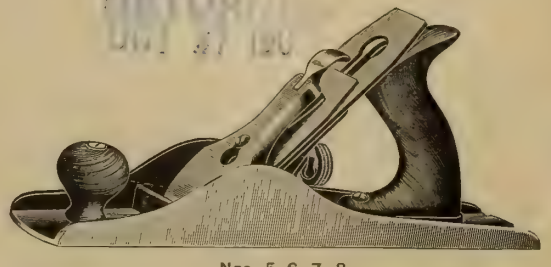
RETURNED OCT 27 190



No. 12



Nos. 21, 22, 23, 24, 25.



Nos. 5, 6, 7, 8.

STANLEY PLANES are made for Every Purpose.

We have 124 varieties and sizes.

ALSO WHOLESALE DISTRIBUTORS OF THE CELEBRATED "HUNTS" PLANES

Tool Catalogue No. 34 Free To Dealers

CAVERHILL, LEARMONT & CO.

HEADQUARTERS FOR PLANES

MONTREAL AND WINNIPEG

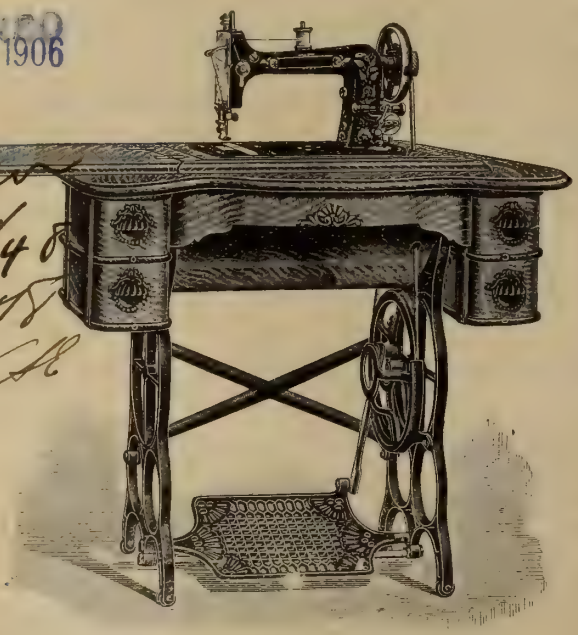
Drop Head Sewing Machines

With and Without Automatic Lift

THE ALEXANDRA THE VICTORIA

THE ALEXANDRA is a perfect High Arm Sewing Machine, made of the finest materials by skilled workmen and containing all the latest and best features in construction. It is a marvel of simplicity, the acme of durability, the *lightest running* machine made, and is unexcelled for perfection of work. **THE ALEXANDRA** has many features. The take-up or thread controller is *absolutely positive*, being actuated by a rotating cam, giving *perfect control* of the thread, so that each stitch is pulled with *exactly the same tension. No other shuttle machine made at the present time possesses this improvement.* The machine is *self-threading throughout*, except the eye of the needle. The needle is self-setting and *cannot* be set wrong. It is the *only machine* made with the driving pulley to the outside of the hand wheel. **THE ALEXANDRA AUTOMATIC LIFT** is the most desirable and the only perfect Automatic Drop Head Sewing Machine ever offered. It is the only one on the market having Positive Action, Double Locking. No Springs, No Vibration, Perfect Durability, Dust Proof Stationary Head Case, Ready Adjustment, No belting up of Balance Wheel.

RETURNED APR 11 1906



The Alexandra Hand Lift Drop.
Style No. 44. Open for Use.

THE VICTORIA is a *perfect* reciprocating shuttle, lock stitch, sewing machine, *light and easy running, well made, reliable, and honest*, and *cannot* be worn out by foot power use. It is guaranteed to be *superior* to any other machine of the same type—*i.e.*, the type of machine having the *thread-controlling mechanism* operated by the action of the needle-bar and spring take-up. **THE VICTORIA** will do the *widest range* of *family sewing*, from the *lightest* to the *heaviest*, and do it *perfectly*. It fully meets the demand for a reliable sewing machine.

These are Two excellent lines for Hardware Dealers. They yield a good margin of profit and are easily sold.

Sold Exclusively by

The Hobbs Hardware Co., Limited

London, Ontario

SHOT GUNS, RIFLES, AMMUNITON

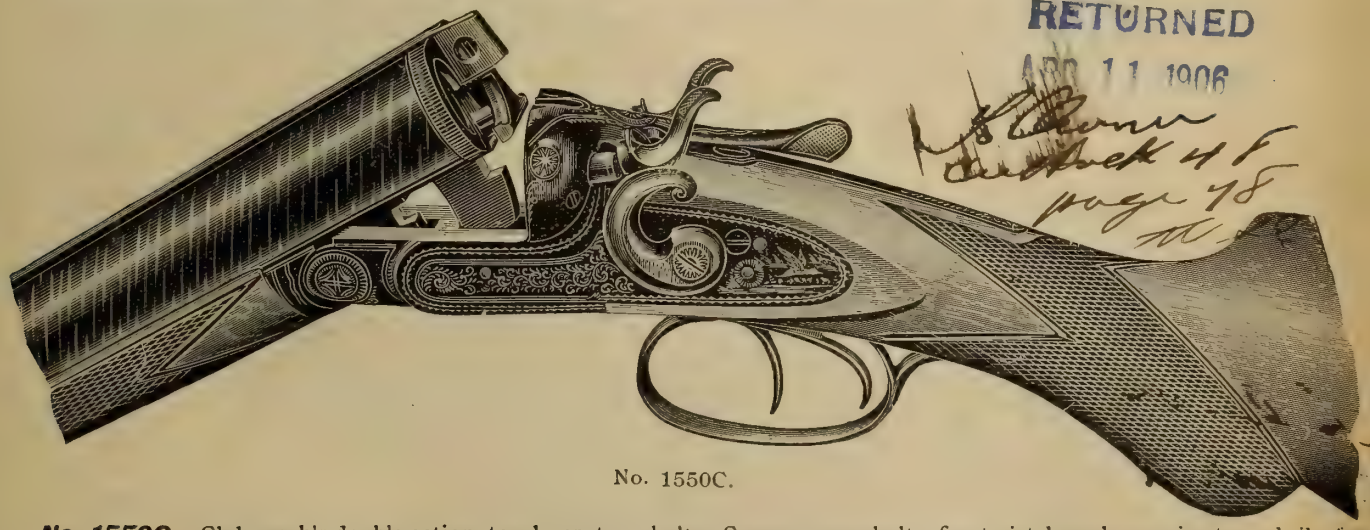
We carry in stock by far the largest line of Shot Guns, Rifles, etc., in Canada, embracing the most popular English and European made goods. Our ***Bonehill, Clabrough,*** and ***Greener*** Guns are made up especially to our own specifications as to choking of barrel, bend of stocks, etc., and we most strongly recommend these goods to all users of good guns.

In **SHOT GUNS** the best includes, besides the three mentioned above : ***Pieper, Janssen, Iver Johnson, Stevens, Browning Automatic, Winchester Repeating*** and ***Marlin Repeating.***

RIFLES: ***Winchester, Marlin, Savage, Stevens, Hopkins & Allen, Pieper's Express, New Century, Hamilton,*** etc.

Full line of **AMMUNITION**—***Dominion, Winchester, U.M.C.,*** and ***Peter's.***

RETURNED
APR 11 1906



No. 1550C.

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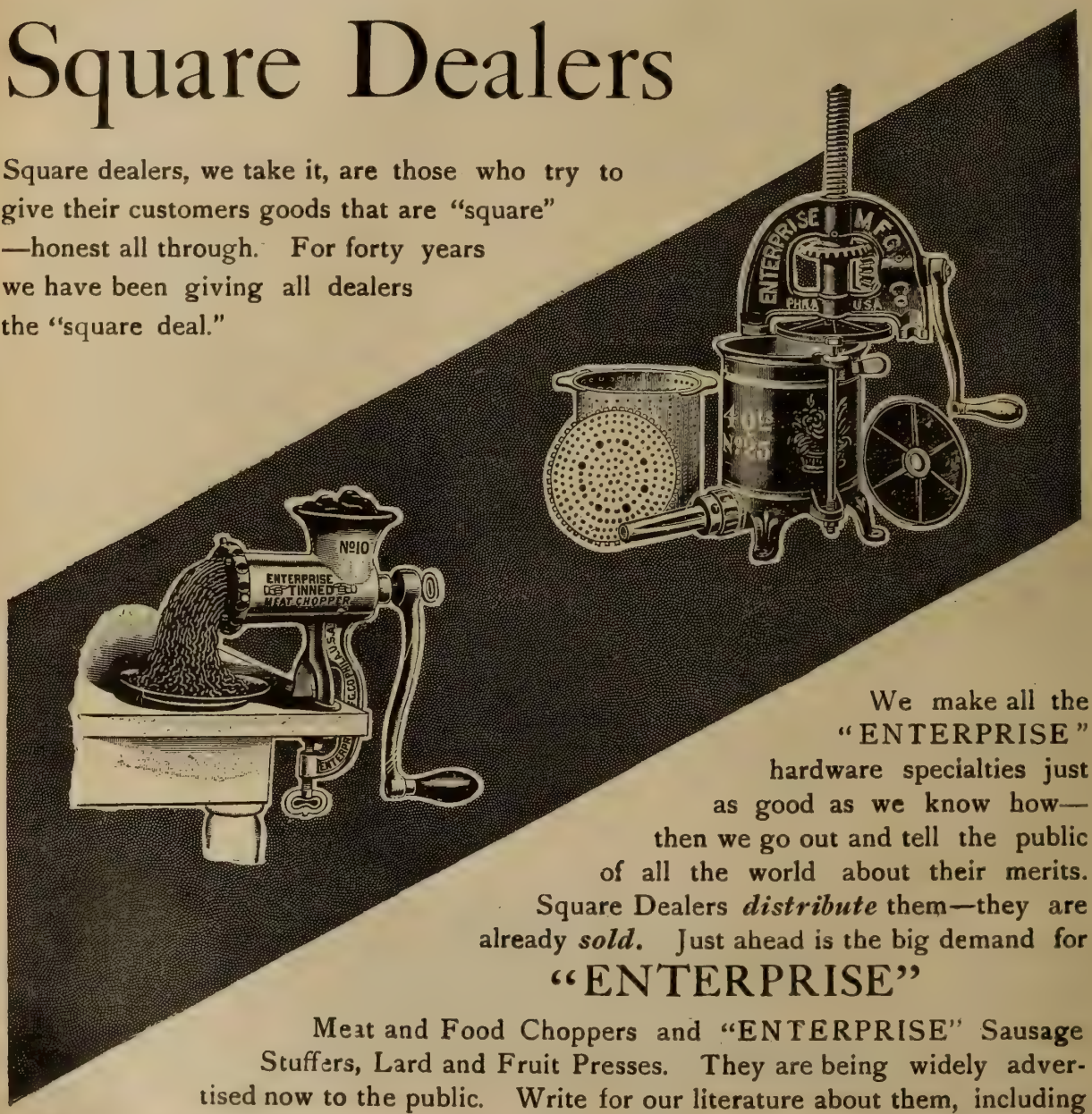
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To Dunn
our Booklet
page 92

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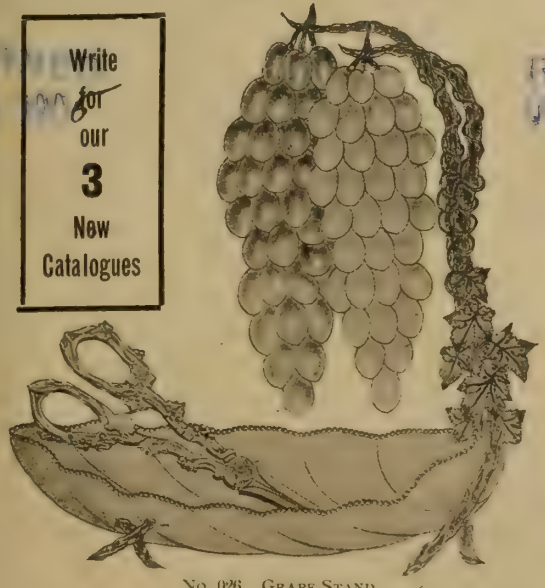
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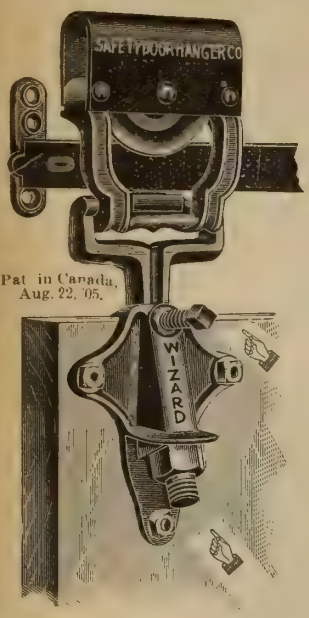
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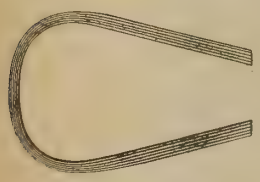
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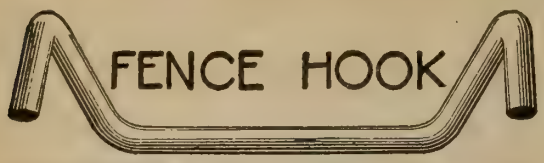
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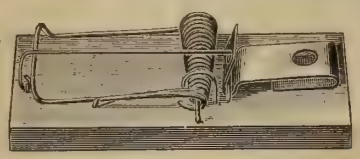
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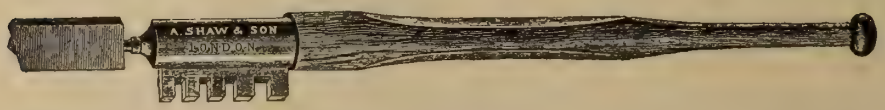
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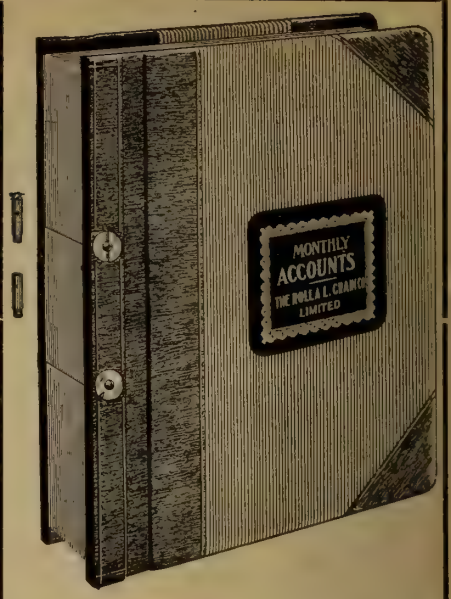


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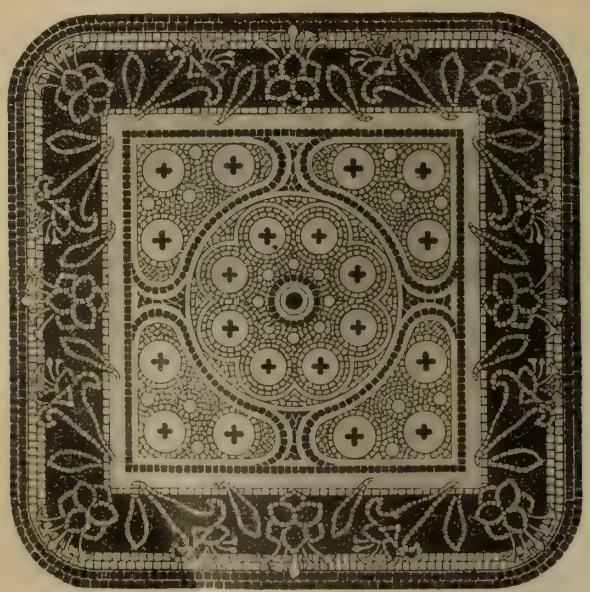
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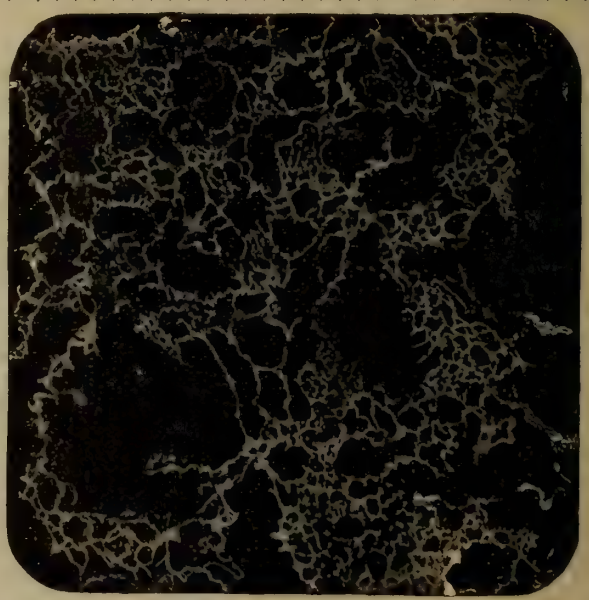
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Canadian Wholesale Hardware Association

SEVENTH ANNUAL CONVENTION AT TORONTO, OCTOBER 17th.

ONE of the most important gatherings in the history of the Canadian Wholesale Hardware Association assembled in Toronto on Tuesday, Oct. 17th, there being a fair representation present at the meetings, which were held in the offices of the secretary on Toronto street. Organized in Hamilton seven years ago, the association has been a great factor in bettering the conditions under which the hardware jobbers do business, and has done much towards bringing about a better feeling among the representatives of the various wholesale houses throughout Canada.

At last year's gathering the project of forming a national association, to include the wholesale hardware houses of the Maritime Provinces, of British Columbia, as well as Ontario and Quebec, was discussed, and this question was one of the most important before the gathering this year, a strong delegation of the most representative hardware jobbers from the Maritime Provinces being present to discuss the details of the more comprehensive organization with the delegates present from Ontario and Quebec.

Retailers look to the wholesale association to handle questions of vital interest to the hardware trade in Canada, as in the absence of a strong retail hardware dealers' association the Wholesale Hardware Association is the only body which can speak with any authority on matters pertaining to the Canadian hardware trade. At the inception of the association a feeling existed amongst the retailers that the new organization would mean a combine detrimental to the interests of the local merchants, but this feeling no longer exists as it is generally recognized that the association of jobbers has to a great extent prevented the cutting of prices and has exercised a steady influence of benefit to the entire trade.

A few of those present at the opening session of the convention were : Thomas Birkett, M.P., of Thomas Birkett & Sons Co., Ottawa; A. Whitam, of Hobbs Hardware Co., London; William Vallance, of Wood, Vallance & Co., Hamilton; T. E. Newman, of Caverhill, Learmont & Co., Montreal; W. Starke, of Starke Hardware Co., Montreal; A. Jeannotte, of L. H. Hebert, Montreal; T. G. Dexter, of H. S. Howland, Sons & Company, Toronto; J. G. Lewis, of Lewis Brothers & Company., Montreal; T. B. Lee, of Rice Lewis & Son, Toronto; D. H. Howden, of D. H. Howden & Co., London; S. R. Kennedy, of the Kennedy Hardware Co., Toronto; and Secretary-Treasurer J. S. Hardy, Toronto, others being represented by proxy.

The first business before the gathering was the annual address by President C. A. Whitwam, of London, who spoke as follows :

President's Address.

Members of the Canadian Wholesale Hardware Association :

Gentlemen,—It is with the greatest pleasure I greet you at this, the seventh annual meeting of our association, and congratulate you on the general prosperity that has accompanied business, not only during the past year but for several successive years. The volume of business has taxed a great many of our industries to their fullest capacity, and with the tremendous influx of settlers and others to the great Canadian Northwest, the abundant harvest which has been given to all Canada, the building of the new transcontinental railway, and the consequent consumption of all kinds of goods, I think we can look forward to the same condition of business for some time to come

Canada is now being considered by large American manufacturers very much more closely than ever in the past, and they are coming this way. The Plymouth Cordage Co., of Boston, are erecting an enormous plant at Welland, the P. & F. Corbin, the Stanley Works, the Hart Steel Register Works, the Russell & Erwin Co., the Lehigh Cement Co., and others, are now negotiating for lands for their proposed Canadian plants. Not only in Canada do these conditions exist, but in the United States. The iron trade, especially, is booming, and shows very clearly higher values of material must come, indeed are with us now, advances in the prices of wire and other steel goods having already taken place.



Mr. William Vallance, of Wood, Vallance & Co., Hamilton, Elected President.

I am sure it is very gratifying to us all to know that the pleasant relations which have existed in the past between the several manufacturers and our association are still maintained.

During the past year we have not suffered loss by death of any of our members, and we should be thankful to God for His care over us.

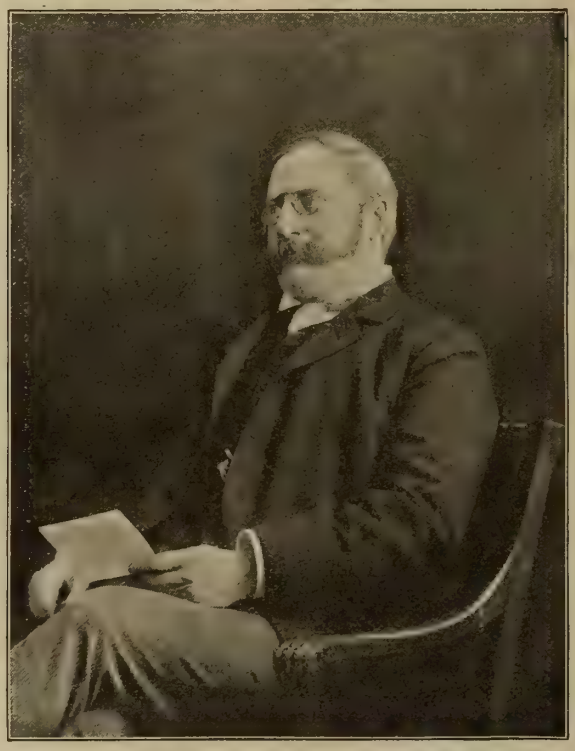
We have applications from other job-

bers wishing to join our association, which will be laid before you for your consideration.

Last November your committee, in response to an invitation, visited the National Wholesale Hardware Association of the United States, meeting at Atlantic City, and we are very much indebted to that body for the cordial reception given your delegates during their visit there. We have invited them to send representatives to our meeting, and trust we may have the pleasure of welcoming them.

In closing, I desire to heartily thank the members, also the executive committee, and especially our able secretaries, for their loyal support and the lenient manner in which you have overlooked my shortcomings, and to repeat my appreciation of the honor you have conferred on me by electing me your president for the year now closing.

C. A. WHITWAM, President.



Mr. T. H. Newman, of Caverhill, Learmont & Co., Montreal, Elected Vice-President.

General Business.

Letters of regret at non-attendance were read from T. James Fernley, secretary-treasurer; Samuel A. Bigelow, president, and Brace Hayden, second vice-president, of the National Hardware Association of the United States, all of whom sent their best wishes for the continued success of the Canadian Association.

A delegation consisting of John A. McAvity, St. John, president of the Maritime Provinces Wholesale Hardware Association, and W. H. Thorne, St. John, N.B., A. M. Bell, Halifax, N.S., and E. K. Spinney, Yarmouth, N.S., of the same body, attended to discuss the probable formation of a Dominion association, or the affiliation of the Maritime body with the National organization. It was arranged that the two bodies would co-operate on matters of mutual interest, and the details of making the National organization a success will be worked out by representatives of the two bodies.

The meeting was very satisfactory in its results, and one important feature was the settlement of the many differences which are bound to arise between competitors in business in the course of the year.

Officers Elected.

President — Mr. William Vallance, Wood, Vallance & Co., Hamilton.

Vice-President—Mr. T. H. Newman, Caverhill, Learmont & Co., Montreal.

Secretary-Treasurer—Jenkins & Hardy, Toronto.

Executive Committee—Thos. Birkett, Sr., of Thos. Birkett & Sons Co., Ottawa; Alfred Jeannotte, of L. H. Hebert, Montreal; J. G. Lewis, of Lewis Bros. & Co., Montreal; T. G. Dexter, of H. S. Howland, Sons & Co., Toronto, and D. H. Howden, of D. H. Howden & Co., London.

THE BANQUET.

Tuesday evening a banquet was tendered by President Whitwam to the delegates and the representatives of many of the hardware manufacturing firms, in the banquet hall of the King Edward Hotel.

The banquet was a most successful one in every respect. The menu was first-class, the guests in good spirits, and everything went off with a swing. There was not a dull moment during the evening. Jokes were liberally cracked and the speeches were, on the whole, well spiced with wit. Mr. Whitwam occupied the chair, and he was a good chairman as well as an amiable host. Those present were:

S. O. Greening and R. H. Merriman, B. Greening Wire Co., Hamilton; Arch. Macfarlane, Stanley Rule & Level Co., Montreal; C. G. McGhie, Welland Vale Mfg. Co., St. Catharines; Thos. G. Dexter, H. S. Howland, Sons & Co., Toronto; Jas. Maxwell, David Maxwell & Sons, St. Marys; John Stevely, Columbia Handle & Lumber Co., London; Geo. A. Childs, United States Steel Products Export Co., Montreal; Geo. W. Howland, Graham Nail Works, Toronto; A. W. Taylor, Parmenter & Bulloch Co., Gananoque; J. Hardy and S. J. Frame, Jenkins & Hardy, Toronto; Hon. J. R. Stratton, Peterboro Locv Co., Peterboro; W. J. Lind, Independent Cordage Co., Toronto; John M. Taylor and Adam Taylor, Taylor-Forbes Co., Limited, Guelph; H. Clucas, Canada Paint Co., Toronto; A. Jeannotte, L. H. Hebert, Montreal; W. Vallance, Wood, Vallance & Co., Hamilton; W. L. Cummer, Dowswell Mfg. Co., Limited, Montreal; A. M. Bell, A. M. Bell & Co., Halifax, N.S.; W. H. Thorne, W. H. Thorne & Co., St. John, N.B.; John A. McAvity, T. McAvity & Sons, St. John, N.B.; E. K. Spinney, E. K. Spinney, Yarmouth, N.S.; T. H. Watson, Toronto Bolt & Forging Co., Toronto; J. P. Steedman, Gurney Scale Co., Hamilton; T. H. Newman, Caverhill, Learmont & Co., Montreal; H. Donald Hope, managing director of Kynochs, Limited, Birmingham, Eng.; A. W. Campbell, inspector of good roads, Toronto; W. Starke, Starke Hardware Co., Ottawa; C. E. Britton, Cowan & Britton, Gananoque; Thos. B. Lee and A. Burdett Lee, Rice Lewis & Son, Limited, Toronto; Col. J. B. MacLean and W. L. Edmonds, Hardware and Metal, Montreal and Toronto; C. A. Whitwam and W. O. Matthews, Hobbs Hardware Co., Limited, London; D. H. Howden, D. H. Howden & Co., London; James G. Lewis, Lewis Bros., Limited, Montreal; Ernest J. Fry, Peck Rolling Mills, Limited, Montreal.

The Toasts.

The toast list was well selected, and President Whitwam, before proposing

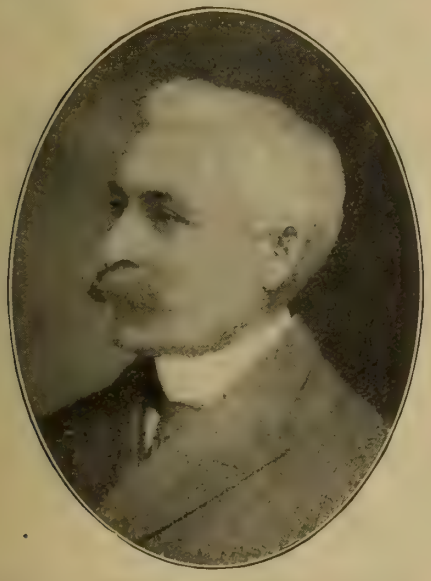
WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

the first toast, said that he was thankful to say that the day was past when it was considered that a fellow business man was an enemy. "There is a common interest and a common bond between manufacturers and wholesalers," he declared amid applause.

"Our Country" was proposed by Mr. Henry Newman, during which he referred in eloquent terms to the growth and development of the Dominion and the great possibilities that were in store for it. The first to respond to this toast was the Hon. James Stratton, who said that Canada was thirteen times larger than Germany, and twice as large as India. "I have," he said, "great confidence in the patriotism of the Canadian people. Canada to-day possesses the longest and the best line of railway, and even the best speculative railway stock, in the world." He referred to the Canadian Pacific Railway. "Pioneers of to-day follow the iron horse. In the years gone by they preceded the iron horse." Canada, he said, would eventually be the granary



Mr. C. A. Whitwam, of the Hobbs Hardware Co., London, the Retiring President.

of the world, and he had not a doubt about it.

Mr. John Stevely followed, saying that the people of Canada were happy and well governed, while the resources of the country were practically inexhaustible, and in many respects this country is far in advance of the United States. "At one time, Canada was a good country to leave; now it is a good land to live in." This, he said, had been discovered by Canadians who had gone to the United States, and he was glad to say that they were now coming back by thousands.

Colonel MacLean said that the preceding speakers very properly referred in eloquent terms to the great expansion in Northwestern Canada; in fact the outlook there was so promising that the whole world was talking about it. Business men of Ontario, Quebec and the Maritime Provinces were inclined, however, to overlook most important developments near their own doors. The district lying between Ontario and Quebec, and the Hudson's Bay, would, within twenty-five years, have a population larger than the combined population of Ontario and Quebec to-day; it would be not only a great mining but manufacturing and farming district. Experts say that it contains the greatest iron property in the world. It has already been proved that it has the greatest nickel areas. Within the last few days it had been stated by a United States expert that it might yet become one of the greatest copper countries. Two years ago a man who had spent twelve months exploring the country stated that it had an enormous area of good farming land, and this has since been admitted by the Hudson Bay Co., whose policy it is to keep miners and settlers out and to retain the rich fur preserves.

The next toast on the list was "Our Association," and President Whitwam in proposing it said that the association had not been formed with the idea of "holding up" any one or of getting tainted money. It was merely formed for the benefit of those in the hardware trade and to remedy certain evils which then existed. "And," said he, "we have been fairly successful." They may have tried to do too much, although he had come to the conclusion that they had not. "We believe that every one should make a fair profit and have a certain return for his labor." (Applause.)

Mr. William Vallance, in responding, said that the usefulness of the association had been very great, but that he hoped it would be still greater. It had been particularly useful in bringing the members of the hardware trade together, and thereby enabling them to become acquainted with each other. "The machine has worked well, and much better than we at first expected it would," he declared amid applause.

Mr. Newman prefaced his remarks by announcing that Mr. Vallance, who was the first president of the association, had again agreed to become the executive head. This announcement was greeted with applause. Mr. Newman spoke of the good work the association had done, and he hoped that it would eventually be affiliated with the Wholesale Hardware Association of the Maritime Provinces, whose representatives he was glad to see present. He said that he had always esteemed the manufacturers, although the jobbers had not always been able to get what they wanted from them. (Laughter). "However," he said, "we have done our best, and one thing we have accomplished at any rate is that we have brought the

Right Now is the time to find out the whole truth about a good paying paint specialty. ***Sherwin-Williams Buggy Paint*** is a good seller all the year round, but especially so at present, when buggies are being repainted after the summer's work.

There's satisfaction and profit for every dealer in selling the ***Sherwin-Williams Buggy Paint.*** It has the toughness, durability and strength of color to thoroughly adapt it to its use of repainting old or worn carriages and buggies. It gives a high gloss finish, which has also made its use popular on boats, porch and lawn furniture, and like objects exposed to the weather.

The dealer could not add to his stock a product which will sell better the year around than ***S-W. Buggy Paint.***

We are giving it the most forceful publicity direct to the consumer; and the dealer has in addition the help of first class display features and color cards, beside the other special aids the Sherwin-Williams Co. gives its agents, a full description of which may be obtained from our nearest offices.

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS
Canadian Headquarters and Plant: 639 Centre Street, Montreal.
Offices and Warehouses: 86 York St., Toronto; 147 Bannatyne St. East, Winnipeg. 1488

manufacturer and the jobber closer together. It must be remembered that upon the wholesaler largely rests the burden of carrying the debts, and we hope that the manufacturer will appreciate this."

Mr. James Lewis, although persistently called upon for a speech, calmly remarked that it was not his intention to make a speech, but he thanked them for coupling his name with the toast.

Mr. William Starke made one of his usual witty speeches. He said that although it was some time since he was elected president of the organization he had never been able to discover why they had elected him. Like the other speakers, he referred to the good work the association had done. "With Sir William Vallance as president, and Sir Henry Newman as vice-president, is there any reason why this association should not go ahead?" queried Mr. Stark amid laughter and applause.

Mr. T. B. Lee, another ex-president of the association, said that Mr. Vallance, who had laid the foundation of the association, had now become they keystone in the arch which supported the organization. They had confidence in him, and during his presidency they would not be afraid of even the manufacturers.

Messrs. James Hardy and S. Frame followed briefly.

Mr. Vallance proposed the toast of "The Sister Associations," as represented by the gentlemen present from Halifax, St. John, and Yarmouth.

Mr. John McAvity said that before they formed their association in the Maritime Provinces members of the hardware trade used to fight like cats and dogs. "That is how we lost our hair," he facetiously remarked.

Mr. W. H. Thorne said that he was sorry he had not been born a hardware man in Ontario, as he felt that hardware men in that Province possessed many advantages. "Our aims and objects in the Maritime Provinces are much the same as yours. We have tried to develop the interests of the hardware trade, not for the purpose of increasing profits, but to lessen the asperities caused by competition," he declared amid applause. He said that in the east they felt just as keen an interest as those in Ontario in the development of the Canadian Great West, and on behalf of the Maritime Association he expressed the hope that there might be closer relationship between the trade there and here.

Mr. A. M. Bell declared that in the Maritime Provinces they had a range of ocean ports which were second to none in the world. He said that people were often told to "Go to Halifax," and he had great pleasure in saying that Halifax was a good place to go to, and that on behalf of the trade in the Maritime Provinces he extended to the western association their most cordial thanks.

Mr. E. K. Spinney prefaced his remarks by paying a tribute to what the MacLean Trade Papers had done for the up-building of closer trade relations between the Maritime Provinces and the west. He expressed a wish for affiliation between the hardware trade in the east and west, and declared that from his present visit to Toronto and meeting with the trade there he had received great benefit.

IT IS SAFE



LOOK HERE for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

New York Office: 99 Chambers St.

As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them anyway it costs you nothing. If you will ask for it we will gladly send you our bright little booklet, "Shots," together with our handsome catalogue.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

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See Montreal Book 43 page 81



CARRIAGE BOLTS.

For winter work, "ACME" Carriage Bolts have always been thought highly of by the carriage maker.

We're particular to make them to suit. We know the practical man appreciates good goods.

"ACME" BOLTS

run uniform. Threads are true—nuts fit properly—material is to size. To ensure satisfaction order by the brand.

THE MONTREAL ROLLING MILLS CO.

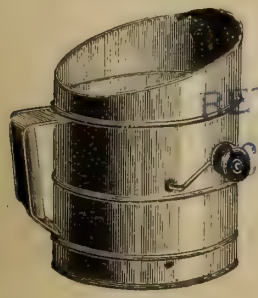
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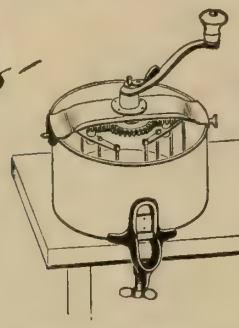


Made In Three Minutes with The "UNIVERSAL" BREAD MAKER and RAISER

than can be made by hand in 30 Minutes. Hands do not touch the dough. DOES AWAY WITH HAND KNEADING. Easy to clean. A child can work it.

No.	Capacity
4	4 Loaves. Heavy Tin and Sheet Steel
8	10 " " "

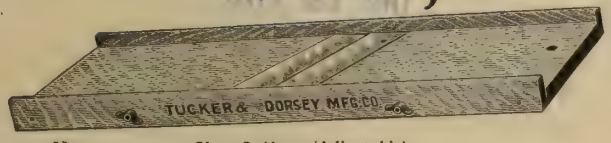
Very simple in construction. A child can operate it. As easily cleaned as a tin pail.



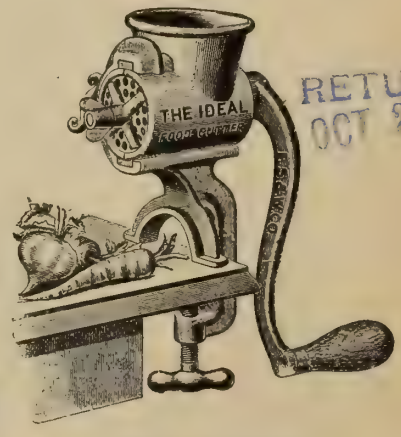
"UNIVERSAL" Cake Maker.
Capacity, 1 gallon. Tinned steel.
Is indispensable to all up-to-date housekeepers and cake making is no longer a thing to be dreaded. Mixes the batter for all kinds of cake easily and quickly.



"STERLING" Vegetable Slicer



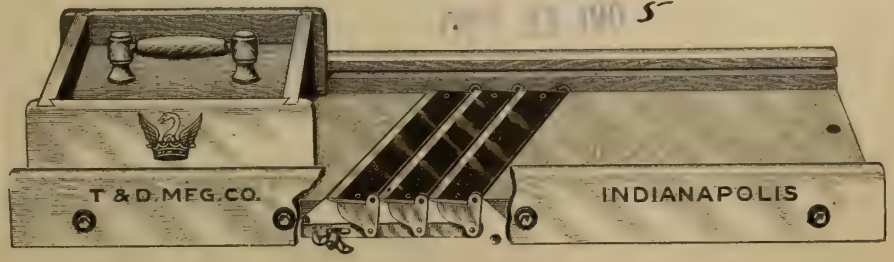
No.	Slaw Cutters (Adjustable)
1	One Knife. Maple Board 6½ x 17 in. long
2	Two " " " 6½ x 18 " "



"IDEAL" Food Chopper



Mincing Knives



No.	Kraut Cutters (Adjustable.)		
2	Two Knives	9 in. wide	27 in. long
3	Three "	9 "	27 "
5	" "	10½ "	30 "



"UNIVERSAL" Food Chopper

H. S. HOWLAND, SONS & CO., LIMITED Toronto

GRAHAM NAILS ARE THE BEST.

Our prices are right

Factory: Dufferin Street, Toronto.

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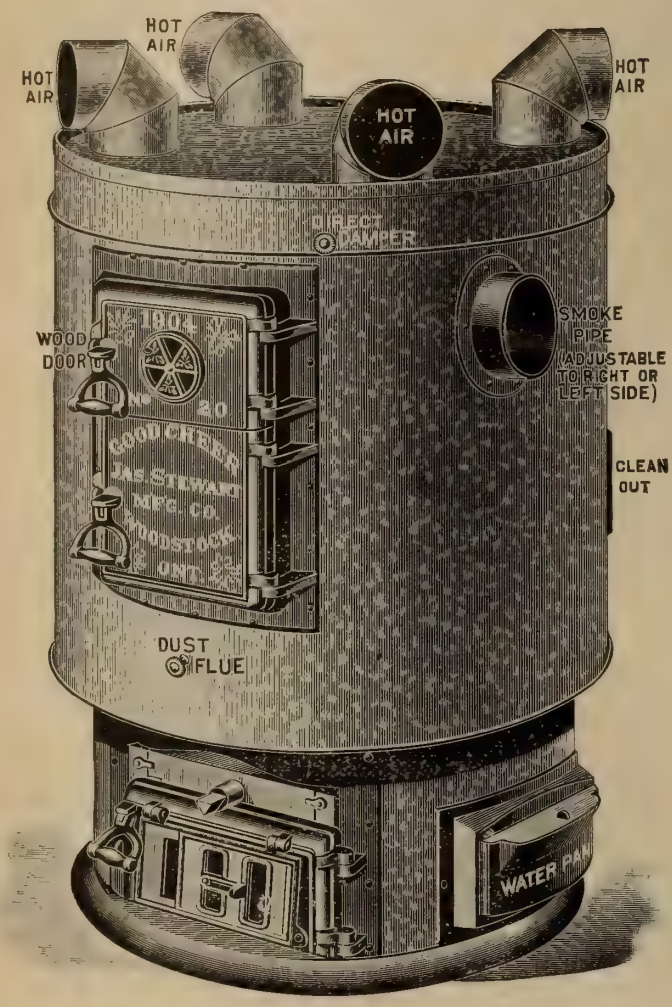
THE "GOOD CHEER" FURNACE

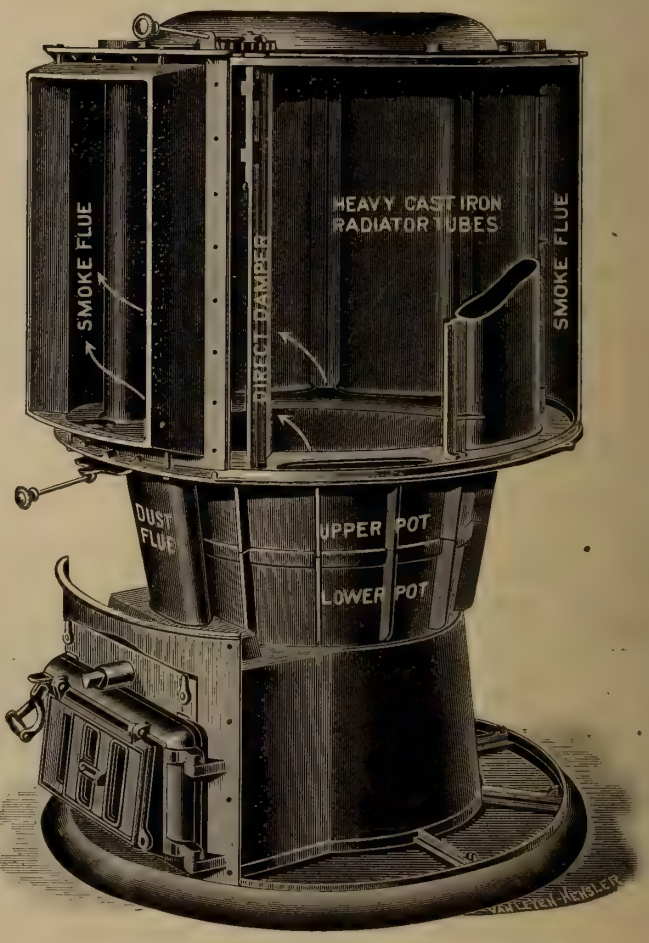
PATENTED

A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.





Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

In response to the toast "Manufacturers," Mr. C. Britton said that as far as the manufacturers and jobbers are concerned there was no question that an honest arrangement between the two would be beneficial to all, and that during the forty-four years he had been in business he had never had any reason to complain about the treatment accorded him by the wholesale hardware trade. He claimed that it did not pay in the long run to figure over an extra five or ten per cent. It was better to keep prices steady and earn a fair profit. To him one man's dollar was just as good as anothers, and if a cut was made for the benefit of one the other got it as well. "Break prices 10 per cent. and the other fellow will not have as ask me to accord him the same privileges," he said amid laughter and applause.

Mr. James Maxwell said that he realized that the jobbers' association was a good thing, and that the members should stand together. He said that they should have a fair profit on the business they did, but they should also have faith in each other. "I think," he said amid applause, "that the man who buys from the manufacturer at less than the regular price is just as bad as the manufacturer who sells below the regular price."

Other speakers to this toast were Messrs. Wm. Cummer, John M. Taylor, Geo. W. Howland, Thos. Watson, and J. P. Steadman.

Mr. Taylor's address was of the usual witty type with many hits at the expense of the other gentlemen present, while at the close he gave some original and impromptu verse which was likewise personal in its character.

Mr. Geo. W. Howland, in response to persistent calls made upon him, recited in capital style "The Habitant."

A. W. Campbell, Good Roads Commissioner, and W. L. Edmonds, responded for the ladies.

A cordial vote of thanks was tendered Mr. Whitwam, Hon. Jas. Stratton and Mr. A. W. Campbell moving the resolution. Mr. Whitwam feelingly replied, and declared that he had always been actuated by a desire to promote the interests of the wholesale hardware trade.

Crumbs From the Banquet.

Mr. Hope, of John Kynocks, Limited, Birmingham, had to respond to a special toast proposed for his benefit by Mr. Wm. Starke, who declared that there was only one Birmingham and only one "Hope" to respond to it.

"27½ and 2 per cent. You can book our order at that."—Mr. Starke.

"Howden, here's to your new building, and may it build up business."

"Touch your glasses to Mr. James Lewis, the man who never cuts prices."

"Here's to George Howland, the man who is never satisfied with the price of nails."

"Here's to John Taylor, the man who was never sat on."

"Here's to the Sewing Machine King"—Mr. Henry Newman.

"Mr. Jeannotte was the youngest benedict at the feast. He was only a month old."

Is it possible that Mr. Bell, who is about 100 pounds lighter than Mr. Spinney, lent the latter gentleman his dress suit? He said he did.

STOVES AND TINWARE

SUBSTITUTES FOR COAL.

IN view of the apprehension in some quarters that there will shortly be another general strike in the Pennsylvania anthracite regions, the many consumers will be glad to learn that two substitutes for coal have recently been put on the market.

One of these new fuels is being manufactured by the Universal Ideal Coal Co., and many excellent qualities are claimed for it. Peat is its raw material, and the process by which it is turned into a commercial article is the result of many years' experimenting in the effort to extract all the moisture from peat. The difficulties hitherto met in making peat into satisfactory fuel have been eliminated by an electrochemical process, which destroys entirely the nature of moisture in peat, and changes it into real hard coal, thus doing what nature takes centuries to do. Among the advantages claimed for the new fuel are that there is an entire absence of smoke, soot, dust, clinkers, or sulphur. Furthermore, this coal, which is marketed in the shape of cylinders an inch and a half in diameter, and about two inches in height, is perfectly clean to handle. The headquarters of the Universal Ideal Coal Co. are at 781 East Notre Dame street, Montreal, but it is their intention to erect plants in close vicinity to all large centres of population where peat beds are available.

The other new fuel, which has already been described by Hardware and Metal, is "Briquetted Coke," which was just last week put on the market by the Montreal Light, Heat & Power Co. It is retailing at $5.50 per ton, and promises to become very popular.

TIN USED BY CANNERS.

STATISTICS concerning the tin plate importations of Canada show that for the year ending June 30, 1904, there were imported into Canada from Great Britain 41,218,600 pounds of tin plate, and from the United States 8,241,400 pounds, or a total of 49,640,000 pounds, of which a large proportion was consumed in British Columbia, though in that year the salmon pack on the coast was comparatively a small one.

This year the imports of tin plate for British Columbia alone were 150,000 boxes of 112 pounds each, or 16,800,000 pounds, of which 60 per cent. came from Great Britain and 40 per cent. from the United States.

The salmon canners are urging upon the Tariff Commission the necessity of leaving conditions as they are rather than imposing a duty against the Welsh tin, as some propose.

Since the Federal Government has allowed trap fishing on the Pacific Coast, a demand for wire rope and wire netting for the construction of traps has sprung up, and the canners ask that these articles be placed on the free list. They point to the fact that they are in competition with American salmon canners on the open markets of the world, and that the Americans can secure their wire rope and wire netting at much less cost than it is possible to obtain the same in Canada.

DIFFICULTY OF REPAIRING STOVES.

REPAIRING stoves is a nerve racking task, even for the best mechanics and under the most favorable circumstances, so that when the circumstances are unfavorable — and stove manufacturers generally see to it that they are—it is about as trying an undertaking as the stove man or any one else can conceive.

With the many improvements along the line of stove manufacturing, very few have been inaugurated with a view to simplify the replacing of the broken or burned out parts with new ones, says the Metal Worker. It is often remarked among members of the retail trade that if the men who are responsible for the manner in which stoves and ranges are constructed were compelled to repair one of them occasionally they would pay more attention to this detail of the business than they do at present, or ever have done. No expense seems to be spared in making stoves handsome in appearance, and to insure their rendering good service in every way. Yet many of the very best grades are so constructed that a mechanical genius with all the attributes of Job is required to do any repairing that they may need. In fact, there are many of them on the market so fearfully and wonderfully made as to give the impression that they were designed with an eye single to preventing their ever having an old casting replaced with a new one.

It is well understood that no one expects stoves to repair themselves, nor to be able to do it by simply pushing a button. But it does seem as if manufacturers ought to give more attention to this matter, and so make it a little easier for the retailer, upon whom the burden falls.

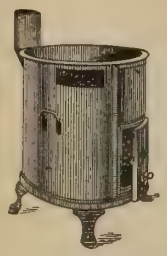
In many instances bolts are put in places where it is almost, or quite, impossible to either hold or cut the nut when necessary to remove it. Any one who has ever attempted the feat knows that it is no easy matter to turn the nut on a stove bolt after it has been exposed to a hot fire for several months or years. As a rule, it can't be turned, and it thus becomes necessary to cut the nut with a chisel, if it can be reached with one; and when it cannot, it is "a condition and not a theory that confronts" the mechanic. A range that has to have all the fire box fixtures, including the water front, removed in order to put in a new grate, may be durable



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH
JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write
JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada

UNIVERSAL OIL HEATER



Price $3.25

This Stove has a larger sale than any other competing Stoves. Handsomely made and finished.

Guaranteed to give satisfaction. Heaters of all varieties, prices ranging from $2.50 to $7.50.

For Sale by
E.T. WRIGHT & CO.,
HAMILTON, CANADA

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

and capable of rendering excellent service in the kitchen. But when the time comes to make repairs—and it is sure to come—it can hardly be said to be a success at restricting the spread of profanity.

What little protesting the dealer does is usually to the traveling salesman, and that suave individual invariably hides behind the stock argument: "Our line seldom needs repairs," or, "You get paid for the time spent in making repairs," neither of which is true, for all stoves need repairs sooner or later, and it is not always possible nor expedient to charge a good customer all it is actually worth to do the repairing, especially if the stove was sold and recommended by the dealer himself. Men in the stove or any other line of business, find it hard enough to collect reasonable accounts, and therefore shrink from presenting a bill that they know is exorbitant from the customer's point of view.

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It might be suggested that dealers refuse to handle such stoves as they know are difficult to repair, and let it be known why they refuse. As soon as the manufacturers find they have got to cater somewhat to the retailer's likes and dislikes they will begin to do so, especially if his likes and dislikes are founded on common sense, as they would be in this case.

SAFETY FURNACE PIPE.

READERS of Hardware and Metal will have noticed the advertisement appearing in these pages of recent weeks bringing to the attention of the trade the safety furnace pipes, etc., made by the Perfection Safety Furnace Pipe Co., 3 Brookfield street, Toronto. This pipe is made by specially adapted machinery, by men of long experience in the furnace business, who recognize that good tinsmiths are scarce and cannot be procured when wanted. They point out, therefore, that by buying these pipes and fittings dealers can go ahead with furnace jobs at any time, there being no waste of material whatever when using the perfection pipe. The manufacturers call particular attention to their special make of round hot-air pipes, there being only one lapped joint in every four joints, the other joints being double locked. This gives a saving of from seven to ten feet in every hundred, an important saving of material. A full supply of hot-air pipes, elbows, angles, register boxes, galvanized cold-air pipes and elbows, and galvanized smoke pipes and elbows will be kept in stock, and this will undoubtedly prove a great convenience to dealers, enabling them to buy ready-made all the material required for furnace jobs without delay. Correspondence is solicited by the new company.

BUFFALO BLACKSMITH HAND PUNCH.

THE blacksmith hand punch illustrated herewith is a new tool developed and manufactured by the Canadian Buffalo Forge Co., Limited, Montreal. Its chief merit lies in its handiness and adaptability rather than on account of any remarkable results in operation. By means of the long leverage of handle through a cam movement in the head it will punch as large as a half-inch hole in No. 14 iron, or a quarter-inch hole in No. 4 iron. Bands and straps in position can be easily and quickly punched where otherwise they must be detached and heated or carried to a stationary punch. In sheet metal and tank work where it is desirable that the rivet holes in lap joints should be punched as both sheets are held in position, this machine will be readily appreciated. The narrow head permits punching holes in curves of small radius,



Buffalo Blacksmith Hand Punch.

such as tank head flanges, ferrules, and bands of small diameter. The clearance from die to end of head is only $\frac{5}{8}$ of an inch so that holes can be punched close up to corners, which is a very valuable feature in punching light angle iron frames. The total depth of jaws is 2 inches which allows a hole to be punched that distance in from the edge of the plate.

The head of punch into which the handles are fastened is a solid drop forging machined to take the die and punch, retainers, pins, etc. Both punch and die are held in steel bushings or sleeves which are so arranged that different sizes can be readily substituted. The leverage is worked through a cam which forms part of the upper level, and it should be noted that the working pressure is brought to bear directly on the punch and not through intermediate fittings which insures the easiest possible action and does not subject other parts to unnecessary strain. The machine measures 32 inches over all, weighs 15 lbs., and is furnished with punches from three-thirty-seconds to one-half inch, advancing by thirty-seconds.

ASBESTOS SAD IRONS.

The Dover Mfg. Co., Canal Dover, Ohio., manufacturers of the celebrated asbestos sad irons, furnish an iron for every purpose. The company are advertising very extensively, being determined that these irons shall be known in every home. They are also offering $1,000 in cash prizes for the best advertisements and window displays of the asbestos sad irons. Full particulars regarding these contests will be furnished dealers on request. A booklet giving a complete description of the irons will also be forwarded to those who are unacquainted with their many merits.

NEW STOVE FOUNDRY.

Battram & Hamilton have commenced the manufacture of stoves at Thornbury, their leading line being the Cinderella Special, a steel range which is bound to win favor amongst the trade and be very popular amongst housekeepers. Another line manufactured is the Classic Cinderella, a cast iron range which has already met with a large sale. Stove dealers throughout the country are requested to communicate with this firm regarding agencies and territory.



AN AGENT
for
THE EMPIRE QUEEN RANGE

is allied to a stove that he need never be ashamed of "talking up."

There are so many good points that he should have no difficulty in making his sale. Everything essential to a first-class stove is to be found in **THE EMPIRE QUEEN RANGE**. Unessentials are omitted. On its superior baking qualities this range should be bought in preference to others, and then, the prices! **Well, write for them.**

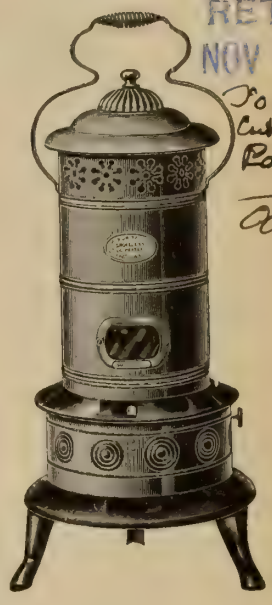
The Canadian Heating & Ventilating Co.
OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

THE ROCHESTER LAMP CO.
109 Church Street, TORONTO.

Solicit the attention of the trade to their line of

Oil and Gas Lamps
Parlor Oil Heaters
Chandeliers
Brackets, Etc., Etc.



The No. 71 Welsbach and Lindsay No. 5 Gas Lamps are the best in the market and safe goods to stock.

We carry the best line of **High Grade** and ordinary Gas Mantles sold in Canada, and our prices to the trade are very low for the quality of the goods.

Send us your orders, we guarantee satisfaction.

THE ROCHESTER LAMP CO.
TORONTO

The "Up-to-Date" and the "Ordinary"

As a practical salesman wouldn't you rather sell an "up-to-date" range rather than the "ordinary" kind?

Particularly when the "up-to-date" is bristling with points of merit and is arranged with all practical features of convenience and utility?

And when through its modernness and thoroughness of construction it will save fuel and time, thereby eliminating expense and worry?

And when the up-to-date will assuredly make you a friend?

And when this friend will therefore give you his other business, and you will have obtained actual advertising results without actual expense?

Better decide to be "up-to-date" and handle the



Walker Pilot Steel Range

Because it possesses all the above "up-to-date" advantages, and yet ***sells at a competing price and makes you about double the usual profits.***

SEND A POSTAL FOR PARTICULARS.

The Walker Steel Range Company, *Limited*
Grimsby, Ont.

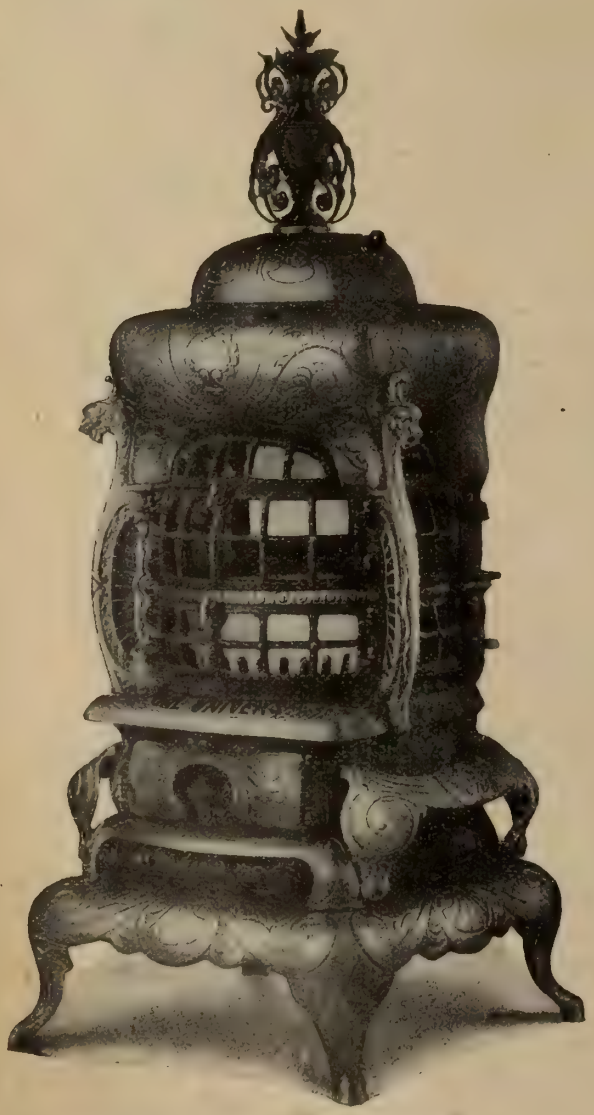
Unbiased Report on Base Burners

A Valuable Guide for Dealers

taken from

UNITED STATES TRADE REPORTS

Early in August the United States Trade Reports decided to send an expert to Canada to investigate the merits of Base Burners made in Canada. No manufacturer had any knowledge that such an investigation was being conducted and as the report is based absolutely on merits it is a valuable guide to dealers. Below is given the exact report as published last week:



The Best Make of Base Burners.

We fully appreciate the difficulties the prospective buyer finds in obtaining a truthful and correct answer to the question, "Which is the best make of Base Burners?"

In the first place, he himself can not know all the different kinds, and, therefore, can not decide for himself.

Second, he can not depend on the opinions of others, as they, like himself, can not know all the various makes, or may be prejudiced in favor of the kind they use.

Third, he can not take his choice from reading matter and advertisements of manufacturers, since one and all, believing they are right and justified in saying so, claim their respective make the best.

Fourth, he can not expect to have his question answered by any journal devoted to the trade, for in so doing such journals would commit financial suicide, since all other manufacturers, except the one given as the best, would at once withdraw their advertising patronage.

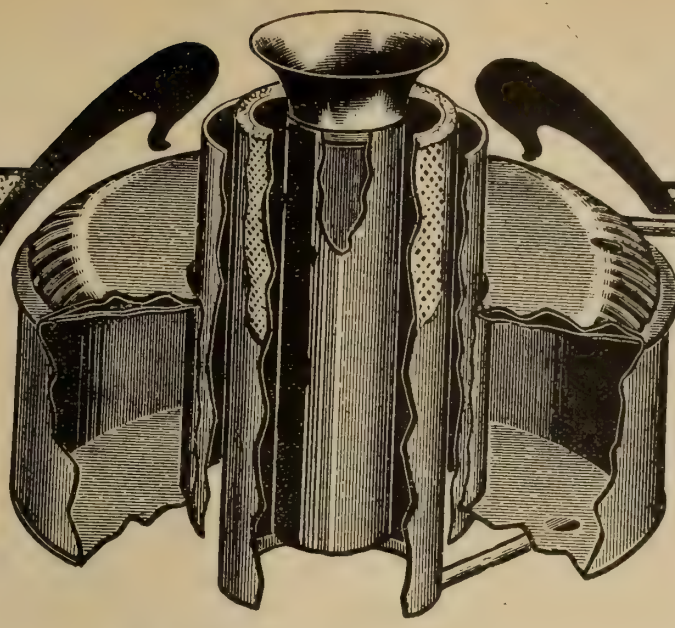
In view of the difficulties to a correct decision, this paper decided to make a thorough investigation, the result of which would be a decided answer as to which is the best. We fully realize the responsibility of making such a decision, since we are aware that our readers will accept it as final and worthy of fullest credence. For the benefit of new readers, we wish to state that such faith on the part of our old readers is caused by their knowledge of the invariable method pursued by the Reports by which we can conscientiously give an independent and unbiased report on any article manufactured. This method consists in examining closely all the various makes by means of our editorial and reportorial staff without the knowledge of any manufacturer interested, and, further, without making any charges, accepting any gifts or soliciting any advertisement from any one whose wares we may pass upon.

As a result, we are prepared to state that there is no make of Base Burners on the market to-day equal to the "Grand Idea," manufactured by the Guelph Stove Company, of Guelph, Ont., Canada. These base burners are made of the best material, are durable in use, perfect in construction, and will give entire satisfaction at all times.

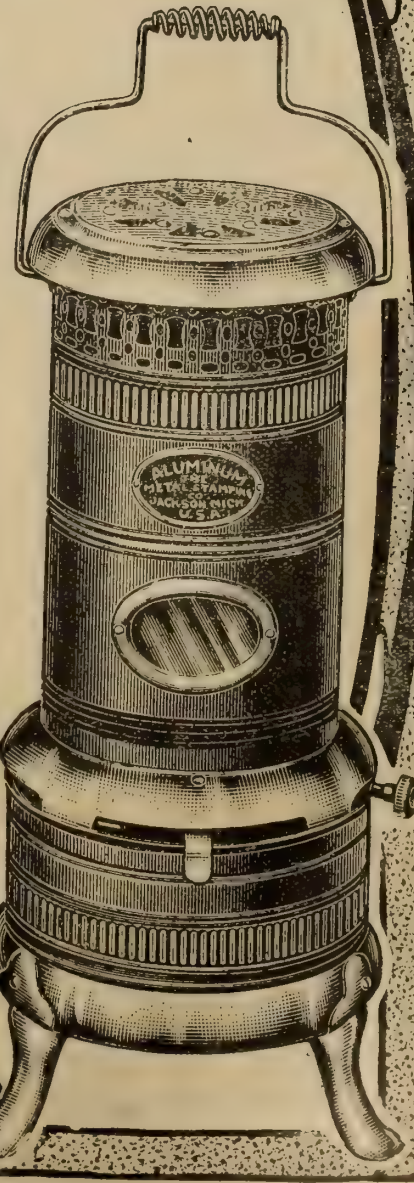
The company is thoroughly reliable in every respect and can be depended upon. Their business is conducted on a line that is pleasing to each and every customer, and promptitude is a special feature of their business methods. They also stand high commercially.

Our interested readers will do well in addressing them direct, as we are sure that all dealings with them will prove mutually beneficial and profitable.

The Guelph Stove Co., Limited, Guelph, Ont.



The Aluminum Oil Heater



A warm seller, over the million mark in sales simply because it is the best and only positively safe Oil Heater in the world. Stands supreme in practical merit. "Every sale a seller"—neighbor tells neighbor and they all want the Aluminum Oil Heater.

NOTE THAT SAFETY BURNER

At the top of this page we illustrate our great Safety Burner. See the air passages which give ample circulation and perfect ventilation, assuring perfect combustion. As there are no perforations about the burner, clogging up is impossible. No oily residium, no dirt, no odor, no danger.

Oil in fount is never in direct contact with wick, so overheating and explosions are impossible.

Simple in operation as a lamp and much safer.

Radiates heat all over like a base burner—from bottom, sides and top. No other Oil Heater will throw out heat this way. It is the only Oil Heater with partition in the drum to deflect the heat downward—the only Oil Heater which heats by radiation as well as by circulation.

Your trade deserves the best—give them the Aluminum Oil Heater. You will find it easier to put them in stock than to keep them there.

We advertise them generously; get your orders in early.

We guarantee every Aluminum Oil Heater.

METAL STAMPING CO.

DEPT. 12

JACKSON, MICHIGAN, U.S.A.

W. J. McMURTRY, Galt, Ont., Canadian Agent.

A PROMOTOR'S ENTERPRISE

IN Hardware and Metal of September 30 an article was published on the Canadian tin plate industry, which has met with commendation from readers in all parts of the Dominion. The proposed establishment of tin plate mills at Morrisburg, Ont., was commented upon and it was clearly shown that the industry could not be successful at that point without a very heavy duty being imposed on all imported tin and Canada plates, all users of these metals throughout Canada being taxed in an endeavor to build up an enterprise which from the beginning could have no hope of success. It was pointed out that the tin plate industry was not established in the United States until that country had a population of between 60,000,000 and 70,000,000 people and therefore Canada with only 6,000,000 people could not hope to sustain a tin plate industry, especially at such a location as Morrisburg, which is not near the base of supplies for either raw material or fuel.

In looking into the matter still further it appears that the proposition to establish the industry at Morrisburg is one which we must consider as purely a promoters' enterprise, which readers of Hardware and Metal would do well to avoid in making investments. Names of several well-known men have been used in unauthorized manners and several who have been announced as directors have given instructions that their names must not be used in connection with the enterprise, Messrs. W. K. George, Toronto, and T. C. Davidson, Montreal, having made public announcement to this effect.

The promoters of the Canada Tin Plate & Stamped Steel Company are Messrs. J. Wesley Allison, G. H. Meldrum and N. D. Lewis, and they propose to dispose of 15,000 shares of stock at a par value of $100 each, $500,000 being preferred and $1,000,000 ordinary stock. In securing subscriptions men have been told that certain capitalists were investing large amounts in the concern, the truth being that the men referred to had refused to invest a dollar in the enterprise. The promoters in their prospectus also make the definite statement that "the Government have expressed their intention of aiding and fostering the industry"—a most unlikely story as the Dominion Government is not in the habit of making advance statements of this kind, particularly to enterprises which as yet only exist on paper.

From the inception of the enterprise the promoters have worked the newspapers for numerous write-ups and the names of such American capitalists as the Vanderbilts were freely used as being behind the enterprise. An agreement was entered into with the town of Morrisburg, a conditional arrangement being made whereby the town agreed to supply 700 horse-power. Owing to the Dominion Government declining to allow the use of the canal water to develop this power, however, a hitch has occurred and the work of erecting the power house has not been gone on with. The Reeve of Morrisburg has resigned and the people are divided on the matter of going ahead with the plan of aiding the enterprise. But in order to encourage the subscription of stock the company is going ahead with their part of the construction work.

The prospectus of the company contains an alluring table outlining the estimated profits. According to Mr. Lewis on an output of an eight-mill plant of 20,000 tons the profits would be $200,000, from which if a dividend of $24,000 is deducted on preferred stock there would be a balance of profit equal to 35 per cent., amounting to $176,000. Anyone could work up a table showing large estimated profits, but as Mr. Lewis is announced as an experienced man from Cardiff, Wales, and one of the pioneers of the industry in the United States, some investors may be led to consider the estimate possible of realization. Investigation, however, does not show that Mr. Lewis is one whose figures should be relied upon, he having no record as a manager in the United States and having only been engaged by a mill in Pittsburg for six months in a minor capacity, his duties being in aiding in securing workmen and his engagement terminating about the time the tin mill was started. If Mr. Lewis was a capable tin mill manager it is likely that he would still be in Cardiff rather than spending a year or two in Montreal on the strength of the flotation of the stock and possible success of the Morrisburg proposition.

The plan of the promoters is evidently to induce the Dominion Government to recognize the enterprise by giving a small duty in its aid. With this assistance the company's stock could be more easily disposed of. But with Messrs. Allison and Meldrum's experience as promoters of the Cramp Steel Company at Collingwood before them investors should act cautiously. This latter concern was floated five or six years ago by Mr. Allison and in response to large advertisements in the Toronto papers a large amount of the stock issue of $2,820,000 of common and $594,000 preferred was disposed of to farmers and others who have never realized a cent or saw a wheel turned in return for their money. The Cramp Company's plant with its assets claimed to be worth $3,414,600, including real estate, buildings, plant, water rights, quarries, mines and franchises, placed at $3,339,725.86, stock subscribed with payments not yet due of $35,000 and cash on deposit in the bank of $39,874.14, was finally disposed of in September, 1904, to the Northern Iron & Steel Company for $70,000 and insured by the latter concern for $25,000.

The announcement that a duty on tin plate might be established raised a storm of protests from the canners of British Columbia who appeared before the Tariff Commission. Such a duty would also have a serious effect upon the fruit canners in Ontario and the canning industry in Nova Scotia, the result being that many concerns now progressing favorably would be crippled. The canners point out that up to about 1880 there was a small duty of five per cent. on tin plate but this was taken off at the solicitation of the users of tin plate throughout Canada and under the revised tariff pig tin and tin plate were put under a separate heading to Canada plate and galvanized sheets. It would, therefore, be a backward step to impose a duty at this time when the importation of tin plates is only $1,500,000 annually in comparison to the consumption in the United States of $26,000,000 annually in 1891 when the McKinley tariff was put on and the industry established in America. Even though mills were established at Morrisburg importations would have to continue as the demand is of such a diversified character that it could only be supplied in Wales.

The history of the tin plate industry in the United States shows clearly that a small duty will only have the effect of taxing the consumer without aiding the manufacturer. Even the duty of one cent per pound, equalling at present prices about 40 per cent., with importations of $18,156,773 into the States in 1883, did not stimulate the industry. But these facts relating to the development of the industry in the United States can best be outlined by the following extract from "Tariff History of the United States," by F. W. Taussic, LL.B., Ph.D., Professor of Political Economy in Harvard University:

"A different aspect of the tariff of 1890 appears in the rise in the duty on tin plates. This article had never been produced in this country, and had never been subjected to duties comparable to those on other manufactures of iron. In 1862 a duty of twenty-five per cent. had been imposed, and had been retained until 1872, when at the time of the general reduction of that year it was lowered to fifteen per cent. In 1875, when the general reduction of 1872 was repealed, the rate was changed to a specific duty of 1 1-10 cents a pound, equivalent to about twenty per cent. at the prices then ruling. But this change did not have any effect in stimulating domestic production, and in 1883 the duty was reduced to one cent a pound, equivalent, at the prices of 1883, to an ad valorem rate of about thirty per cent. At that rate the importations had been very large, twenty millions of dollars and more a year, and the domestic production had been nil. The question presented itself squarely whether a further and great extension of the protective system should be made. Those who believed that system to be wise, naturally maintained that this article had been unfairly singled out for a specially low rate of duty, and in the Act of 1890 a duty of 2 2-10 cents a pound, equivalent to about seventy per cent., was imposed."

If it took a duty of 70 per cent. and a population of nearly seventy millions to give the tin plate its start in the United States in 1891 can it be expected that a small duty of even 15 per cent. with our population of only 6,000,000 will result in the establishment of a similar industry in Canada at this time? And with the natural disadvantages of the Morrisburg location and the unsuccessful business records of the promoters, could success be looked for even if the duty and population were favorable? And also, how many Canadians would even consider the imposition of a similar tariff to that existing in the United States, the duty of 2 2-10 cents per pound, equalling at present prices a protection of about 84 per cent.?

In the United States the metal industry was built up gradually by first producing the heavier goods for which there was the greatest demand. Canada's experience must be of a similar nature. But Canada is still importing large quantities of metal products on which as much as 30 to 35 per cent. duty is imposed. In the face of this the effort to promote a tin plate industry in Canada at present must be considered preposterous by anyone who gives the matter the slightest study.

FIVE versus ONE

One Metallic Ash-Sifter

will outlast five wooden sifters. There is such a small difference in the price of the metal and wooden sifters that the buyer of the wooden sifter virtually throws away four purchases and the seller four chances for sales. Our metal sifter, besides, is easily worked, consumes less time, ***and has no dust.*** Surely you don't carry wooden sifters! Better read our circular again!

C. M. CUTTS & CO., Toronto Junction, Ont.

Sole Makers



Don't accept "perhaps"
When you can get "sure"

Sterne's Asbestos Stove and Furnace Cement

is of ***certain*** value. We know what is ***wanted*** and we ***make*** it. If you never begin selling the "sure" cement you will never accomplish much selling the "perhaps" cement. Think it over.

Always write direct to

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

ARK-EL-ITE
TRADE MARK

$1.50

pays for trial order of 10 six-lb. packages in case of

Asbestos Stove Lining

It is packed in heavy cardboard boxes, no waste from broken bags. The cardboard boxes have finely printed cover and make a very attractive showing.

It is an improvement over Fire Brick for lining and repairing Cooking and Heating Stoves, Ranges, etc. It is easier to handle and nets larger profit to the dealers.

It can be applied in a few minutes, and there is none of the trouble making an exact fit as in the case of Fire Brick.

MANUFACTURED BY

The Francis-Frost Co., Limited.

Makers of Celebrated "Ark" Brand Paints.

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

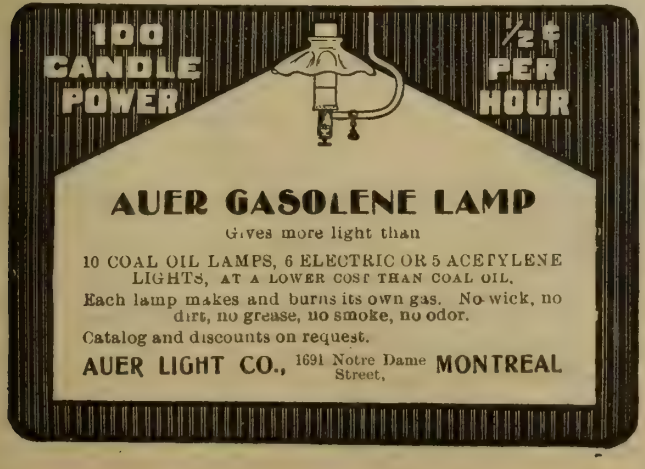
Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



WE KNOW THAT THEY ARE GOOD
WE MAKE THEM

When we say that our

Furnace Cement

and

Stove Putty

are the articles par excellence for you to carry, we are just saying what scores of Hardwaremen are proving. To test our reliability you must have a "Scarfe Stock," when you also test the articles' saleability.

We can ship you Barrels, Half-Barrels or Small Packages. No matter what amount you order we will wager it will be the best money's worth you have had for many a day. That gives you a clear field for profit.

Shall we send prices?

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

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OCT 21 1905
To J J Gilbert
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SALE MAKING

Few people buy a range without careful examination and thorough demonstration.

To sell you must have a range of good appearance, unqualified merit and with allmodern improvements and features. The

IMPERIAL OXFORD RANGE

has more talking points than any other range in the market. It is handsome and contains every good feature with no drawbacks.

The oven, of course, is the one thing you'll be asked about, and on this point you can say more for the Imperial Oxford than can be said for any other range. **The Diffusive Oven Flue** is found in no other range, and this is really the only important advance in range building made in years. Explain what it is and what it does and you've sold an Imperial Oxford.

Catalogue 61 is ready

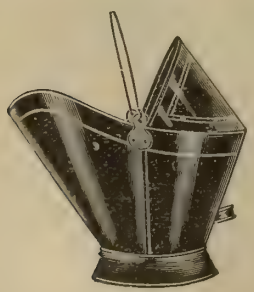
The Gurney Foundry Co., Limited

Toronto Winnipeg Vancouver

71

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

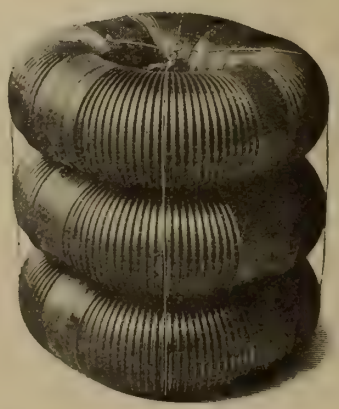
Seasonable Goods



COAL HODS

Plain, Striped, Gold-Striped, Japanned and Galvanized

9 sizes and 13 styles



STOVE BOARDS

Crystalized Lithographed in 7 styles and sizes. Crystalized in 8 styles and sizes.

McCLARY ELBOWS

4 sizes

Made in Polished and Galvanized Iron and Tin

These goods are moving fast these days. Do you need a further supply?

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

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NEW ADVERTISEMENTS.

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Imperial Cement Co., Owen Sound.

PLUMBING MUDDLE.

WASHING dirty linen in public is a pleasant proceeding for the old women of both sexes, but it is anything but pleasant for any of the participants. During the past week the plumbing trade in Toronto has become mixed up in public controversy over matters which should be discussed and thrashed out entirely amongst themselves. Other trades have organizations to govern matters pertaining to their various trade interests, but it seems to be left to the plumbers to make their differences the subject for public controversy, newspaper reporters being called in by people who love sensationalism and desire to pose as martyrs as soon as opportunity offers.

It is needless to say that there have been differences in the Master Plumbers' Association in Toronto during the past two months. If there had not been certain members would not have withdrawn or been expelled, and other members would not have resigned important positions in the association. These differences, however, should be settled within the association and as there is to be a Provincial convention in Toronto next week Hardware and Metal in this issue reproduces the substance of the happenings during the past week as reported in the daily press. As the matter has now reached the courts, an injunction issued and an investigation called for by one of the disputants, the members of the Provincial association should be aware of the facts as it may be necessary for them to take some action at the coming convention.

As stated in another column Hardware and Metal considers that the work of the Master Plumbers' Association has been of great benefit to the general public as well as to the trade. The power for good of the association, however, is being damaged by the sensational articles appearing in the Toronto newspapers, and the best remedy appears to be an open investigation conducted by an impartial committee, the officers of the association allowing the fullest facilities to aid the investigation. If there are any who will suffer as a result of such an investigation it must be remembered that the interests of the great mass of master plumbers throughout the Province are greater than those of the few in the Toronto organization.

It is certain that the matters over which disputes have taken place have been greatly magnified and this is all the more regrettable as the public is being given a wrong impression. At present the situation appears to be going from bad to worse and prompt and courageous action is, therefore, necessary.

It is altogether unlikely that Crown Attorney Curry will be able to work up a case warranting the calling for an official investigation so that if action along this line is desired the move must be made by the members of the association As a preliminary step it would be a good plan for the association to call upon Messrs. Harrison, Reeves and Gray, the three ex-members who are getting columns of notoriety in the newspapers, to throw open their books for a public investigation.

MANUFACTURERS VS. JOBBERS.

A STRONG delegation of jobbers and wholesalers from Western Canada appeared before the transportation committee of the Canadian Manufacturers' Association in Toronto on Wednesday, and protested against the action of that body in seeking to have the present regulations with regard to mixed carloads altered.

Prior to 1903 the rule was that anyone could make up a car, putting in as many different articles as he wished, but having to pay freight on the whole carload at the rate of the highest article in it. For instance, if a manufacturer were to fill a car with a mixed load of buggies, dry goods and hardware, he would pay freight on the whole car at the rate on buggies, because the freight rate on buggies is higher than that on dry goods or hardware.

In 1903 this rule was changed. Since then the possible grouping of merchandise to make up a car lot is confined to the class of articles which any one dealer would handle. For instance, general hardware, paints, oils, etc., could be shipped in one car. Similarly the various things which enter into a grocer's stock could be mixed to make up a car.

This arrangement, of course, militates against certain manufacturers. If a manufacturer makes one article which is sold in a hardware store and another which is sold in a carriage shop, even if they are made under the same roof, he cannot put them in a car together without paying freight on them at broken car lot rates. This, of course, much exceeds the rate when the car is taken complete.

Ever since the last change, in 1903, the Canadian Manufacturers' Association have been moving for a restoration of the old regulation or a betterment of the present rates. They demand that a manufacturer be allowed to use everything which he manufactures in making up a car lot. In spite of the protest of the westerners, supported by a number of eastern manufacturers, the association will persist in its present contention.

A delegation composed of Messrs. J. E. Elliott, of McLennan, McFeeley & Co., Vancouver; C. P. W. Schwengers, of E. G. Prior & Co., Victoria; John Burns, manufacturers' agent, Vancouver; W. G. Mackenzie, of Wood, Vallance & Leggatt, Vancouver, and J. A. Rickaby, of R. P. Rithet & Co., Victoria, represented the B. C. Wholesale Hardware Association, they holding that if the old rule comes into effect that their business will be completely demoralized. In British Columbia it is said that the present move on the part of the eastern manufacturers is in consequence of the commercial travelers' tax put upon their representatives coming into the Province of British Columbia to do business. If they succeed in restoring rule two it is said the B. C. wholesale dealers will undoubtedly press for a still further tax upon these eastern travelers in order to hold their own against the manufacturers of the east.

NOTICE TO ADVERTISERS.

On account of next Thursday being Thanksgiving Day the next issue of Hardware and Metal will be printed on Wednesday instead of Friday. All advertising copy must be received by Tuesday and advertisers are requested to cooperate with us in this arrangement.

PROVINCIAL TAXES RETARD COMMERCE.

FREQUENT comment has been made in these columns on the arbitrary and near-sighted policy of Provincial Legislatures, in taxing commercial travelers. Additional light which has been shed on the matter, has only served to accentuate the impression that these taxes are entirely unwarranted, and are, in spirit, though possibly not in letter, an infringement on the rights of the Federal Government, and an insult to the good sense of the nation.

On Prince Edward Island rests the blame for initiating this class of legislation. A tax of $25 was imposed on all commercial travelers visiting that Province, and the money-making possibilities of the scheme immediately appealed to the hungry legislators of British Columbia. But in this case, the tax was doubled, every traveler selling goods in the western Province being relieved of $50 or $100. Then the Quebec Cabinet, frenzied by their endeavors to make ends meet and thinking that they should be able to go their sister Provinces one better, proposed and carried through the iniquitous statute which forbids traveling representatives of foreign houses from doing business in the Province, except on payment of a $300 tax.

When this last piece of legislation was perpetrated, a storm of protest went up from all over Canada. So strong was popular opposition to such insular enactments that many representations were made to the Dominion Government, praying for an exercise of the right of veto granted by the British North America Act. The British Columbia tax was made the subject of a test and the Minister of Justice was asked to report on its validity, his finding, recently made public, is that the statute is within the rights of the Province to pass it, and, as a result, the Government has declined to interfere.

Where is this thing going to end? Will other Provinces too fall victims to the taxing mania, and keep on increasing the amounts, as has already been done? It is quite conceivable that these might become so high as to be prohibitive, and an obvious interference with Federal rights.

Under the circumstances, it is only to be expected that, in Britain and the United States, uncomplimentary references are being made to Canadian statesmanship. In the States, there are many firms who, if they could work the territory without so many restrictions, would make a connection in Canada sufficient to justify their investing in a Canadian plant eventually. As it is, they are losing confidence in the ability of Canadian legislators, and we have been advised that one large firm are withdrawing their plans to invest nearly half a million dollars in Canada, owing to the bad impression that the recent enactments have made.

No objection is made by foreign manufacturers to a legitimate tariff; but the numerous petty restrictions being imposed upon them has naturally aroused great antagonism.

In view of the Dominion Cabinet's decision to make no move in the matter, and the avowed intention of the Quebec Treasurer to enact an even more comprehensive statute, it behooves the business men of Canada to demand purely Federal control of the nation's trade and commerce. This we believe to be the feeling of the vast majority of Canadian merchants, and to this opinion, if properly expressed and conveyed, the Government must needs bow.

THE IMPORTER AND THE TARIFF.

IT is to be hoped that during the investigation into the tariff which is now being made the interests of the importer will not be overlooked.

When a case is before a court of law all parties interested are called upon to give evidence. The importers of this country are interested in the Customs tariff, and their evidence should certainly be taken.

Canada is a protectionist country. Nine-tenths of the people believe that at least a moderate tariff is necessary to the welfare of the Dominion. But in preparing a Customs tariff the interests of all should be considered. The manufacturers, the lumbermen, and the agriculturists of different kinds are being heard, but the merchant—the man who distributes merchandise wholesale and retail—does not seem to have an existence. And yet he has interests to consider and rights to guard.

The tariff needs revision, and it is presumptive evidence that the Government thinks so, too, or it would not be holding the present investigation. But while the work is being done it might as well be done well. And the only way it can be done well is to first consider and carefully weigh the interests of all concerned, and from the evidence thereby adduced, and the knowledge thereby attained, construct a tariff that will protect the interests of the merchant who imports and sells as well as those of the manufacturer who makes.

Boards of trade and mercantile organizations in general should give this matter their prompt attention.

A NEW TRADING STAMP PLAN.

PROMOTERS of trading stamp concerns are actively making preparations to continue their business after November 1st, when the Dominion Legislation providing for the discontinuance of the issue of stamps becomes effective. To effectually get around the clause which states stamps cannot be issued or redeemed by a third partv. a company operating under the name of the General Specialty Co., Limited, with the further title of Affiliated Stores Agency, 124 St. Peter street, Montreal, has issued an interesting prospectus to merchants and the public, which they declare to be perfectly legal.

Montreal, the mecca of trading stamps, is the only centre operated in at present, but it is intended, according to H. E. T. Cook, the manager, that the system be extended throughout the principal centres of Canada. The plan is practically the old system, with the exception that the merchant redeems the stamps himself in order to keep within the letter of the law. The stamps are issued by the agency, with the imprint of each interested retailer thereon, a deposit being required as a guarantee of good faith. The company exacts a commission for its services in furnishing the stamps and doing the advertising. The stamps, redeemable by the merchant, are each worth one-half cent in goods, and one-third of a cent in cash. The co-operation and active interest of the retailer is sought by giving him a share of all profits, in fact four-fifths.

The advantage of this method over the merchant giving his own premiums is not entirely obvious, although the sponsors of the system claim their proposition has been well received. With the exception that stamps of different merchants can be made interchangeable, there is no additional advantage to the collector.

The Traders' Advertising Co., the oldest and largest of the Montreal stamp concerns, advises its patrons credit on all cash receipts returned to them will be given in a "savings coupon account," at the rate of one-half cent. for every cash receipt. This coupon account is to be extended indefinitely after the 1st of November, and they will accept the stamps of certain merchants at the rate of 5 per cent. on the face value of the coupons. Their method is to save the collector any trouble until $10 has been placed to the credit of the collector. Then three options are obtainable—$5 in cash, $8 in goods, or $10 in the Ideal Savings Company.

FREIGHT AND INCIDENTAL CHARGES.

FROM time to time difficulties arise between the retail hardwareman and his jobber as to the exact meaning of those mystic letters, f.o.b. The ordinary conception is that when goods are quoted f.o.b. Montreal or Toronto, the jobber or manufacturer agrees to deliver the goods to the railway people, when his responsibility ceases. But practically none of these firms have wagons under their own management which deliver freight at the receiving sheds of the railway companies. Instead, the drays of the transportation companies call at the respective warehouses to accept freight, and the responsibility of the railway company begins as soon as the goods are placed on the dray. Thus it often happens that consignees are asked to pay cartage, in addition to their freight charges, and even when not definitely stated it is generally included in the bill for freight.

Another peculiar incidental charge is sometimes made on shipments which are sold from export without having been received into stock. It is known as "back charge," or, as it is sometimes called, "advance." When traced to its head, this "advance" charge is generally found to be for some such incident as wharfage.

But, as one of our readers asks, why should the retailer be compelled to pay this "cartage" and "advance" when he buys his goods on the understanding that they will be delivered "free on board" the train or boat, at the consignor's station? He himself in selling his goods cannot exact charges for packing and delivery, and he naturally thinks that, by the time he has paid the jobber a reasonable indemnity for "packing," and the railway company for "freight," he should be exempt from such further incidentals as "cartage" and "advance."

But this is a matter which will have to be settled by an understanding between the two interests involved, and the individual retailer would have a small chance. What better agency could be employed than a thoroughly energetic Retail Hardware Association, such as exists in the Northwest Provinces and in nearly all the States of the American Union? This is something which Hardware and Metal has long advocated, and the time is ripe for a move in that direction.

Advertise weather strip and storm doors now.

Chafing dishes will soon be in demand. Carry a nice line of hollow ware and it will pay.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 3.

FROM office boy to general manager of a firm's business is a big jump but it has been made by many and articles often appear drawing attention to the marvelous advances made by men who have served their employers faithfully and well. Only a few days ago Mr. Chas. M. Hayes, general manager of the Grand Trunk Railway, told of how he had risen from the position of messenger boy to the one he now holds, stating that the company does everything it can to encourage such advances.

While there have been many who have made the leap spoken of, there are few who have done it so quickly as the subject of this sketch, Mr. R. J. Cluff,



Mr. R. J. Cluff, Senior Member of the Firm of R. J. Cluff & Co., Toronto.

head of the recently established firm of R. J. Cluff & Company, Toronto. Mr. Cluff is the youngest supply man in the Central Supply Association, having been born in 1875, only thirty years ago. Seventeen years ago he took a position as office boy with the Dominion Radiator Company and through hard and conscientious work won his way upward until he occupied the position of assistant manager, which position he resigned in May last to become head of the company organized by himself. While with the Dominion Radiator Co. Mr. Cluff spent several years on the road acting as their traveler through Ontario, and making occasional trips to Manitoba and the Northwest Territories, he being very well known to the trade everywhere between Montreal and Edmonton.

Associated with him in the firm of R. J. Cluff & Company is Mr. W. J. Cluff, who was also formerly with the Dominion Radiator Company, acting as their traveling representative in Eastern Ontario. Other influential business men are also interested in the enterprise, the firm acting as Ontario selling agents for Warden King & Son, Montreal, manufacturers of the popular Daisy Hot Water Boilers. They also carry in stock iron pipe, cast and malleable fittings, brass goods and everything to complete hot water or steam heating systems. Although head of the firm Mr. Cluff still makes occasional trips on the road.

Since the establishment of the company last May the business has grown to such an extent that the present premises at 50-52 Lombard street, Toronto, are now too small to handle the volume of trade and plans are being prepared for a new building which is to be erected on a central site. The firm's business has been away beyond expectation and although the offices have been enlarged and the staff doubled the rush of business has prevented the getting in touch with all the trade and it is the intention to put a larger staff on the road next year.

Although not prominent in athletics of any kind Mr. Cluff is always present at any social feature in connection with the plumbing and heating trade, he recognizing the great value of encouraging the social element in the organizations of the trade. Although few of our readers will recognize a similarity between the likenesses of Mr. Cluff and Mr. Fred Somerville, general manager of the Ontario Lead & Wire Co., these two gentlemen are often taken for each other and some amusing situations result in consequence. At the recent Toronto Exhibition one of Mr. Somerville's many lady friends addressed Mr. Cluff as Mr. Somerville and explanations were in order. Likewise Mr. Cluff is often spoken to regarding lead pipe and other supplies, while Mr. Somerville gets inquiries for heating goods which are intended for Mr. Cluff.

PREPARE FOR TARIFF COMMISSION.

THE Tariff Commissioners have now completed their labors on the coast, and are on their way east to hear representations from that part of the country bearing on a tariff revision.

It is pretty well understood that an effort will be made by the officials of the proposed tin plate concern in Morrisburg to have a protective duty put on tin plates, Canada plates and black sheets.

If, then, it is the desire of the Canadian manufacturers using these raw materials to meet the Tariff Commission when they convene in Toronto or Montreal it behooves them to get together and arrange their delegations.

PERSONAL MENTION

Quebec.

E. Crowe, of South Maitland, visited Montreal recently.

L. E. Venne, hardware dealer, Hochelaga, is enlarging his store.

J. A. Paquin, general merchant, of St. Eustace, was in Montreal during the week.

G. C. Poulin, wholesale lumber dealer, of St. Johns, Que., visited Montreal this week.

Geo. Beauchemin, of Beauchemin & Co., machinists, Sorel, was in Montreal on business this week.

Mr. Beaulieu, manager of the Pontbriand Co., Limited, saw makers, Sorel, was in Montreal recently.

Mrs. Gates, of Waterloo, Que., called on the Montreal jobbers this week, placing orders for Fall goods.

J. E. Terriault, of the Joliette Foundry Co., Joliette, Que., was reported in Montreal a few days ago.

E. Brosseau, hardware merchant, of St. Sauveur des Montagnes, visited Montreal jobbers this week.

John Black, general merchant, of Scotstown, called on Montreal wholesale hardware firms during the week.

J. B. Limoges, general merchant, of Ste. Anne de Plaines, called on the hardware jobbers in Montreal a few days ago.

T. W. Boyd, of the firm of T. W. Boyd & Son, dealers in sporting goods, Montreal, is in New York on a business trip.

W. E. Ramsay, manager of the Pedlar People's Montreal branch, spent last week in New York on his annual vacation.

R. G. How, Canadian representative of the Wilkinson Sword Co., with headquarters in Montreal, spent last week in Halifax.

C. L. Devitt, who represents Lewis Bros., Limited, in the territory adjoining the Gatineau, spent the week end at headquarters.

Messrs. Tindall and E. G. E. Ffolkes, of the Wilkinson Plough Co., Toronto Junction and West Lorne, were in Montreal this week.

Jean Roud, proprietor of the saw and grist mill and electric lighting plant at St. Therese, visited the supply houses in Montreal this week.

Mr. Haskill, of the Haskill Lumber Company, Fasette, Que., called on the wholesale hardware trade in Montreal this week, ordering supplies.

E. Monbleau, steamfitter and machinist, St. Johns, Que., visited the Royal City this week on business with the supply houses of that place.

Howard Pillow, of Caverhill, Learmont & Co.'s Montreal staff, has returned from a trip through Great Britain, France and the continent.

Geo. Miller, representing the Brantford Screw Co., Limited, Brantford, was a visitor in the offices of Hardware and Metal while in Montreal on business last Monday.

E. F. Price, of the office staff of Frothingham & Workman, Limited, Montreal, is confined to his home with an illness which threatens to develop into typhoid fever.

L. N. and J. E. Noisseux have just completed a very handsome store at 2157 Notre Dame street, Montreal, where they will establish another branch of their hardware business.

G. A. Decatur, of Decatur, Bull & Co., hardware importers and manufacturers' agents, Montreal, is at present enjoying a trip to Europe, and it is expected that he will not return until December.

Frothingham & Workman, Limited, Montreal, are hard at work on their new catalogue, which will be issued about the first of the year. It will be a very comprehensive volume bound in the loose-leaf system.

Ontario.

Adam Taylor, Guelph, has been spending the past week in Toronto.

G. Allan, hardware merchant, Burlington, was a visitor in Toronto this week.

The Toronto Hardware Co. suffered a small loss by fire at their works on Dufferin street a few days ago.

Major J. A. Currie, president and manager of the Imperial Steel & Wire Co., of Collingwood, visited Pittsburg last week.

The Batty Hardware Co., Norwich, have been making considerable improvements and doing some very fine window dressing recently.

Joseph Akitt, hardware merchant, Creemore, has moved into a new store building constructed of cement blocks. The store front has a most imposing appearance.

D. & H. Becker, New Hamburg, have been showing some exceptionally fine display windows recently, and Hardware and Metal hopes to be able to present illustrations of some of them at an early date.

Mr. J. T. Peacock, who has for several years been connected with the office work of the James Morrison Brass Mfg. Co., Toronto, has joined the Toronto staff of the Canadian Fairbanks Co., Limited, Toronto.

Mr. Robert Hobson, general manager of the Hamilton Steel & Iron Co., was a visitor in Toronto this week in connection with the meeting between the British Columbia jobbers and the Canadian Manufacturers' Association.

Mr. F. W. Reynolds, Bethany, has taken over the hardware stock of the general store of his father, Charles Reynolds, and has moved into a new store which has been fitted up with a splendid arrangement of modern fixtures.

Mr. Converse, who has been connected with the Consumers Cordage Company in Montreal as secretary-treasurer, has been in Toronto this week making preparations for the taking up of the same line of business on his own account shortly.

A. L. Schultz, of Pittsburg, the engineer in charge of the construction of the big bridge plant being established in Buffalo in connection with the Lackawanna Steel Co., spent several days last week in Canada examining the field as a prospective market for the product.

Senator Fulford, of Brockville, whose sad death resulted from an automobile accident in Boston recently, was buried in Brockville this week. The deceased senator was a director in the Jas. Smart Mfg. Co., Brockville, and the Frost & Wood Implement Works, Smith's Falls.

Miss Banfield, who has been a trusted employee of H. S. Howland, Sons & Co. for several years, is leaving her position on account of poor health. Last Saturday her fellow employes gathered around her and presented her with a beautiful silver toilet set, handbag and pair of opera glasses as a token of their friendship.

Mr. Fred. A. Riley, representing the Regal Glove & Mitt Co., London, was a caller on Hardware and Metal's Toronto office last Saturday. Mr. Riley states that since his firm began the manufacture of gloves, mitts, aprons and other canvass specialties a few months abo, a large trade has been built up, and the hardware merchants are doing a good business with mechanics, farmers, etc., who use these goods in their work.

Cameron & Cameron, hardware merchants, Beaverton, have been refitting their store with modern fixtures and showcases, and have also made considerable extension in installing a new front and doing considerable painting. This firm is very enterprising and are doing a large coal business at present, amounting to over two cars per week. They find this to be an exceptionally good side line when run in connection with their cement warehouse.

Western Canada.

A. H. Meakin has purchased the hardware business of D. Taylor & Co., Nananimo, B. C.

John Drew, manager of the J. H. Ashdown Co.'s business at Nelson, B.C., is shortly to be removed to Calgary. Mr. Hamilton Byers succeeds Mr. Drew in the management of the Nelson branch. While in Nelson Mr. Drew took a prominent part in the work of the board of trade and wholesalers' association.

Maritime Provinces.

The Dominion Tar & Chemical Co., with works at Sydney, N.S., have opened a branch office in the Board of Trade Building, Montreal. They have had an agency for this district since the early part of the year, but in view of increasing business, and with a desire to be in closer touch with their Montreal clients, they have decided upon the branch office, which will be under the management of Mr. F. N. Seddall, who has hitherto acted as their agent here.

A Halifax despatch says that the report that Mr. Graham Fraser is to return to the Nova Scotia Steel Co. is persistent. Mr. Fraser has been in Halifax recently, and had a conference with Mr. R. E. Harris, president of the Nova Scotia company. The report comes from Sydney that a steel expert from Illinois named Macdonald has been engaged as Mr. Fraser's successor with the Dominion Company. The name of Mr. A. J. Moxham, formerly general manager of the Sydney Mines, is also being mentioned as a possible successor to Mr. Fraser.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 74.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Gilmore's Shovels are now quoted at $10 list.
Pig Lead shows another advance, current price being from $3.85 to $3.95.
Pig Iron has experienced a rise in several grades.
Carron, No. 1 is quoted at $21.
" **Special** is quoted at $20.
Ayresome, No. 1 is quoted at $20.
" **No. 3** is quoted at $19.40.
Clarence No. 1 is quoted at $19.
" **No. 3** is quoted at $18.50.
Antimony has declined slightly, and is now sold at 14¼c. to 14½c. for Cookson's.
Ingot Zinc has again advanced, current prices being 7c. to 7½c.
Linseed Oil prices are being shaded for large orders.
Turpentine is now selling at 98c. single barrels, and 97c. for two barrels and over.

TORONTO.

Iron Pipe and Fittings have been subject to an open market for several days.
White Lead has advanced from $5.40 to $5.55 reverting back to its former figures.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 20, 1905

LOCAL jobbers have been a little busier this week as orders for Fall trade are increasing right along. Even at that, however, Fall goods are not moving as they should owing to the long continued spell of fine weather which Eastern Canada has been experiencing. Such articles as stove pipes and stoves are not selling in their accustomed volume for this time of year, but indications are that a cold snap or the breaking up of the present weather will result in an abnormally large volume of business in these lines.

Among the goods which are moving with particular rapidity just now may be mentioned skates, horse blankets, sleigh bells, and hockey sticks. Cutlery is also going out well and will continue to do so until Christmas. In this connection it is remarked that the better grades are in much more active demand than usual especially in the west.

Changes which have taken place in the price list during the past week are of no moment except in shovels, Gilmore shovels being now listed at $10. Horse shoes and horse nails are wonderfully active, good orders being received from all parts of the country. The staple hardware articles are being asked for in the same remarkable manner which has characterized this trade for several months past.

Axes—The normal activity is manifest, all the local houses reporting a splendid trade for their various patterns. We are quoting prices as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—The demand is first class, showing no abatement. We quote: Axe handles No. 3, $1.25 [illegible] No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—With the advance of the season sewing machines are coming rapidly to the fore in the hardware markets. We give prices as follows: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—A good volume of business is reported, mostly, however, in repeat orders. We quote: Cold blast, $4.50: No. 0, Safety, $5.00.

Rivets and Burrs—This line maintains the wonderful activity that it has shown throughout the year. Our prices are: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Good sales are reported by all the dealers at unchanged prices. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Trade is featureless, but continues good. We quote: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Horse Nails—This is naturally one of the most desirable lines at this season. All dealers are making big sales. Our quotations are as follows: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—Prices have not yet advanced, though there is a feeling among the trade that this cannot be long delayed. We are still quoting: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—The demand is only fair with the price remaining at $2.20 per keg, f.o.b. Montreal.

Horse Shoes—These goods share the activity of horse nails. The market is decidedly strong. We quote: P. B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern. No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—The large volume of business which has been done throughout the Fall is still being maintained to a considerable extent. Ammunition is the strong feature. We quote: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.: American centre-fire cartridges, list net: sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—No contracts of unusual interest have been booked during the past week, but business is satisfactory. All parts of the country are scenes of much building activity with the result that orders for building paper are keeping well up to the mark. Prices remain unchanged and are still as quoted in our current market quotations.

Cordage—The steadiness of prices in these lines for the past year has created a record, as there is generally considerable fluctuation. Prices are unchanged this week.

Cement and Firebrick — The same conditions hold good this week as were noticed in our last issue. Jobbing orders continue to be the order of the day and there are no very large contracts in sight. We quote the followingem in sight. We quote as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags: $2.05 in barrels in round lots.

Coil Chain— We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—There has been no awakening as yet in this trade which is considered slow for the season. Our quotations are as follows: Little Star, $4.85; Hudson, $5.00; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Sales are rapidly increasing and prospects are bright for a record season. Prices remain from 25c. to $2.50, according to quality.

Sleigh Bells—Movement in this line is getting stronger daily. We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft

gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—Inquiries are coming in very nicely. The largest local interest reports that this season there will be a great improvement even upon last. Prices range from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Oct. 20, 1905.

RIFLES are beginning to boom owing to the demand for deer shooting. The call for ammunition and shells is also very active. Cutlery is also being ordered in fair quantity and a demand is expected to continue brisk for some weeks yet. Skates and sleigh bells are being shipped in large quantities, orders having been booked for these goods some months ago. Orders for next summer's trade in lawn mowers are being taken by the travelers, but prices are unsteady as manufacturers have been unable to agree upon new lists as yet. Business on the whole is reported to be very good, but very few out of town buyers have been in the city during the week. Trade is taking a turn for the good and a boom is looked for in a week or two.

Sporting Goods—Rifles are increasing in demand, owing to the call for deer shooting.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chains and other Fall lines are selling well. 1-4 inch, $6.50; 5-6 inch, $4.45 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Ladders are being called for actively and more than the average Fall trade is being done. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Barb and Coiled Spring Wire—Trade is falling off, the bulk of the season's business having been done. No change in quotations.

Wire Nails—Demand continues very keen, but quotations remain the same. While cost of materials is advancing there is no talk of a rise as yet.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Axes—Blades and handles are being bought largely and a most satisfactory winter trade is looked for.

Horseshoes—Prices continue unchanged with the outlook for business excellent. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—Blacksmiths are ordering in large quantities and dealers have no complaints to make.

Cutlery—Case goods and carvers have been the favorite lines. Some dealers are still sending in sorting orders.

Skates and Sleigh Bells— Merchants are ordering well, particularly for sleigh bells.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—The possibility of higher prices is giving an impetus to trade. Prices remain as before.

Bolts and Nuts— An increase is looked for by some on account of the advancing prices for iron. Mills have plenty of business.

Cordage—Sorting orders are being received. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton. 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—A scarcity exists owing to the heavy demands of the past season, and prices are very firm in consequence. We quote: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick— Demand is increasing. Quotations are firm, but prices unchanged. We quote as follows: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Business is active, the heavy building being done calling for a large quantity of goods. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool—The conditions remain unchanged, demand is active, arrivals about equal, with prices too high to effect profitable business.

Hides, inspected, No. 1 per lb.	0 12	
" " " 2 "	0 11	
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelts, best city slaughter	1 00	
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Order your sleds and display them on the sidewalk the first day there is a snowstorm.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, October 20, 1905.

REPORTS from the west state that iron pipe and fittings are being slaughtered there, but local dealers cannot understand such a situation at the present time. Iron and steel are higher in price and firmer now than they have been for months, and certainly the situation is not such as would justify an open market and cut prices. In the east there is a decided scarcity in iron pipe and a general advance in all heavy goods is contemplated. The big firms have withdrawn prices on boiler plates and no concessions are now obtainable on contracts already booked.

Copper remains unchanged with no immediate prospect of a deterioration in value. Tin is also firming up again, though prices have not been advanced by the jobbers. Antimony again shows a slight easing off during the week, but as stocks in this country are small there is little difference in current quotations.

Galvanized sheets have been advanced four times recently to importers with the result that the jobbers have been forced to withdraw their prices. They are now busy making out new lists which will be sent out probably to-morrow. All the thicker guages are being advanced. Canada plates both in galvanized and polished are subject to these conditions also, and black sheets too, which have been raised 10c. to importers, will be advanced before the end of this week.

Pig lead is firmly held at 5c. advance on last week's quotations. Its strength at this price will be realized from the statement that the advance on imports has been much greater in proportion. Far from having reached the top price it is believed that lead is destined to break more records before attaining the end of its upward career. It is hard to understand this condition, especially since the close of the war as everyone expected a slump when that event occurred. It has been shown, however, that, while there was a falling off in demand from the belligerent nations, other circumstances cropped up to make up for this deficiency. Further more it is thought that both Russia and Japan are now replenishing stocks which would mean but little falling off in the demands from those quarters. The increase in trade of the east, too, must be the cause of considerable more lead being consumed, especially for tea lead, as both Japan and China are now shipping many times the quantity of tea that they did during the war.

Another revival has occurred in the Scotch pig iron market this week and it has been shown that the American buying movement is by no means over. The reported purchase of 50,000 tons of Scotch or North of England pig iron by an American firm is one incident which will tend to prove this assertion. Some of the Old Country furnaces are booked up for months ahead, and it is

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
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C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc.

impossible at the present time to place contracts for their products.

Canada Plates—This is among the products booked for an immediate advance. In the meantime we quote: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—Conditions remain the same as at our last report, and prices still are as follows: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—This metal is again firming up and while the advances have not been such as to warrant an increase in the jobbers' prices, it is more than probable that higher figures will be reached before long. We are quoting: 36c. to 36 1-2c. per pound.

Pig Lead—Although this metal had reached a remarkably high price last week its upward tendency has been continued until another advance has been declared. Our revised prices are: $3.85 to $3.95 per hundred pounds.

Boiler Tubes — We quote prices as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c., 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, per foot net.

Pig Iron—Another remarkable buying movement has been manifest in the old country this week with the result that some of the Scotch furnaces have sold out their entire output for months ahead. We are quoting this week many advanced prices, as follows:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.75 to $19.25	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	21.00	"	"
" (special)	20.00	"	"
Ayresome No. 1	20.00	"	"
" No. 3	19.40	"	"
Summerlee	18 75 to 19.25	"	"
Clarence No. 1	19 00	"	"
" No. 3	18.50	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—The advances quoted last week have held firm and current prices are as follows: Sleigh shoes, $1.97 1-2, tire, $2.12 1-2; spring, $2.75; toecalk, $2.67 1-2; machinery iron finish, $2.07 1-2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The series of rises which have been encountered by the importers has at length compelled the jobbers to amend their lists. Although the new prices have not yet been made public it is certain that higher figures will be demanded next week, especially in

"DOMINION"
The hall mark of quality on
Bar and Hoop Iron
Polished Steel Sheets
Polished Canada Plates
Charcoal Tin Plates
A. C. LESLIE & CO.
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ASK YOUR CUSTOMERS
if they don't need new pumps. If they do, sell them our
Standard Anti-Freezing Pumps
They'll appreciate getting a pump that doesn't have to be thawn out every zero morning



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Say that
B. K. MORTON & CO'S
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stands more heat and works more easily than any other steel they have tried.
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NEW GLASGOW, N.S.
Manufacturers of
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And SIEMENS-MARTIN
OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

MISCELLANEOUS.

A MANCHESTER firm, manufacturers of Bevelled and Silver Plate Glass, desire to place their goods in Canada, and would welcome correspondence from furniture manufacturers and others using plate glass mirrors. Box 279, HARDWARE AND METAL, Toronto. [12]

A LANCASHIRE firm of Lead Manufacturers would welcome inquiries and specifications for lead pi ing for water and gas purp ses from Canadian firms using same. Box 280, HARDWARE AND METAL, Toronto. [42]

A MANCHESTER manufacturer of Rope and Twine (with patent twine holder) wishes to correspond with Canadian wholesale dealers of same. Box 281, HARDWARE AND METAL, Toronto. [42]

A MANCHESTER firm desires prices and description of Spokes, Hubs and Splashboards from Canadian manufacturers of same. Box 282, HARDWARE AND METAL, Toronto. [42]

FOR SALE.

A ONE THIRD interest in the hardware and implement business of George Stephens & Co., Chatham, Ont. For particulars, apply to D. H. Douglas, Chatham, Ont. [43]

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Port Burwell Breakwater," will be received at this office until Friday, November 3, 1905, inclusively, for the construction of Breakwater at Port Burwell, in the County of Elgin, Ontario, according to a plan and specification to be seen at the office of the Resident Engineer, Confederation Life Building, Toronto, at the office of the Resident Engineer, London, Ont., on application to the Postmaster at Port Burwell, Ont., and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for seven thousand dollars ($7,000.00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, October 3, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (42)

EXPERIENCED ADVERTISEMENT WRITERS

who are open for a situation are requested to register their names with the MacLean Publishing Co., at any of their offices. Inquiries are occasionally made by manufacturers and wholesale houses who contemplate establishing their own advertising department.

the heavier gauges. We quote: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15 to $4.40; "Windmill Best," 28 gauge, $3.95; Sword and Torch 28 gauge $4.05; in less than case lots 25c. extra.

Black Sheets—This line is also certain to be advanced when the new lists are made public. During the present week importers have had to face a further advance of 10c. We are quoting: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—A slight weakening in the market has caused a falling off of half a cent but as Canadian stocks are very light no decided dominant movement is expected for some time. We are quoting: 14 1-4c. to 14 1-2c. for Cookson's.

Tin Plates—These have just been advanced on the other side and it will not be long before jobbers will be compelled to follow suit. Our prices are still, however, Cokes, $3.75; charcoal, $4.00.

Ingot Zinc—Hardware and Metal predicted last week that higher prices would be commanded by spelters very shortly and this has come true during the week. Our new prices are: 7c. to 7 1-2c.

Bar Iron—No change has taken place during the past week, ruling prices still being: $1.87 1-2 base, f.o.b., Montreal.

Scrap Metal—Conditions in iron are the same as last reported. It is said that there is no large collection of wrought scrap in the hands of local dealers and as cast iron has been looking closer, stocks seem light in that too. Copper remains at the same price.

The Boston papers are quoting very little higher than local dealers for scrap rubber, but indications are that as soon as the manufacturers come into the market we will see much higher prices. At the present time there are little or no stocks on hand. All prices this week are the same as last, and are as follows: Copper wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 1-2c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 6 1-2c. to 6 3-4c.

FOR SALE.

ONE No 3 Warrington Steel Pile Driver, length, 8 feet; diameter of cylinder, 8 inches; normal stroke, 30 inches; weight of striking parts, 1 800 lbs; total weight, 3 800 lbs; distance between jaws, 18 inches; width of jaws, 6¼ inches; fitted with patent end base; interchangeable; complete with all fittings and steam hose. This hammer has been used but two weeks by a private concern (to hustle work delayed by contractor) which has no further use for it. It is practically as good as new. Box 285 HARDWARE AND METAL Toronto. [42]

VALUABLE Canadian patent for a very useful pocket tool; cost one cent to manufacture; retails for 10c.; half a million sold in the States. For particulars or interview address Perry, Box 397 Norwich, Conn. [45]

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 20, 1905.

EVERYTHING is reported steady in the metal lines, the general situation being considered very good. All metals are very firm in price except antimony, which is, however, about holding its own. Pig lead is particularly strong. New lists on Canada plates and galvanized sheets are expected next week, an advance having been made in the United States.

Pig Iron—Prices are strong and the volume of business being done is large. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 00
Londonderry, at furnace	16 50 to 17 00

Bar Iron—The market is active and prices firm. We quote as follows: $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—Market is active and demand very keen. Quotations have fluctuated, but are now steadier.

Tin Plates—Demand is active with considerable strength shown in prices.

Galvanized Sheets—Trade is very active and higher quotations are looked for.

Brass—Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Stocks continue light and buying heavy at unchanged quotations. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Demand is more active, and prices firm. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Business being done is quite large, no falling off in the demand being reported. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Prices are firm, but not much business is being done.

Old Material—Copper is very strong, but lead is not so much in demand. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9c. $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $7.50 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 1-4c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Possibility of a strike in both the anthracite and soft coal fields is making business active. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch,

$1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, October 19, 1905.

THE leading interests in the steel industry are more and more emphatically taking a position adverse to any violent upward price movement. They are endeavoring not alone to keep values of raw material within bounds, but are holding down prices on finished iron and steel. This is shown by the character of the buying of pig iron on the one hand, and by the success in keeping the official price of plates at the old figure.

The markets for pig iron have stiffened. This week it is the east and the central west which have marked up quotations. Some of the large southern interests have practically withdrawn from the market entirely, but there is still some, though little, iron available on the basis of $12.50 for No. 2 at Birmingham.

In the central west the news of greatest interest is that the steel corporation has purchased 20,000 tons of iron for October delivery at $15,50, at furnace, and 20,000 tons for November delivery at $16, thus establishing an advance. The quantities purchased, however, are smaller than expected.

There has been further good buying in the eastern markets and prices have been advanced to $16.50 to $16.75, at furnace, for No. 2 foundry, and $17.50 to $17.75, delivered, for basic pig. A leading Buffalo interest has to-day put up prices 50c. per ton.

The reaffirming of the official price of $23 for steel billets by the makers interest nobody, since the "official price" has long since been inoperative. What transactions have taken place during the last few months have been at considerably higher figures. In the eastern markets very considerable quantities of open hearth steel have been selling lately at $28.

A number of moderate sized lots of steel rails have been contracted for during the last week. It is understood that thus far the New York Central Co. has allotted about 125,000 tons of its requirements and that the Baltimore & Ohio Co. is in the market for 71,000 tons.

The pressure upon the car builders and locomotive shops is enormous. It is figured out that there are contracts in sight for 80,000 steel cars, which include the 20,000 cars just being figured on for the Pennsylvania system. The locomotive builders are crowded and are covering liberally for their materials. One large interest has contracted for a total of 75,000 tons of bars, plates, etc.

Reports from the lighter lines are very encouraging. Even in the tin plate trade orders and specifications are on a more satisfactory scale.

Why not convince your friends who intend to build of the advantages of "Empire" Metallic Shingles over wood shingles?

Many have been so convinced by other dealers, and a good trade created by just keeping alert to local building operations and getting out after the trade. It requires but slight effort to prove to anybody that wood shingles are things of the past and once the point is made clear the profit and trade are yours instead of your business rivals'.

"Empire" Metallic Shingles are fireproof, stormproof and never rust. Their capacity for wear is wonderful and dealers who will but take the trouble to push their sale are assured of goodly profits.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto ***Winnipeg***

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts.
"Metallic" Siding (stone, brick, etc.)
"Metallic" Crestings and Finials
"Impervia" Fireproof Windows
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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LONDON METAL MARKETS.

From Metal Market Report, October 18, 1905.

Pig Iron—Cleveland warrants are quoted at 54s. and Glasgow standard warrants at 52s. 4d, making prices as compared with last week 1s. 3d higher for Cleveland warrants and 1s. 4d higher for standard warrants.

Tin—Spot tin opened firm at £149 2s. 6d, futures at £148 10s., and after sales of 200 tons of spot and 180 tons of futures closed easy at £148 17s. 6d for spot and £148 5s. for futures, making price as compared with last week £1 15s. higher on spot and £2 higher on futures.

Copper—Spot copper opened firm at £72 12s. 6d, futures £71 2s. 6d, and after sales of 400 tons of spot and 600 tons of futures closed easy at £72 10s. for spot and £71 for futures, making price as compared with last week £1 higher on spot and 15s. higher on futures.

Lead—The market closed at £14 18s. 9d, making price as compared with last week 6s. 3d higher.

Spelter—The market closed at £28 12s. 6d, making price as compared with last week 12s. 6d higher.

REVISED FREIGHT RATES.

MONTREAL and Toronto merchants are bound to gain a big advantage over Vancouver merchants by the big reduction made in the through C.P.R. freight rates from Montreal and Toronto to Edmonton. The reduction is an unusually large one, amounting in some cases to as much as forty cents per hundred pounds. This is on first class freight matter, and the reduction is slightly smaller on the lower classes.

The officials of the C.P.R. when seen stated that no reduction had been made or was contemplated in the rates from Vancouver.

It looks as though it were a fight between communities. Montreal merchants have claimed that they have been discriminated against for a number of years and are therefore entitled to the reduction made.

R. Kelly, a prominent wholesale merchant and heavy shipper in Vancouver, when shown the despatch said, "It means putting us out of business." Other dealers re-echoed this statement, and the whole business section of Vancouver has been thrown into a ferment. Students of the transportation question state that this latest modification of freight rates in favor of Montreal signifies the opposition of the C.P.R. to the China Mutual Line and other steamers bringing European goods into Vancouver for distribution through Canada and the desire of the railway company to force transportation of all these goods through Montreal. Vancouver shippers complain that the C.P.R. has always treated Vancouver as if the line had only one terminal, and that one was Montreal. They suggest that the proper course for the railway to pursue would be to treat both as terminals and give an equal and fair distributing rate along its lines from both points.

SEASONABLE GOSSIP.

Put some of this year's profits into a section or two of modern shelving. It will pay dividends.

Sheffield cutlery manufacturers are introducing ingenious mechanical processes in order to reduce costs sufficiently to meet German competition.

One of the first things a man entering business should learn is the art of successful advertising. If he does that, and has fairly good business sense, there is not so much of a problem as to his future. Nearly every successful business man is a smart advertiser, and nearly every failure was not. That's the difference.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Oct. 20, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

BUSINESS is very active in all lines of general hardware, particularly in heavy goods. There are no price changes to record this week, but a general revision of prices in several lines of hardware is expected to be made in a few days. Nails are steady at the decline noted last week. Collections are already improving as a result of the large amount of money being put in circulation as the crop is being marketed. The continuance of fine weather with a late closing of lake navigation would be a great boon to the trade.

Lanterns—Wholesale prices are steady and are quoted as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—As noted last week, barb wire has been advanced 15c. per cwt. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized, 6 to 8	3 39
" 9 2 50	2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire, 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—As noted last week, prices have declined to $2.60 per keg in Winnipeg. The price has been steady since the decline.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" tarred	80c

Ammunition, Etc.—Sorting orders are still coming in. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—Price is now 21c. per lb.

Iron and Steel— Prices are quoted as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb.	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 16 to 16 gauge, 100 lb.	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—There are rumors of an advance in some makes of galvanized sheets. Prices are firmly maintained at following prices:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 65 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 10 x 21, 10 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum and Gasoline—Prices are still quoted as follows:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Rennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74 76	27c.
Gasoline, 72-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints and Oils—Business continues brisk at unchanged prices. We quote:

Established 30 Years. Quality Tells.

We have seven factories producing daily 120,000 Files and Rasps, which are distributed throughout the four quarters of the Globe, and the excellent reputation which our Files maintain is the result of many years experience, and the expenditure of a large amount of money in designing the most elaborate machinery and tools for producing our INCREMENT CUT FILES, in all sizes and shapes, for all purposes.

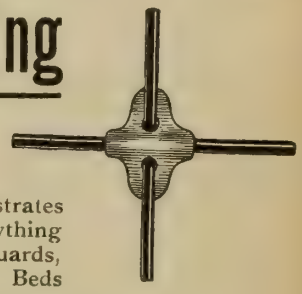
We manufacture several Brands at our Dominion Works, all of which are warranted for their excellent cutting quality.

Sold by all prominent hardware and mill supply merchants.

NICHOLSON FILE COMPANY

Dominion Works, PORT HOPE, ONT.

Railway and Farm Fencing



We are prepared to place Munro's Lock Wire Fence in the hands of Hardware Merchants.

No patent tools required to fasten lock. Cut illustrates another style of galvanized lock that is superior to anything on the market. Write us for prices on Window Guards, Counter Railing, Steel Ladders, all kinds of Spring Beds and Mattresses. Largest works in Canada West.

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED

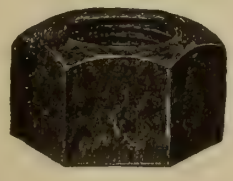
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

White lead (pure)	$6 00	6 25
Bladder putty, in bbls		0 02½
" " in kegs		0 02¾
Turpentine, pure in barrels		0 96
Less than barrel lots		1 01
Linseed oil, raw		0 60
Boiled		0 63

Window Glass—We quote as last week.

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25

61 to 70	"	5.75
21-oz.C.S., double, in 100-ft. cases—		
26 to 40 united inches		7.35
41 to 50	"	8.40
51 to 60	"	9.45
61 to 70	"	10.50
71 to 80	"	11.55
81 to 85	"	12.60
86 to 90	"	14.75
16 to 95	"	17.30
6 to 100	"	

British Columbia Trade News

Vancouver, B.C., Oct. 12, 1905.

MANAGER STOCKETT, of the Western Fuel Co., operating the Nanaimo coal mines, made a formal application to the Tariff Commission at its Victoria session to have a duty of 2½ cents per gallon on fuel oil. He explained that already one good customer had abandoned coal for fuel oil, thereby losing for them a customer whose use of coal had been 1,500 to 2,000 tons per month. He was afraid others would follow. The only large consumer of fuel oil in British Columbia is the sugar refinery here, so it is presumed that this concern was referred to by Mr. Stockett. He estimated a ton of coal to equal 42 gallons of fuel oil, so that the annual consumption of oil by his lost customer would not be far from a million gallons, and the proposed 2½ cents per gallon would be a heavy tax.

* * *

Since the successful culmination of the efforts of the Deputy Minister of Labor, W. L. Mackenzie King, the work of reopening the Nanaimo coal mines has gone on successfully and more men are being put to work each day. It will naturally be some time before the whole number employed will equal that before the strike. The water has accumulated in the four months the pumps have been drawn, so that the unwatering alone will take a good deal of time, the pumps having to take care of the daily accumulation and reduce those of four months. It is thought that several hundreds of yards of the workings will have to be pumped out before they can be worked.

* * *

Varying estimates of the gold output of the northern camps are coming to hand as the season closes up. It is given out that the Yukon will yield from $3,500,000 to $4,000,000. The output of Atlin camp is set by competent authorities at a round million dollars which is considered a very good return. The Tanana district, which is not in the Canadian Yukon but across the line in Alaska, is estimated at $6,000,000 or $7,000,000, but this is thought to be rather high.

The most important question before the people of the Canadian Yukon is water, and the investigations of Engineer Thibaudeau on behalf of the Dominion Government are looked to bring some favorable results. The people are practically a unit in desiring that the Dominion Government undertake and carry out a comprehensive scheme which shall provide and insure a permanent supply of water for all parts of the district.

Briefly outlined, it is that the waters of the Klondike River shall be brought to the "Dome," an elevation whence all the principal gold-bearing creeks emanate, and below which all the hillside and bench claims are also located. It will take many miles of ditching and piping to do this and to distribute the water to the many claims and concessions along the hillsides and creeks, and it is argued that only the Government is in position to undertake this, and that only the Government should have control of such an important semi-public undertaking, to insure its continuance in the service of the public.

* * *

Smelter matters continue to interest mining men in various parts of the Province. Those established and running are busy, and others are in contemplation. The Dominion Copper Co., which intends to build a smelter in the Boundary district, has not yet decided on a location, though they are likely to choose a site near Grand Forks. They also wish to purchase mineral claims in the same vicinity.

The old Pilot Bay smelter on Kootenay Lake is to be re-opened, the Bank of Montreal having sold it to C. Fernau of the Canadian Metals Co., the same company which has a new zinc smelter nearly completed at Frank, Alberta. The Pilot Bay smelter will handle ores from that part of Kootenay Lake district adjacent, and as there are many mining claims in the Ainsworth division including some now owned by Mr. Fernau, there promises to be some activity in mining in that locality.

The coast smelters, both situated on Vancouver Island, are busy, and the Britannia smelter at Crofton may be enlarged, for if there is to be any accession of custom smelting with the increase of the Britannia output above 150 tons per day the present plant could not handle it all. Numerous coast mining properties, among them the Mount Sicker camp on Vancouver Island, the King Solomon, also on Vancouver Island, and the Van Anda mines on Texada are to be vigorously worked. For the former a concentrator is proposed, and with it the development of a water power for its operation.

* * *

Some conflict over the authority of the Department of Lands and Works in instructing seizures by its timber inspectors, of booms of logs at up-coast points has been roused by recent seizures. Already a test case is on, and the loggers say they can beat the Government on the question. The seizures were made on the strength of information the Government claimed to have, that the logs were intended for export though the timber clauses of the Land Act specially forbade such exportation.

A strong advance in price of logs is predicted by men interested in the trade. The recent increase on Puget Sound is pointed to as one straw and another is in the fact that $7.50 per thousand is now being paid for fir, and at that price logs are in demand, while a year ago they were a drug on the market at $6 to $6.50. Clear cedar logs of prime quality are selling at $10.50 per thousand.

An attempt to establish direct dealing between the mills and the lumber consumers of the Northwest was made this week by Mr. Wm. Hobson, of Grenfell, who arrived on the coast to buy lumber for his own use. Mr. Hobson thinks that the middlemen are a greater cause of high prices than even the railway rates. He says he wonders that the mills do not establish their own yards and wipe out the middlemen. As to the duty of $2 per thousand the millmen are asking for, he says the farmers are not bothering themselves so much about it as about the big profits of the middlemen. Rough lumber costs say $10 per thousand in British Columbia and the freight is say $5 per thousand. The ordinary price is not less than $22 in the Northwest, giving $7 per thousand profit to the middleman.

* * *

There are two familiar sections in the Canadian Manufacturers' Association, the east and the west, when it comes to considering the re-establishment of old "Rule No. 2," C.P.R. freight regulations. Following the appeal of the Canadian Manufacturers' Association, made on behalf of the eastern wholesale shippers, for a ruling that this regulation should be placed in the regulations, and the counter appeal of the wholesale trade here, the British Columbia Wholesale Hardware and Grocers' Associations have sent delegates east to interview the eastern portion of the Manufacturers' Association with a view to impressing the justice of their case upon them. "Rule No. 2" when it existed permitted eastern wholesalers to mix any freight at hand and ship it west in carload lots, which the western jobbers considered an unfair advantage and they united in an effort which was successful in having the rule removed. The eastern men have now invoked the Railway Commission, and the joint delegation now seeks to induce the Manufacturers' Association to withdraw this request, though British Columbia jobbers put up a strong fight against the restoration of the rule when the matter was brought up before the commission at the time it sat here. The delegates appointed to go east were Messrs. J. E. Elliott of McLennan, McFeely & Co., Limited, Vancouver; C. P. W. Schwengers, of E. G. Prior & Co., Limited, Victoria; John Burns, manufacturers' agent, Vancouver; W. G. Mackenzie, of Wood, Vallance & Leggett, Limited, Vancouver; J. A. Rickaby, of R. P. Rithet & Co., Victoria.

Nova Scotia Trade News

Halifax, N.S., Oct. 18, 1905.

THE hardware business continues very encouraging. Orders are coming in just as freely as noted in last report. Trade in Cape Breton is quite brisk, and the orders from that section are very substantial. Collections on the average are considered very good. Prices show little change. Metals, as before stated in this correspondence, are very firm. The dealers here who hold good stocks decline to quote prices with the existing conditions of the metal markets.

The mining trade at the present is brighter looking than it has been for some time, and the prospects are that there will be a general revival of the mining industry all over the Province. Hundreds of mechanics and miners are flocking into the settlement of Torbrook, in Annapolis county, where good deposits of iron ore have been located. It is proposed to develop the areas on a large scale, and hundreds of miners' cottages will be erected at once.

Reports from points throughout the Province show that the lakes and rivers

are exceedingly low, and with the scarcity of water lumbering operations are very greatly hampered. There has not been one hour's steady rain since the birth of the month of October, and the existing conditions are causing a little alarm in some parts. The lumber operators, however, are still placing good orders, and they will be prepared for business when rain comes to move the logs.

In competition with the firms in this city handling imported cement, the city works department has accepted the tender of the Sydney Cement Co. for a year's supply. Halifax some years uses 10,000 barrels of cement, and this year the quantity consumed will be heavy, as there is a lot of sewer construction going on. The acceptance of the tender will have to be ratified by the city council before it becomes effective.

Owing to the increase in business the firm of Walsh Bros., painters, glaziers and decorators, have become a joint stock company. The company has been incorporated, and the capital stock is $100,000. The company will carry on the business under the name of Walsh Bros., Limited. At a meeting of the company the following officers were elected: President, Capt. D. A. Scott; vice-president, F. D. McDonald; secretary, J. A. Walsh. T. J. Walsh has been appointed manager of the company, and he will devote all his time to the business.

The resident engineer of the Beaver Hat Gold Mining Co. has made a quarterly return to the Nova Scotia Mines Office, which shows 375 tons 15 cwt. quartz crushed, yielding over 280 oz. of gold. This is said to be a record for a five-stamp mill.

The Sydney Rail Co. has just completed its 25,000 ton order of rails for the Grand Trunk Railway, and on Monday it started to roll a similar order of rails for the Intercolonial. During the past ten days forty-one cars, containing the products of the steel company, were sent out over the I.C.R. for Western Canada.

A FENCING PROPOSITION.

The Munro Wire Works, Limited, of Winnipeg, are making the hardware trade of the west an offer whereby they may make money from the sale of fence wire, a staple which is usually sold at very near cost. Probably there are very few hardware stores selling barb wire or galvanized wire at a decent profit.

The above mentioned Winnipeg firm are now making the trade a money making offer. Their "Hercules" fence can be erected without the use of expensive tools. It consists of galvanized wire and a patent lock. By selling this patent lock with the wire, a substantial profit can be made and at the same time a serviceable fence can be sold at a very low cost. Particulars of this offer can be obtained by writing the Munro Wire Works, Limited, Winnipeg. There is money in the scheme.

Chopping bowls and knives, vegetable slicers and meat choppers are all in demand, while sausage grinders will soon be seasonable. How is your stock?

"MADE IN BERLIN" EXHIBITION

BUSINESS men have learned to expect exhibitions of various natures and purposes, either of general character such as the Toronto Industrial Exhibition, or of special purpose like the Pure Food Shows held annually in Montreal, Toronto, and other centres.

It has remained to Berlin, Ont., to institute (at least so far as Canada is concerned) an exhibition along lines most characteristic of the times, when protective sentiment is developing into a spirit of Provincial and even local loyalty.

This week in the large hockey rink of the town a "Made in Berlin" exhibition is being held. Not only is this exhibition designed to interest local buyers in the goods displayed, but each day brings many people from neighboring towns, attracted by single fares on the railway and a musical performance in the rink, as well as by the Exhibition itself.

Of the towns of Canada none probably could make a display of local manufactures which should be as large and diversified, as high in standard of design and workmanship and withal as interesting to the average person as the display being made by Berlin manufacturers this week. The more important manufactures of Berlin include: Furniture, leather, felt goods, shirts, collars and cuffs, sugar, rubber shoes, trunks and valises, pianos, suspenders, boilers and engines, furnaces, office furniture and interior fixtures, robes and clothing, woodworking machinery, gas and gasoline engines, clocks, gas and electric meters, aluminum goods, cigars, beer and automobiles.

As the hardwareman has to handle shoe and stove polishes, household oils, etc., the display of the Alpha Chemical Co. could not fail to arouse his interest. This firm has a large booth and on a table in the centre as well as attached to panels at the back they had a most comprehensive display of shoe and stove polishes, ammonia, borax, blues, chloride of lime, harness soaps, etc.

One result of a visit to this Exhibition would be added interest in the woodenware, brooms, etc., made in Berlin.

A. Hertel devoted a display to Klondyke refrigerators, washing machines, enclosed ash sifters, benches, clothes horses, etc.

The Berlin Woodenware Co. included in theirs such lines as extension and step ladders, rocking horses, clothes horses, benches, rolling pins, Indian clubs, etc.

A. T. Schiedel confined his display to brooms and whisks, making a nice showing in a small three-sided booth.

The Standard Broom & Brush Company made a fine showing in small brooms and whisks, their range of the latter line being particularly strong.

A display that could not fail to interest merchants was that of the Berlin Electric Co., who showed an automatic switch, designed to switch off electric lights at any hour desired, thus saving light bills when service is given by meter.

The exhibitors have reason for congratulating themselves not merely on the success of this exhibit but also on the production of goods of such quality and attractiveness.

A display that could not fail to interest hardwaremen was that of the Berlin Aluminum Works. Here one could see all the familiar kitchen utensils, pots, pans, saucers, cups, etc., fashioned from the clean, light, attractive aluminum. This display was one that seemed to attract the interest of housewives generally.

Nearby was the exhibit of I. E. Shantz & Co., consisting of "Howard" Hot Water Boilers in three sizes, so arranged as to give the visitor an idea of their interior as well as of their exterior; also a pipe-cutting machine for plumbers and machinists, a comparatively new line with this firm.

The Berlin Racycle Co.'s display included six different styles of bicycles, one with aluminum finish, the others in black and red enamel.

The exhibit of Philip Gies, which was comprised of "Economical" Hot Water Boilers, with parts shown separately, "Hymmen's" Down-draft Drums, "Anderson's" Force Pumps and "Braniff's" Patent Leach Casting Machine came in for much attention.

A simple yet interesting exhibit was that of the Berlin Glue Works. It consisted of four barrels of glue in light flakes and ranging in color from light amber to dark brown.

IT PAID

The Miller-Morse Hardware Co., of Winnipeg, inserted the following want ad. in HARDWARE AND METAL, October 7th issue:

HARDWARE CLERKS WANTED

SIX bright, active experienced hardware clerks wanted for a Winnipeg wholesale hardware house. None but thoroughly experienced wholesale clerks need apply. Address, stating experience, age, references and salary expected Box 73 HARDWARE AND METAL, 511 Union Bank, Winnipeg.

The paper does not arrive in Winnipeg till Monday, and on Monday morning they engaged a clerk who answered the advertisement. By Tuesday they had received several replies.

Have you a message you wish delivered?

Have you a business for sale?

Do you wish to secure a new clerk?

Do you want anything in which a Hardwareman or Plumber would be interested?

RATES—2c. per word, first insertion.
1c. " each subsequent insertion.

Messrs. Clisdale & French have purchased the hardware business conducted by Mr. R. E. Walker at Caledonia, and will take possession on November 1st. successful business there. Mr. Walker The stand is a particularly good one, and Mr. Walker, through his popularity, did much towards building up a new has been a subscriber to Hardware and Metal for upwards of ten years, being one of the papers oldest subscribers. In a letter to the publishers of Hardware and Metal he states that the paper has been one of his best friends, and has been a great help to him during his business career.

PAINT, OIL AND BRUSH TRADES

TWENTY-FIFTH ANNUAL CONVENTION.

AS announced in Hardware and Metal a few weeks ago, the Sherwin-Williams Co will hold their 25th annual convention in Montreal the week of October 29th. The convention will bring to the city some 250 salesmen and managers of the company.

The Windsor Hotel will be the headquarters for the convention, although the meetings will be held in the auditorium of the company's plant at Centre street.

Those in attendance at the convention will come from all parts of the United States and from the territories in foreign fields covered by this company's salesmen, as well as those traveling throughout Canada. A special train will bring a large part of those to Montreal, and this meeting promises to be the largest convention of the employes of a single concern ever held in Canada. The object of this gathering is to review the paint and varnish situation of the past year, and to discuss the outlook, plans and methods for conducting business the coming year.

This is the first time the convention has been held in Canada, and only the second time it has been held away from the home office at Cleveland. It is especially fitting that the convention be held in Montreal at this time, as it will celebrate the tenth anniversary of the consolidation of the Walter H. Cottingham Co. of Canada, with the Sherwin-Williams Co.

Mr. Walter H. Cottingham is the vice-president and general manager of the Sherwin-Williams Co. He was born in Canada, and although he now resides in Cleveland, is still a Canadian and deeply concerned in the great industrial growth here. Mr. Cottingham founded the Walter H. Cottingham Co. and when this concern was consolidated in 1895 with the Sherwin-Williams Co., he became managing director of the Canadian division of the company. In 1899 he was appointed general manager of the entire company, with headquarters at Cleveland, and a little later was also elected to fill the office of vice-president, on the death of Mr. E. P. Williams, one of the founders.

Mr. C. C. Ballantyne, the present manager of the Canadian division of the company, is president of the Canadain Manufacturers' Association, and prominently identified with the interests which are pushing Canadian manufacturers to the front.

If you expect to sell paints you must practice what you preach by having your store front bright and cheery.

SHERWIN-WILLIAMS EXPANSION.

A neat booklet has been sent Hardware and Metal by the Sherwin-Williams Co., Cleveland, announcing the opening of the company's new offices and branch warehouse at Cincinnati last month. The steady development of the Sherwin-Williams business is largely due to the enterprising methods adopted in the advertising and salesmanship departments of the business, the company's plan being to not merely sell high quality paints and varnishes to the dealer, but to help to move them from the dealer's shelves into the consumer's hands. In this they have been most successful and the opening of the Cincinnati branch is only another mile post in the company's progress.

BOUNTIES ON PETROLEUM.

About $340,000 was paid in bounties on coal oil produced in Canada during the last fiscal year. At the rate of 1-2c. per gallon this would represent a net output of some 2,250,000 gallons of crude petroleum. This output of Canadian wells is far short of the total consumption. In addition to the home production there was imported during the year about 22,000,000 gallons of coal oil, naphtha, gas oil and the like products of petroleum.

CANADIANS FOR PERSIA.

A party of five Canadians from the Petrolia oil district, left by the steamship Tunisian the other day for England on their way to Persia where they propose to develop the oil fields in that country. The men, whose names are Crawford, Kirby, McNaughton, McIntyre and Slack, are expert oil drillers and have obtained concessions from the Persian Government which will enable them to enter the field under specially favorable circumstances.

The thing in hand is the most important now. To-morrow will take care of to-morrow's tasks if to-day's are done to-day.

ELASTILITE VARNISH
"FAMOUS FOR FINISH"

Equally good for outside or inside use. Sold once always asked for. Considered a leader by our agents.

Manufactured only by

The Imperial Varnish & Color Co. Limited

TORONTO, ONTARIO, CANADA.

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey

and

VANCOUVER, B.C., care Durand Merchandise Company



TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

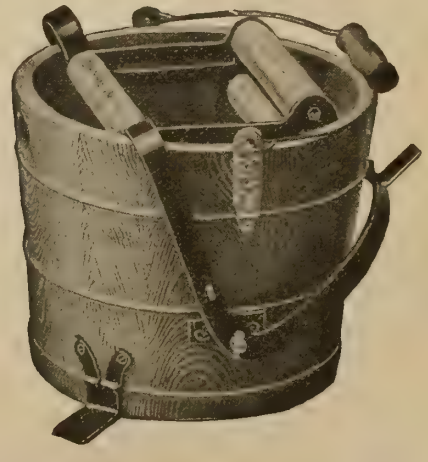
White Lead, Oils and Colors
Prepared Paints, Window
Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS

CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.



Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 20, 1905.

JUST after our going to press last week turpentine advanced to 98c., and remained steady at that figure. Later reports from the southern markets show that the top is about reached, the probability being that the extraordinary figure demanded has completely closed out the bull elements. Lower prices are hoped for, but so long as the stocks are in very strong hands we may be disappointed.

Linseed oil has been rather higher in the English markets, but that feeling has not been reflected in the local markets, where on the other hand a sagging off of 1c. is reported on orders for quantities.

An optimistic feeling seems to prevail on the white lead and color market, and the disposition which was shown two or three weeks ago to shade prices in white lead has been completely dissipated. Stocks from the old country are getting to a very low ebb, and future grindings will have to show the advance which is to be expected from the higher customs tariff. Buyers are quite safe to stock liberally in white lead, liquid paints and the allied branches.

Varnish shows a good steady demand and dry color sales are also much in evidence, the feature of the week being a remarkable call for vermillion and golden ochres.

Turpentine—The one cent advance reported in our last minute telegram last week holds steady this week, though there is a feeling current that the top of the market has been reached. We quote: Single barrel, 98c. per gallon. Two barrels or over 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Although English markets show greater activity at higher prices this week the local dealers have not been affected by this. We are quoting: Raw, one to four barrels, 45c.; five to nine barrels, 43c.; boiled, one to four barrels, 48c.; five to nine barrels, 46c., f.o.b. Montreal. Net 30 days.

Ground White Lead—We quote: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—The rise in spelter has affected all zinc products, but this commodity only shows a higher tone at unchanged prices. We quote: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc—(Ground in oil) — We give the following prices: 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—We give the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Our prices are still unchanged. Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—The market is very steady and the advanced price of two weeks ago has remained firm. We quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—The market is decidedly firm owing to the recent advances in raw material. Our quotations still are: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Prices are still held at $1.20 to $1.40 per gallon.

Castor Oil—The situation is unchanged. The last arrivals for the season will come in during the next couple of weeks after which import prices will be higher on account of the winter rates. We quote 8 1-2c. to 9 1-2c., according to lots.

Refined Petroleum—Is well held at the advance made last week. We are now quoting: American water white, 16 1-2c. to 17c.; Canadian prime white, 14 1-2c.; 18 1-2c. ex warehouse.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, October 20, 1905.

HIGH prices on linseed oil and turpentine have had somewhat of a deterring effect on business in these lines, but on the whole the jobbers and manufacturers have nothing to complain of as the trade in other lines is more than great enough to make up for a slight falling off on the two articles mentioned. The business so far this year has been much greater than in any previous season, and trade continues to be quite brisk even up to the present time.

White lead is back to the old figures quoted by us. For some time the market was fairly steady at about $5.55,

THE VERY BEST MATERIALS are used in our

TRANSPARENT AIR-DRYING LACQUERS

TRANSPARENT BAKING LACQUERS

Add to that fact "skilled workmanship" and **you** will see why once ordered they are always ordered. **Your store** is incomplete without these goods. Our catalogue will give you the prices, colors and quantities. Send a postcard for it **at once.**

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.



COVERT MFG. CO.,

TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited

TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES

of every kind, and for every purpose. Our glues enjoy large sales in almost all countries of the world, and our brands are generally to be seen amongst good stocks of glues. We believe we are giving better value than any other manufacturer, and we want to submit our lines to the Canadian test. Samples gladly sent in reply to enquiries.

GROVE CHEMICAL CO. Ltd., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON

OTTAWA WINNIPEG

POPULAR BECAUSE THEY POSSESS MERIT

When a dealer realizes that Merit is at the bottom of

"Island City" Brand

Paints and Varnishes, he realizes the necessity of keeping in touch with the makers and thereby safeguarding his business against unreliable transactions. It's worth knowing that our house and floor paints dry in eight hours—that, too, without a crack or blister. It's worth knowing that our prices are the fairest you have an opportunity of getting. ***"Island City Brand"*** stands for Merit. Will we send you prices ?

P. D. DODS & CO.

Toronto, Montreal, Vancouver, Winnipeg

.....COMPETITION
is no longer the life of trade .....
On the contrary..... too much competition is the .....
DEATH of TRADE...
.....CO-OPERATION
is the powerful factor which makes trade profitable.....
Up-to-date Hardware men will co-operate with the CANADA PAINT COMPANY, Limited, of Montreal, Toronto and Winnipeg, the leading manufacturers in the Dominion of Canada of

PAINTS
COLORS
AND
VARNISHES



THE CANADA PAINT COMPANY LT'D

but some days ago quotations fell to $5.40. They have now reverted back to $5.55 and as the demand is quite active prices are fairly firm. Dealers are buying in fairly large quantities and as it is practically certain that advances must be made in the course of the next month or two, it will be seen that they are quite safe in stocking up quite heavily in goods governed by the market in white lead. With the exception of the above change all of last week's quotations hold good at the present time.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c.; boiled, 50c.; 5 to 9 barrels, raw, 46c.; boiled, 49c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Much business is being done at the old figures, shipments by boat being very large. We quote: Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c; 18 1-2c. ex warehouse.

Crude Petroleum—Prices are very firm and further advances are likely. We quote: Pennsylvania, $1.36; Ohio, 92c.; Canadian, $1.32.

MONTREAL WINDOW GLASS.

No new developments are noted in the glass situation this week. Hopes are expressed that there will be more direct shipments by steam for this port before the season closes, and it is thought that at the present time there are two or three ships on the way with consignments of glass. There is no doubt, however, but that glass will be very scarce all winter and the price throughout the cold months will have to be determined by the dealer. Our quotations are unchanged being as follows: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50 seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do. $28.50.

PAINT AND THE WEATHER.

THE influence of temperature on the consistency of paint is not always sufficiently appreciated, either in the factory or the painter's shop, says an exchange. On the whole the manufacturer is less liable to deviate from the standard of composition on account of differences in the consistency of his raw materials caused by variations in temperature than the painter is when the latter thins his paints himself, because the manufacturer works to a definite formula and uses the same relative proposition of the various ingredients winter and summer. The painter, on the other hand, mixes his paints by judgment only, his sole criterion being the ease with which the material can be spread with a brush, and this necessarily implies that the proportion of the various thinners varies according to the temperature and other local conditions. What the manufacturers have to bear in mind, however, is that if they send out in winter a material compounded in a manner suitable for summer use, or vice versa, there is a strong inducement offered to the user to tamper with the material. This fact is well known to makers of enamels and enamel paints, and at least one well known firm of makers of a renowned specialty take the simple precaution of recommending their customers, should they find the enamel somewhat "stout," to stand the can in a pail of warm water before use. Simple advice surely and calculated to save time investigating painters' complaints.

The Best South Wales Produces

IN STEEL COKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

H. & R. SINGLE GUN

Automatic and Non-Ejecting



Simplest "Take Down" Gun Made

12 and 16 Gauge, Steel and Twist Barrels
20 Gauge, Steel Barrel

Superior in Design, Workmanship and Finish
and the most popular Gun on the Market.

HARRINGTON & RICHARDSON ARMS CO.
Catalog on request **Worcester, Mass., U.S.A.** Also makers of H. & R. Revolvers

TRADE MARK
This design a guarantee of quality.

DO YOU PUBLISH A CATALOGUE?
IF YOU DO YOU SHOULD USE "CANADIAN-MADE" PAPER
All grades, from the highest "Glossy Finish" to the rough "Antique" and bulky "Featherweight."
YOUR PRINTER CAN SUPPLY IT.
CANADA PAPER CO.
TORONTO LIMITED MONTREAL

GUESSES AT THE RIDDLE OF LIGHT

THE BUILDER'S GUESS

"Scores of men have never believed that it is **possible** to **totally remove darkness** from an interior in the daytime. They have **tried** various 'systems' with the **same** result—failure. Hence their incredulity. Had these very builders even partially studied the **basis** upon which light **can be drawn** from the sky, and diffused through a building, they would have **at once** recognized that

MAXIMUM LIGHT GLASS

is the **only system** working in **absolute conjunction** with natural law, aided by a **special** combination of lenses and prisms, and so the **only system** that **can succeed. Maximum Light Glass** pays for itself **in a year** on the saving of artificial illumination **alone.** No riddle about light when **any builder** can go to his hardwareman, **examine** the glass, get a quotation, and **have it put in.** That's just common **every day** business."

SOLE CANADIAN AGENTS

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

MEMBERS of the late Canada Machinery Co., whose plant at Point Edward was burned down recently, have made proposals to the town of Sarnia to re-establish the works as a permanent industry in Sarnia. The promoters propose to expend $25,000 in new buildings and to pay out $80,000 to $100,000 in wages annually, from 100 to 225 men being employed. They ask the town for a free site, a loan of $25,000 and exemption from taxation.

The Dominion Oilcloth Co. are to build a $10,000 factory at Montreal.

The new plant of the Dominion Iron & Steel Co. in Newfoundland has been completed.

The Sylvester Machinery Co., Belleville, are to erect a large warehouse for storage purposes.

Briquetted coke, the new fuel, is now being retailed in Montreal by the Light, Heat & Power Co. at $5.50 per ton.

The Improved Match Co. are to begin operations at once at Drummondville, Que., seventy-five men being employed.

The liabilities of the Canada Launch & Engine Works, recently placed in liquidation, are $17,400, and the assets nominally $28,739.

The Red Cedar Lumber Company's mills near Vancouver, recently destroyed by fire, are to be rebuilt and new machinery installed.

Windsor may be the manufacturing headquarters of the Canadian Fencing Co., a Michigan concern which makes a new style of wire fence.

Work has commenced on getting the Simpson mill at St. Catharines ready for the machinery for engine works which are to be established there.

The annual statement of Granby Consolidated shows a surplus of $712,649 for the year 1905. The amount expended for improvements was over $485,000.

A site has been purchased on Van Horn street, Toronto, by W. H. Hutchinson, and it is understood that a factory for a new industry is to be erected.

Coal operators in British Columbia are urging the Tariff Commission to impose a duty on petroleum, which is largely used for fuel on the Pacific coast.

The Hamilton Bridge Company have received contracts from the Provincial Department of Works for two bridges over the Mattawa River, the cost to be $8,900.

The reported sale of the New Brunswick Petroleum Co. to English parties is denied. The company is seeking to increase its capital in order to develop its oil areas.

T. J. Drummond, vice-president of the Lake Superior Corporation, says that the output of ore at the "Big Helen" mine near the "Soo" will be over 200,000 tons this year.

Ross & MacRae, Strathroy, have secured a contract for the construction of twenty-five miles of railway between Three Rivers and Shawinigan, the contract amounting to about $500,000.

The Record Stove Foundry, Moncton, N.B., proposes to increase its capitalization from $800,000 to $1,000,000, the increased capital to be utilized in establishing a new foundry at Vancouver.

A Moncton man named Joseph Stratton has invented a new babbitt metal which is attracting considerable attention and a large industry to manufacture the metal may be established at Moncton.

The Brandon Machine Works Co. has received the contract for all the iron work which will be required in the construction of the new $42,000 school building now being erected at Moosejaw.

The Chimalapa Land Co. have decided to build large mills at Montreal, the mills to be equipped with the latest machinery for the manufacture of lumber from the company's property in Mexico.

Work on the construction of the iron ore smelter at Port Arthur is progressing very favorably and it is expected that it will be in operation this winter. The blast furnace will employ a large staff of men.

The Westinghouse interests have purchased a site on the Niagara frontier on which they will build a large plant for manufacturing electrical machinery. The site selected is on the Niagara Gorge below the Falls.

The Haskill Lumber Co. are making great progress in Fassette, Que. They have recently purchased a new locomotive for the Salmon River & Northern Railway, for hauling out the timber, which will be transported by rail rather than by water.

The Dominion Iron & Steel Company rail mill rolled eleven hundred tons of rails October 12, which is a new record for the mills. The Grand Trunk Railway's order of 25,000 tons has been completed and the rolling of the Intercolonial's 25,000-ton order commenced.

The Nova Scotia Steel & Coal Co. for the nine months ending September 30th shipped 398,095 tons from their mines, as against 350,846 tons for the corresponding period last year. During September the company shipped 12,332 tons to Montreal, as against 14,504 tons the same month last year.

The Chatham, Wallaceburg and Lake Erie Electric Railroad paid duty on machinery and equipment last week amounting to $25,600. Already some $75,000 have been spent on the building and machinery in the power house at Chatham. The line is now complete between Chatham and Wallaceburg.

The British Columbia Electric Railway Company has just distributed $17,000 to the men in its employ in the shape of a co-operative dividend. Every man in the service gets $40. Last year's dividend to the employes netted each man $35, and the previous one $25. The dividend is paid from a fund set aside after the payment of a four-per-cent. to the shareholders. It consists of one-third of the net remainder after that distribution of profits.

The D. M. Steward Manufacturing Company of Canada, Limited, Toronto, has been incorporated for the manufacture of acetylene gas burners in Canada and also to act as selling agent for the D. M. Steward Mfg. Company of Chattanooga, Tenn. The company states that it is doing a good business in Canada in the line of metal workers' crayons and soapstone slate pencils, which have been manufactured and sold by the Chattanooga company for the past 30 years.

The coming winter promises to be the brightest ever experienced in the coal trade in Cape Breton. The Dominion Coal Company commenced this month to deliver coal to the Dominion Steel Company at the rate of 60,000 tons per month. Another contract with the Maine Central Railway calls for 75,000 tons for winter shipment. The Dominion Coal Company have erected immense coal pockets at St. John and Halifax in order to supply the increased steamship traffic as well as the local trade of Provincial towns and cities. It looks as if Louisburg, the winter port of shipment of the Dominion Coal Co., would this year experience the busiest season in its history.

Shareholders of Canadian steel concerns will be interested in the statement that, whereas for the first eight months of 1904 the States sent 93,256 tons of steel rails to Canada, only 4,680 tons came in this year. The Wall Street Journal prints a long article on this development, and says that the members of the "steel rail pool are receiving an object lesson in the practical working of the protective duty when the shoe is on the wrong foot. They were unable to bid for any part of the order for 150,000 tons of steel rails just given by the Grand Trunk Pacific to the Dominion Iron & Steel Company, because of the new Canadian duty of $7 a ton levied on all steel rails bought in the United States."

The annual meeting of the Granby Consolidated Copper Co., which was to have been held in New York on October 3, will be adjourned for two weeks owing to the absence abroad of President Langloth. The annual report for the year ended June 30 will show net earnings of $700,000, as compared with $283,000 the previous year. The company has been liberal in its expenditures the past year in purchasing new properties, $432,000 having been expended in doubling the company's acreage. Other charges have been made for extraordinary mine development work and smelter enlargement and improvements, so that net earnings will be smaller than might be expected. Next year the company is expected to be able to earn at least $130,000 a month net, and the beginning of dividends at the rate of 5 per cent. per annum is looked for at any time.

Companies Incorporated.

The Forbes Hardware Company has been incorporated in British Columbia, the capitalization to be $40,000 and the headquarters at Vancouver.

Standard Bolt & Screw Co., Toronto, share capital $40,000, purpose to carry on machinery business in all its branch-

es. Thomas Clark, Buffalo, Percival Stafford McKergow and John Jennings, Toronto.

The Walker Bin & Store Fixture Co., Berlin, share capital $40,000, to manufacture and sell store fixtures. The directors are Theodore Adam Witzel, William Caven McCuaig and James Andrew Hackett of Toronto, and Michael Seyler of Berlin.

The Fox Bearings Co., Toronto, share capital $40,000, purpose to manufacture, operate, introduce and sell a certain Canadian patent of invention of Tobias Fox. Directors, Tobias Fox of Woodbridge, and Thomas Sullivan and John Nicol of Pine Grove.

The Coleman Development Co., Haileybury, share capital $300,000, purpose to carry on the operations of a mining, milling, reduction and development company. Directors to be James Francis Gillies and Ralph Roy Little of Haileybury and John McKay of Sault Ste. Marie.

The Federal Electric Construction Co., Brantford, share capital $40,000, purpose to carry on the business of manufacturers and dealers in electric motors, dynamos and other electrical machinery. The directors are John Ellis, township of York, George Henry Kilmer and William Henry Irving, Toronto.

Mathews Steamship Co., Toronto, share capital $250,000, purpose to carry on the business of transportation of goods upon land and water, also merchandise and passengers with incidental and subsidiary powers. Directors to be Alfred Ernest Mathews, Richard Lippincott Denison Taylor, William Beardsley Raymond, Frank Ford and Britton Osler, of Toronto.

The Sublime Hygienic Cement Flooring Co., Toronto, share capital $50,000, purpose to manufacture hygienic cement tiles and blocks and marble mosaic, and to carry on a general building, construction and paving business. The directors are Leopoldo Ponzeo Scarrone, Louis Vincent McBrady, Luigi Del Negro, Pietro Venier, Umberto Corsi and Joseph Murphy, all of Toronto.

Canada Steel Goods Co., Hamilton, share capital $115,000, purpose to buy, sell and deal in manufactured metals, etc. Directors are John Straith Ainslie and Ralph Oliphant Young Ainslie of Comber, Arthur Frederick Hatch of Toronto, Arthur Ludlam, Arthur George Moffat and James Dryden Ainslie of Leamington, James Sim Wardlaw, Charles Cumming and George Hancock of Galt.

STEEL-BLUE ENAMEL.

An enamel for use on any metal and which will keep so long as it is tightly corked is made as follows: Dissolve 1 part of borax in 4 parts of water. Macerate 5 parts of bleached shellac in 5 parts of alcohol, saving out a small portion of the alcohol for dissolving methylene blue of sufficient amount to give the color desired. Heat the watery solution to boiling, and constantly stirring add the alcoholic solution. Stir out all lumps and add the blue solution. Before applying clean the metal bright with an emery cloth. Apply enamel with a soft brush.—Popular Mechanics.

Much said—little done. Discussion is valuable only when it works hand in hand with accomplishment.



No. 26. OSHAWA, ONT. Oct. 21, 1905

LOW PRICE

It would be purposeless drumming on our part to ask you to put in a supply of **Perfect Metal Lath** if we didn't know that it was possible for you to do so on either a small or large basis, but always at a proportionately small cost. Metal Lath doesn't appeal to you like general hardware, we know, because its sale in your neighborhood may, perhaps, be in its infancy. When, therefore, you are asked by other manufacturers, in spite of these facts, to expend your money and accept risk with meagre profit, you simply won't do it ; and who can blame you ?

MAKES POSSIBLE

With **Perfect Metal Lath** you need not expend one cent until you have made your sale, or, in other words, you can be the connecting link between builder and maker if you do not wish to carry a stock. You take no risk ; lose no time. The order can be secured in your store (the same as the order to supply hardware) and sent direct to us. While **Perfect Metal Lath** has superseded wood lath, it has nothing to do with carpenters. **It's sold by hardwaremen, or through them, at 10c. per square yard.**

YOUR BUYING

We take the onus of "making good" —proving **Perfect Metal Lath's** perfect qualities : Resistance of Fire, Accurate Key, Non-Corrosiveness, Saving of Labor, Time and Money. You are, of course, a busy man, and no doubt your eye is on the "old standbys" of the business, but still you could give some attention to **Perfect Metal Lath**, the lath of **to-day**, and also make a bid for trade on our **Metal Shingles, Steel Ceiling, Cornices, Wall Covering, Eavetrough, Furring, Studding**, etc. Think over it, anyway. Try before you condemn.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

WE WANT YOU TO KNOW WHY

DOMINION BRAND
TARRED FELT

our Tarred Felt, Roofiing Pitch and Coal Tar will give you better satisfaction than any other you can handle. We can't tell you all about it here, but, if you will write us, our traveller will call on you and convince you.

"Dominion Brand" Roofing Materials

Are made only by us

LOCKERBY & McCOMB, 65 Shannon St., Montreal

ATKINS HIGH-GRADE, CROSS-CUT SAWS

ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



E. C. ATKINS & CO.,
INCORPORATED
Factories and Home Office : INDIANAPOLIS, IND., U.S.A.

LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

Write for Catalogue and Prices.

CANADIAN BRANCH : 56 King St. E., Toronto, Canada.

DON'T BE HOODWINKED!!



No. 650

When you are told that American locks sell better than Canadian locks there is one answer you can always have ready : "Who pays the duty?" You can get American locks high-priced as a result of the duty. You can get American locks, "cheap," as a result of shoddy material. But you cannot get better selling goods than

GURNEY CYLINDER LOCKS

because they are "made in Canada"—which of itself permits their being low-priced, but high grade—because they are made in a factory noted for two things : Accuracy, Skill ; and because they are **guaranteed.**

There are Supplements to Catalogue No. 7.
Have you had them ?

THE GURNEY, TILDEN CO., Limited

HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co, Limited

AGENCY :
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

ATKINS SAW SET AND VISE.

E. C. ATKINS & CO., Incorporated, the well-known saw manufacturers, of Indianapolis, are offering a new saw set for hand saws, as shown in illustration No. 1, that is sure to call forth favorable comment from all practical people. The device is so constructed that a uniform blow can be given to each tooth, thus insuring a perfectly even set throughout the blade. There is no danger of breaking the points of the most highly tempered saw, even when operated by a novice. It is adjustable to any amount of set desired and will set the finest as well as the coarsest tooth perfectly. Cuts 2 and 3 illustrate the Atkins Combined Perfect Saw Set and Vise. This is a very convenient combination and can be instantly adjusted to the different operations. Cut No. 2 shows the filing clamp ready for use. The jaws are rubber cushioned. It is practically noiseless. Can be tilted to any desired angle. Works on the lock lever principle. It can be fastened to bench with malleable iron screw clamp. Cut No. 3 shows same tool adjusted for use as a saw set.

RETURNED
OCT 21 1905

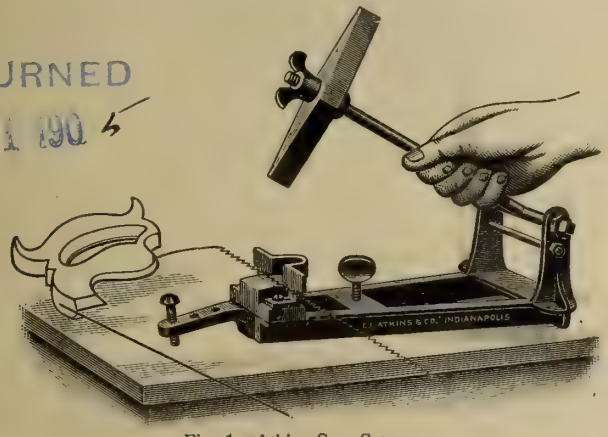


Fig. 1.—Atkins Saw Set.

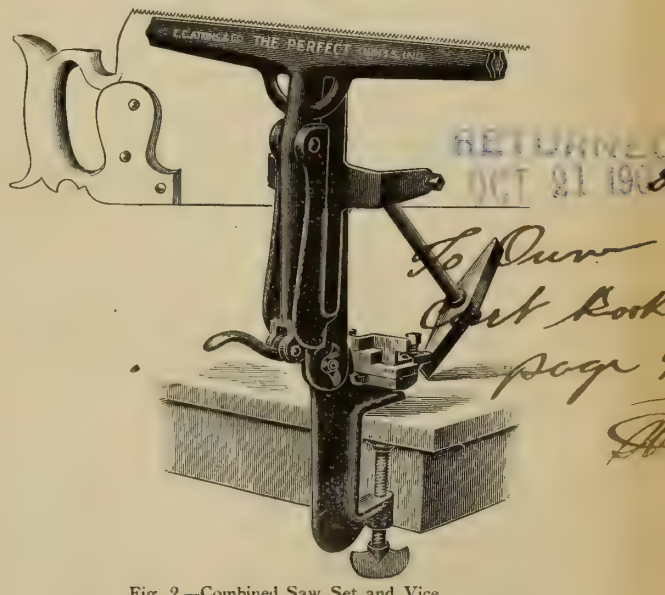


Fig. 2.—Combined Saw Set and Vice.

UNIQUE MACHINERY.

The Pedlar People of Oshawa and Montreal have this week contracted in New York for the early delivery of the extensive plant required in the manufacture of the new fireproofing commodities which they intend to make. Their purchases comprise probably the heaviest and most expensive machinery of the kind ever brought into Canada.

Arrangements have been made for the delivery of these machines at the Oshawa factory within thirty days, and the product will be on the market before the first of the year. A comparative statement of the first costs of a fireproof partition manufactured from steel as against one made from porous terra cotta will appear in "Pedlar Talks" within the next few weeks, and will be of certain interest to our readers.

A handsome bank building is to be erected at St. John by the Royal Bank.

BUILDING NOTES.

The G.T.R. are to erect a new station at Wingham.

C. T. Eraut is building a new residence at Fort Frances.

A new Methodist Church is to be erected at Souris, Man.

The C.P.R. have decided to erect a new station at Varcoe, Man.

A. W. Taylor, Ingersoll, has begun the erection of a new store building.

The Bank of Commerce are to erect a building at Woodstock, Ontario.

T. A. Burrows will build a saw mill near Grand View, Man., this Fall.

The Cockshutt Plow Co. of Brantford is erecting a large warehouse at Regina.

A. C. Patch has secured the contract to build a $30,000 hotel at Fort William.

Dr. MacKenzie has commenced the construction of a new hospital at Fort Frances.

The E. B. Eddy Co. have commenced the construction of a large five-story warehouse in Winnipeg.

The C.P.R. are erecting a large machine shop, forty by forty-eight feet and two stories, at Havelock.

The Standard Bank are to spend $20,000 on alterations to their building on Wellington street, Toronto.

A $10,000 school is to be erected at Rosebank, Man., and a new Church of England is to be erected at the same place.

J. Stewart, Hamilton, is to build a brick residence to cost $2,200, while W. Crawford of the same city is to build one to cost $2,400.

A. M. Nanton, of Osler, Hammond & Nanton, is to erect a business block in Winnipeg on the corner of Portage avenue and Main street.

A new hotel to cost $300,000 is to be erected on Ward's Island, Toronto. The promoters are Judge Morgan, Thomas Aikenhead, Major Carlaw and others.

A $20,000 concrete and steel bridge is to be constructed across Rideau River near Herdsmen's Bridge. The work is to be done by the Montreal Bridge Co.

The contract for the steel structural work in connection with the extension of the Canada Paint Company's Montreal plant has been awarded to the Dominion Bridge Co. of Lachine.

The Canadian Pacific Railway have commenced the erection of five new buildings near the Angus shops, Montreal, the total cost of which will be $33,550. The new structures will include two restaurants, a paint shop, a storehouse for old material.

The Grand Trunk Railway have offered a free site and $4,500 for the erection of a Y.M.C.A. building at Allandale if the townspeople will contribute an equal amount with the railway for the maintenance of the building. Work will likely be commenced this month.

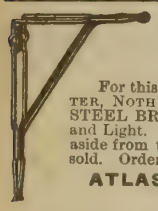
Peter Lyall & Sons, Montreal, have sublet the contract for laying the floors of the new steel sheds which they are erecting on the wharves. Messrs. Stack & Brogan were the successful tenderers, and they estimate that it will take about 200,000 scoria blocks to complete the ground floor of No. 2 shed, some four hundred yards of which have already been finished.

Building has been very active at Peterborough during the present year and it is estimated that the total outlay for the year will reach $400,000. About 200 new houses will be erected, an increase of about 50 over last year. Amongst the large enterprises under way are the following: New Opera House, $30,000; American Cereal Co., mill and elevator, $45,000; Peterborough Shovel & Tool Co., factory, $15,000; Separate School, $25,000; Methodist Sunday School, $5,000.

In Winnipeg the building record is greater than ever. Compared with the total figures for previous years it shows

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Wat-r Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.
Ask for quotations for Septic Tanks.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U. S. A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

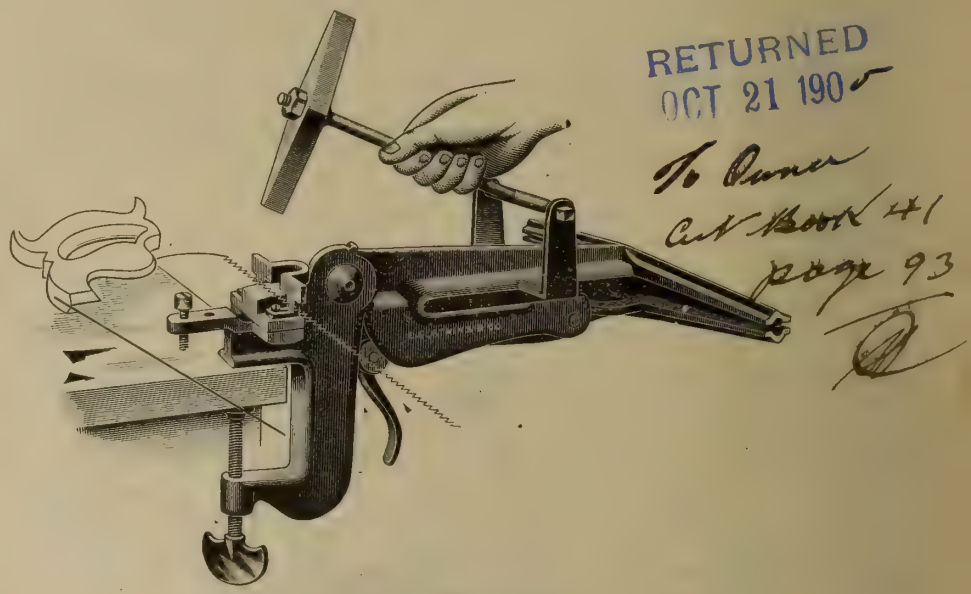
THE IMPERIAL CEMENT CO., Limited
Makers of the Celebrated Brand
"IMPERIAL" PORTLAND CEMENT
Owen Sound, Ont.

PRIEST'S CLIPPERS
BALL BEARINGS
Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
WE MAKE THEM.
SEND FOR CATALOGUE TO
American Shearer Mfg. Co., Nashua, N.H., USA
Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

...FULL STOCK...
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

a marvelous increase. In last year's record several millions were represented by the new C.P.R. terminals, the Eaton block, the gas works improvements and other large structures. There are over 1,200 more buildings this year to date than last year, but the majority of these are residences. The report is as follows: 1904—Permits, 1,768; buildings, 2,268; cost, $9,651,750. To Sept. 30, 1905 — Permits, 2,761; buildings, 3,539; cost, $9,627,950.

The Imperial Steel & Wire Co., of Collingwood, Ont., will erect additions to their factory to cost about $100,000. The buildings will consist of a fence mill, 200x60 feet, two stories; galvanizing building, 250x40 feet, and warehouse, 200x100 feet. The additional machines to be installed will consist of a 250-horsepower water tube boiler and a compound condensing engine of 150-horsepower to drive a 100 k.w. generator. This generator will be used to drive the nail mill, with 40 tons daily capacity; wire fence mill, with 10 tons daily capacity, and galvanizing plant, 10 tons daily capacity. The company will install the very latest devices in motors and silent chain drive in the transmission of their power and the operation of machinery.


RETURNED
OCT 21 1905
To Owner
Cut Book 41
page 93
Fig. 3.—Combined Saw Set and Vise.

TORONTO BUILDING PERMITS.

Angus Kerr, brick dwelling, Dufferin street, $2,000.

Grayson Burns, brick dwelling, Roxborough, $1,000.

Arlington Co., brick factory, Fraser avenue, $15,000.

F. Kent, one pair dwellings, 7-9 Sully Crescent, $3,500.

Dr. Roberts, brick residence, Clarendon avenue, $4,000.

W. J. Munshaw, store and dwelling, 175 McCaul street, $3,000.

Jas. McDonald, two brick dwellings, St. Clarens avenue, $5,000.

Col. Denison, stone and brick residence Prince Arthur avenue, $6,000.

University of Toronto, Convocation Hall, Queen's Park, $160,000.

R. T. Brown, stone and brick dwelling, St. George street, $6,000.

C. M. Essery, one pair brick dwellings, George street, $5,000.

Nellie J. Atkinson, store and dwelling, 100 Sorauren avenue, $3,000.

O. F. Dodge, one pair roughcast dwellings, St. Clarens avenue, $3,000.

H. M. Deeth, brick dwelling, Dovercourt Road, $2,500.

Mrs. C. Carroll, roughcast dwelling, Dufferin street, $1,800.

F. Langrill, roughcast dwelling, 19 Spruce street, $1,750.

J. M. Murray, brick dwelling, 130 Farnham avenue, $3,500.

E. B. Osler, M.P., brick dwelling, Nanton Crescent, $2,000.

E. Taylor, one pair brick dwellings, Delaware avenue, $5,200.

A. Sutherland, stone and brick dwelling, Olive avenue, $4,200.

F. Terry, brick and stone dwelling, 583 Bathurst street, $2,600.

Mrs. Hancock, brick and stone dwelling, 836 Dovercourt Road, $1,800.

Macpherson Trustees, brick dwelling, 17 Roxborough street east, $5,500.

Dr. F. H. Wylie, brick and stone dwelling, Lakeview avenue, $2,500.

Andrew Miller, one pair rougheast dwellings, Ossington avenue, $3,600.

C. Coulter, two pair brick dwellings, 164 to 166 Bellwoods avenue, $8,000.

R. Burleigh, roughcast addition to dwelling, 564 Concord avenue, $1,500.

M. Healy, stone and brick dwelling, corner Harbord and St. George, $4,500.

E. Taylor, one pair dwellings, corner Delaware and Hepbourne streets, $5,600.

A. J. Thomson, one pair brick and stone dwellings, Balmoral avenue, $4,900.

L. W. W. Plews, pair of stone and brick dwellings, McMaster avenue, $6,000.

Seth Rowling, one pair stone and brick dwellings, Melbourne avenue, $4,200.

H. G. Mackenzie, one pair stone and brick dwellings, Howland avenue, $7,000.

Fanny Hutson, one pair and one detached, roughcast dwellings, Seaton Square, $3,000.

Standard Bank, alterations to bank and warehouse, Jordan and Wellington streets, $20,000.

W. D. Wilson, one pair stone and brick dwellings, corner Bernard and Kendall avenues, $6,000.

Fairbanks-Morse Canadian Manufacturing Co., foundry, reinforced concrete, Bloor street west, $22,000.

Dovercourt Road Presbyterian Church, brick church, corner of Dovercourt Road and Hepbourne street, $20,000.

MONTREAL BUILDING PERMITS.

Rich. Egan, rear 89 Mansfield street, store, $2,000.

Thos. Gauthier, 66 Cavillier street, dwelling, $2,800.

H. Filteau, 1,656 St. Hubert street, dwelling, $1,800.

Laurent Dalbec, 1,085 St. Hubert St., dwelling, $1,500.

Arthur Perrault, 1,085 St. Hubert St., dwelling, $1,500.

Victor Morgeau, Rivard St., St. Denis Ward, stables, $1,800.

Eug. Picard, Marquette St., St. Denis Ward, dwelling, $3,600.

D. Pepin & Fils, Lasalle and Laurier streets, dwelling, $1,500.

Chas. Gurd, Beaudry St., St. James Ward, warehouse, $1,800.

James Galley, Chatham St., St. Joseph Ward, dwelling, $3,500.

Emery Lapointe, Gounier St., Duvernay Ward, dwelling, $5,000.

Ambroise Sergerie, Chambord St., St. Denis Ward, dwelling, $1,700.

Canadian Pacific Railway, Nolan St., Hochelaga Ward, factory, $3,200.

Canadian Pacific Railway, Nolan St., Hochelaga Ward, factory, $2,200.

F. A. Grothe, Mitcheson street, St. Lawrence Ward, dwelling, $6,000.

Louis Collerette & Co., Labelle St., St. Denis Ward, dwelling, $1,500.

Canadian Pacific Railway, Nolan St., Hochelaga Ward, warehouse, $2,300.

Canadian Pacific Railway, Nolan St., Hochelaga Ward, lunch room, $11,625.

Canadian Pacific Railway, Nolan St., Hochelaga Ward, lunch room, $14,225.

H. Contant, 836 St. Lawrence street, alterations to dwelling and stores, $2,000.

LEGISLATION TO IMPROVE BUILDING IN MONTREAL.

A new by-law recently adopted by the Montreal City Council is for the purpose of improving the appearance of St. Catherine street, the main retail thoroughfare, by fixing a definite standard for the buildings hereafter to be erected there.

The by-law declares that every new building erected on this street shall have a frontage of cut stone, pressed brick, or other incombustible material, to the exclusion of wood cased in iron, etc. Furthermore, it is enacted that these buildings shall not be less than the equivalent of three storeys in height. Another new restriction is that it shall not be lawful to construct, occupy and maintain on the lots bordering upon said St. Catherine street, on either side thereof, any factory, private stable or livery stable, nor shall it be lawful to enlarge any existing buildings to be used as such.

"Made in Canada"
For Forty Years
Trade C Mark

To The Trade

PLEASE NOTE: That every box of Horse Shoe Nails manufactured or sold by us, has our name and registered trade mark (the Gothic letter "C") on same. Any imitation of either on a box of Horse Nails is illegal, and a penal offence in Canada.

The "C" Brand Horse Nails are sold by us with an absolute guarantee, that every nail is perfect and ready for use, or if found otherwise, they will be exchanged free of cost, or purchase money refunded on application.

Our process of manufacture differs in many respects from other makers, and with better results.

We use exclusively the best obtainable charcoal steel nail rods made especially for our requirements in Sweden the quality of which has the greatest tensile strength (average 54,000 lbs. per square inch), and durability of any material of which we have any knowledge or used in the world for this purpose.

Our nails are of the best proportions according to size and work required; have hardened bevelled points which will penetrate easily into the hardest hoofs, without either split or bend in driving. The heads will not break off in the most severe frosty weather, or from hard usage on hard roads or stone paved streets.

The combination which "C" brand nails have of great toughness and durability, enables the clinch to hold the shoe on firmly until worn out, or its removal is required.

We claim they are not surpassed in quality, pattern or finish by any other horse shoe nails made in the world, and therefore will be found the most economical for the farrier to use, as compared with any lower priced article made by the "cold process" or of cheaper material.

When asked to purchase second quality nails, now being pushed in Canada, please do not forget that our "C" brand is made in Canada by Canadian labor, and therefore your preference is respectfully solicited by ordering the "C" brand.

We make one quality and have only one price, namely, 40, 10 and 7½ per cent. **discount f.o.b. Montreal.**

Canada Horse Nail Company
MONTREAL
ESTABLISHED 1865.

The Standard Ideal Sanitary Co., Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
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A FEW OF OUR STANDARD LINES



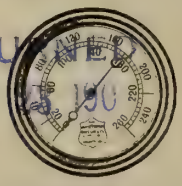
J.M.T. Valve
with Renewable Disc



Guage or Try Cock



J.M.T Gate Valves
Made screwed and flanged



We make all kinds of Gauges, Counters, Recording Gauges, etc.



Hand Oil Pumps



Iron Body Valves
We carry a variety of Iron Body Goods



The J.M.T. Injector
For efficiency and durability
Fully guaranteed.



Can't we persuade you
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RETURNED OCT 23 1905

HEATING AND PLUMBING

THE PLUMBING SITUATION IN TORONTO

A PECULIAR situation exists in Toronto plumbing circles. For some time committees of the recently organized Central Supply Association and the Master Plumbers' and Steam Fitters' Co-operative Association have been working together in arranging plans whereby both organizations can work together to the best interests of the trade, with justice to the general public. Practically every section of trade in which jobbers, contractors or retailers are organized is governed by some working agreement, and the master plumbers and supply men prefer to work in friendly agreement rather than in open warfare.

* * *

When the Crashley case was before the courts a few months ago the plumbing supply men were charged with combining to restrict trade, but it was not shown that the jobbers refused to sell to any reputable master plumber whose account was considered satisfactory. The supply men recognize the value of organization, they see the great improvement in Canadian plumbing since the master plumbers have organized, and they realize that men who are cutting each other's throats in competitive warfare are not likely to be as able to pay their bills as men who charge a living price for the work they do. For these self-evident reasons the supply houses are desirous of seeing the master plumbers organized on a sound basis. It is good business policy for them to aid the Master Plumbers' Association in every legal manner.

* * *

The Master Plumbers' Association has done a commendable work in improving the standard of plumbing work, not only in Toronto, but everywhere in Canada where its influence extends. Working hand in hand with the boards of health, the association has done much towards giving Toronto and other Canadian cities the reputation of being the best plumbed cities of their size in the world. And the statistics issued by the boards of health speak volumes for the improved sanitation brought about by the plumbers' organization. It is good business policy also for the Master Plumbers' Association to work in agreement with the journeymen in providing continuous work for the union men and in avoiding the disastrous strikes which have a bad effect on all sections of the community. The master plumbers have a reciprocity arrangement with the journeymen whereby no member of the Master Plumbers' Association shall employ non-unionists, and the union men in return agree to work only for members of the Master Plumbers' Association. This does not interfere with the right of any non-unionist from working for plumbing contractors who are not members of the Master Plumbers' Association. The two organizations would appear to be entirely within their rights in carrying out such an arrangement.

* * *

In accordance with this agreement the union men gave instructions a few days ago that all union journeymen working for contractors not belonging to the Master Plumbers' Association should leave their jobs and secure work from association members. This order chiefly affected three ex-members of the association who are posing as martyrs before the public. but who, report says, retired from the association because their resignations were called for. All the journeymen employed by these contractors have not obeyed the order of the union, however, and that body now has a problem on its hands in disciplining its members for breaking the union's agreement. The order given by the union was made public, and sensational stories immediately appeared in the daily newspapers, some of the employers concerned giving interviews explaining their side of the controversy, and threatening legal action against what was termed the "plumbers' combine."

* * *

Supuly houses have been selling supplies to any dealer. It has not been the intention to make any change in this respect, the customs authorities being understood to have ruled that any restriction of trade would result in a change in the tariff. It is known, however, that the supply houses have offered to pay a commission to the Central Supply Association on all business secured, the latter association offering their 7½ per cent. commission to the Master Plumbers' Association if its members buy from the Canadian houses represented in the supply association. It is contended that the giving of this commission is entirely legal and similar to the payment of the usual 15 or 25 per cent. commission on advertising or subscriptions by newspapers. A part of the proposed agreement is that a joint committee of the supply association and master plumbers shall work together to encourage the development of the plumbing trade and to prevent any restriction whatever being put upon the industry.

* * *

According to the newspaper reports the supply houses are to charge non-members of the Master Plumbers' Association an additional 5 per cent. on all purchases, making a 12½ per cent. discrimination against them. This, however, appears to be entirely without foundation, as it would be suicidal for the jobbers to discourage outside sales. Their policy, so far as Hardware and Metal can learn, is to sell at one price to everyone. The giving of the 7½ per cent. commission through the Central Supply Association, however, would be an incentive for outsiders to join the master plumbers' organization in order to secure this benefit, the extension of the association's membership being of advantage to every branch of the trade.

* * *

One of the plumbing contractors whose business is affected by the proposed withdrawal of the union men is Joseph Harrison, 608 Yonge street, who withdrew from the Master Plumbers' Association some months ago. In an interview he stated that his men had no reason to leave him and had not done so, he having lived up to every requirement of the union except the one referring to membership in the Master Plumbers' Association.

"Why did you leave the association?" was asked.

"Because I am not in sympathy with the methods used by them in securing contracts. I wanted to have liberty to do an honest business, and to give the public a fair show. There are several other reasons.

"In the first place, I found that my business was decreasing to such an extent that it became a serious question to me as to whether I would retain my membership, or retain the business which I had worked up. My business decreased from $121,000 in 1902 to $31,000 in 1904. This was due to the fact that the rules prevented me from figuring on work in outside towns and cities.

"Again, I had been deprived of some work from men who were really my customers. Some men, who wanted to give me contracts, were prevented from doing so because the association had in solemn conclave decided that some one else should get it, and my tender was of no avail.

"I wasn't satisfied either with paying 5 per cent. into the association on all work awarded to me, which was more than was needed for the running expenses."

"Will you take any action if the union tries to enforce its order?"

"Most certainly I shall, I have everything all ready, and will go to the courts immediately with a charge of conspiracy to boycott. I promise the public some startling revelations then."

* * *

J. B. Reeves, 760 Queen street east, another ex-member of the association, whose men were called out by the union, gave similar statements to the press and followed up the matter by securing an injunction restraining the Master Plumbers' Association and the Journeymen Plumbers' Union from interfering in any way with the union men in his employ, and preventing the employes from going out in response to the call from the local union. Mr. Reeves has also entered suit against the union, and Messrs. Storey and Bush, members of

that organization personally, for unstated damages. The affidavits are made by Joseph Rose, improver; M. McCormick, plumber, and Benjamin Black, bookkeeper.

It is also said that Crown Attorney Curry may proceed against the two organizations, the employers and the union, on a joint charge of conspiracy. Mr. Reeves has furnished the Crown with information upon which the charge may be pressed. Crown Attorney Curry says if he can get the information desired he will proceed against the individuals first, and then against the organization. He believes the agreement is illegal, and is an unjust interference with the rights of every man.

* * *

The publication of these interviews in the daily papers has put the master plumbers' organization in a bad light before the public, and it would seem to be the wisest course for the association to pursue to call the bluff made by Messrs. Harrison and Reeves by aiding in the proposed investigation. It was only a question of time before some such a step was made necessary, and if there are any internal differences in the association they should be adjusted by the members, as the perpetuation of wrongs would certainly result in the disruption of the organization, an event which would have a disastrous influence on the entire trade.

* * *

Taken as a body the members of the Master Plumbers' Association are as fine and honest a set of men as can be found anywhere. They have forced members who have acted unfairly to withdraw from the organization, and can do this again if necessary. Other trades are organized on a similar businesslike basis, but owing to the sensational newspaper reports master plumbers are now looked upon as something akin to highway robbers. Yet they will not be found to be living in better houses than other tradesmen, and few are rated in mercantile reports as possessors of property worth up in the five figures. That the public is not overcharged is evidenced by the fact that the association's rules call for a 25 per cent. profit, one-fifth of which goes into the association treasury. To do business successfully, maintain a shop, pay fair wages, earn an average living, and pay one's bills, the profit named is none too large.

* * *

The whole matter will tend to give added interest to the semi-annual convention of the Ontario Master Plumbers' Association in Toronto on Thanksgiving Day. The gathering will meet at the association rooms, 21 Richmond street west, and a banquet will be tendered the visitors by the Toronto association in the assembly hall, Temple Building, Thanksgiving night, when every master plumber in Ontario, whether a member of the association or not, is an invited guest.

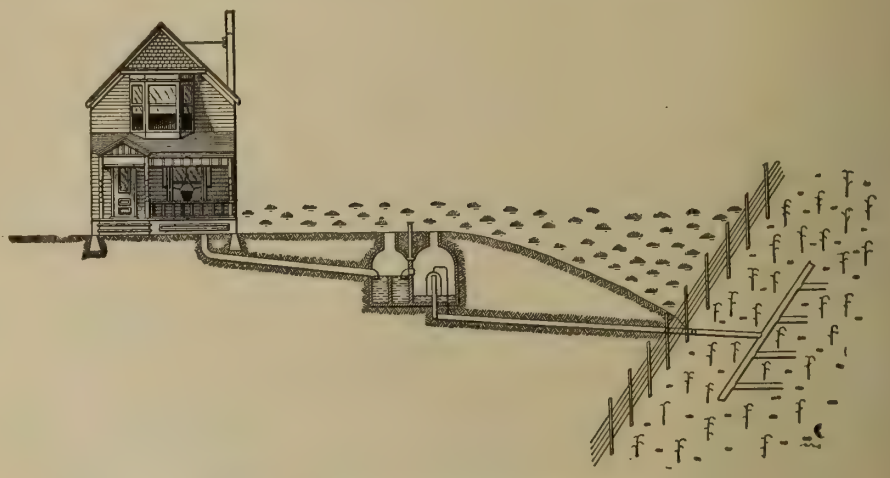
PLUMBING GOSSIP.

John Howie, plumber and tinsmith, of St. Johns, Que., was among the out-of-town buyers to visit Montreal during the past week.

SANITATION OF A COUNTRY HOUSE.

Chapter on "Waste Disposal" from a book by Dr. H. B. Bashore, entitled "Sanitation of a Country House." Published by John Wiley & Sons New York, price, $1.00.

IN taking up the study of waste disposal it is necessary to remember that "out of sight, out of mind," is not hygiene. The use of his senses long ago impelled man to put away his waste products, and this was the first step in the evolution of waste disposal. The use of the reason—the second step born by the labor of countless centuries of costly mistakes has taught us that these wastes must, in addition to being put away, be turned into harmless compounds before we can call the work complete. Though this seems very simple in theory, in practice, on account of the complicated conditions of modern civilization great question of sewage disposal. If one is situated near the sea or on a tidal river, the easiest method is to run the sewage directly into this. It is not admissible, however, to run raw sewage directly into a fresh water stream or lake. This is, nevertheless, frequently done, and it has a bad moral effect on ation we often fall far short of the ideal.



A Method of Sewage Disposal for an Isolated House.

In most country houses water under pressure is available, and when this is so water carriage of excreta is certainly desirable, necessitating thereby the use of water-closets and plumbing, just as in the city. Then there follows, of course, the use of the sewer and the the rural citizen who is by no means over burdened with sanitary devices. Of course, some of our great fresh water streams seem to have been given over to sewage by the cities along their banks, and the country resident living on such a stream could hardly be blamed for using it for his own sewage disposal.

When it comes to the smaller streams and lakes such a plan is wholly inadvisable and some form of disposal plant becomes necessary. Intermittent sand filtration is a method which disposes of sewage satisfactorily and gives an effluent which can be turned safely into any stream however small. A plant of this sort, though used extensively in various towns, is only advisable for certain houses where the character of the soil or of the toporaphy makes it difficult to use one or the other method of irrigation—surface or subsoil—either of which is an ideal plan of disposal for nearly all isolated houses.

In surface irrigation the sewage is simply distributed over cultivated land where it is rapidly absorbed and the filth disposed of by the numerous bacteria of the soil. By this method the sewage from the house is first sent to a settling tank, or rather an intercepting chamber, where the solid material is decomposed and macerated into very small particles; from this liquid passes into a flush tank, from which it is discharged by an automatic siphon into surface gutters, and from these allowed to spread over the ground or run into furrows between growing vegetables or grain. The intermittent flow of sewage, which is brought about by the use of siphon, is a desirable feature for the efficient working of this plan, especially in the winter.

Surface disposal of sewage in this manner is perfectly satisfactory and creates no nuisance. In some instances, however, due to lack of suitable location, sub-surface irrigation might be more desirable. The house arrangements in this case are the same as for a surface plant, except that the foul liquid, after leaving the flush tank, flows into open-jointed drain tiles laid under the ground near the surface—within eight or ten inches at least. This last is important for the reason that the filth-destroying bacteria are vastly more numerous near the surface. In putting up a plant like this the flush tank should have a capacity of something like fifty (50) gallons for each person, and in good absorptive soil about one hundred (100) feet of two-inch tile for each fifty (50) gallons capacity of tank.

There is yet another method simpler and less costly than those described, provided land is abundant and the house at a considerable distance from other dwellings. In this method the settling and flush tanks are eliminated and the sewage is turned directly from the

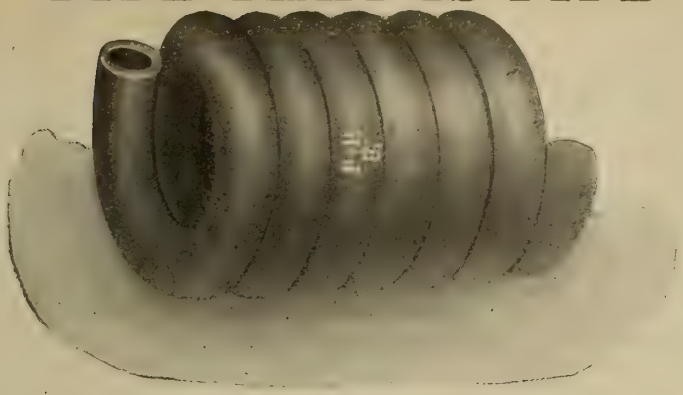
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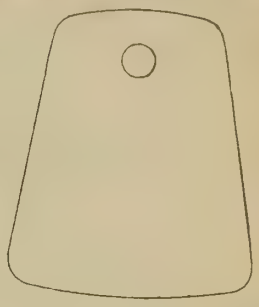
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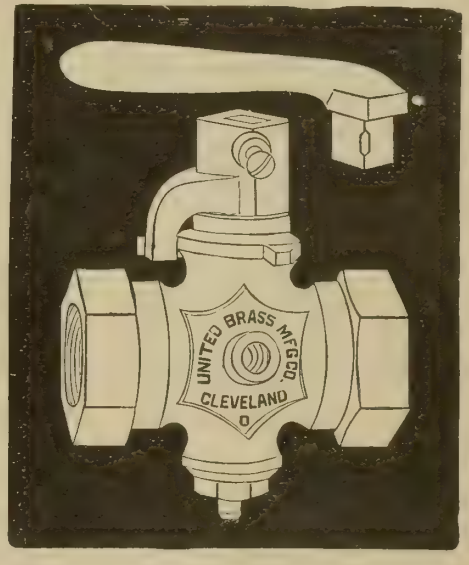
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house to the land, flowing from the sewer into shallow trenches, between which corn, vegetables, or trees may be planted. In order not to overtask the land at any one place the trenches should permit of being blocked at various points so as to divert the sewage into different trenches. A wintry climate does not interfere with the working of these various sewage farms, for the sewage, more or less warm, readily cuts its way through snow and ice and gradually filters through the soil beneath.

With the sewage disposed of, there yet remains certain other waste products to be gotten rid of—garbage from the kitchen, rubbish of various kinds, and ashes. The disposal of these products becomes easy if the various kinds are collected and kept separate. A good way is to have a series of receptacles for the different materials, and a certain place for each one. The paper, rags, rubbish, etc., for which flour sacks, supported by iron racks are used, might be still further subdivided, according to circumstances. Another, perhaps better way of collecting, is to have the receptacles arranged in one place, instead of being scattered here and there about the premises; for example, in a large box placed at the back of the house near the kitchen door, so as to be retadily accessible.

Now as to the ultimate disposal of household waste. The garbage is best got rid of by earth burial—simply put into a shallow furrow in a field and covered with a little earth. If the vegetable bed is near the kitchen, a good way is to have a hole in the bed and practice daily disposal of the garbage. Every evening the garbage should be covered with earth; and in addition, a tight board lid should cover the hole during the summer months, else the place may become a breeding place for flies and degenerate into a nuisance. Screening the hole, which I have tried, will not be sufficient, for the little fruit flies, which are very likely to choose such a breeding place, will creep through a screen of the smallest mesh.

The non-combustible part of the rubbish, such as bottles, tin cans, scraps of metal, etc., can usually be sold to the junk dealer; and the combustible part, if not saleable, should, of course, be destroyed by fire. Ashes can be used in almost any place for filling, making paths, or for a foundation under pavements, than which there is nothing better, the engineers say.

We have now to consider that class of country houses—generally of the smaller kind—where a sewerage system is not available, and for such we have to adopt an entirely different plan for the disposal of excreta, namely, that known as the "dry" method. This calls for the use of a galvanized iron pail and a seat exactly like that of an ordinary water closet. At the side of the seat is a box for holding the absorbent, which consists of sifted coal ashes or dry earth. After use a little of the absorbent is scattered in the pail, and when the pail is filled it is emptied on cultivated land—a field or a vegetable bed. If the pail is emptied near the house, a little earth should be raked over the pile, and in a short time—a week or two in summer, with corresponding increase in cold weather—all evidence of filth will have disappeared. Thus simple is the "dry" closet, an arrangement which, if taken proper care of is perfectly clean, inodorous, and sanitary.

When the dry method is used we will have certain waste waters from the bath and kitchen sink to dispose of, and this is best done by some form of surface drain suspended over the vegetable bed. One is made of a six-inch galvanized roof-gutter pierced every twelve inches by one-fourth-inch holes. This allows the filthy water to be distributed evenly over the ground without forming puddles and mud holes. The disposal of garbage, ashes, and rubbish is conducted in the same way as described previously.

CENTRAL HEATING PLANT AT CHATHAM.

OTHER cities may have led the way in the introducing of public conveniences such as gas, electric light, and water works plants, but Chatham has the honor of being the first place in Canada to instal a public heating plant, says a despatch from Chatham. The Wallaceburg, Chatham, & Lake Erie Electric Railway Co. is behind the project, which it is expected will be completed according to present plans before the really cold weather sets in. Nearly every business block and public building in the city has agreed to make the experiment, and if it proves as successful as the railway people say it will, then it is intended to extend the system throughout the whole place.

The exhaust steam from the power house is to be used for this purpose, and it is claimed that there will be enough of this without the manufacture of live steam to supply all the heating at present contracted for. To the outsider this may sound like a fairy tale, but the people of Chatham do not look upon it as such, and are almost wishing for Winter to set in that they may have the luxury of having their buildings heated without the trouble of shoveling coal into the furnace and carting the ashes away afterwards. And then there will be no more coal bills to pay. Steam bills will take their place, of course, but that will be overlooked in the joy of having at last discovered a way of escaping those terrible little billets doux from the coal man.

The method by which the steam will be conveyed about the town is reminiscent of the story told by Bangs in the "Houseboat on the Styx" of the way in which the associated shades in Hades were provided with their tobacco smoke. Tne tobacco was burned in one of the many furnaces of the lower regions, and the smoke conducted off by pipes into a huge reservoir. From this rubber tubes, to which were attached meters, registering the amount of smoke consumed, ran out to the smokers, who used what smoke they required, paying for it by measure. In this way all waste was avoided, and there were no cigar butts to throw away. There will similarly be no waste in the Chatham heating system. The system will run from the big engines of the Street Railway Co. into the pipes which are now being laid through the main streets of the town, and from these it will be tapped off into the buildings along the way.

Cold-Proof Tubes.

The pipes through which the steam passes is an iron one, wrapped in asbestos, and this again is enclosed in a tin tube. Outside the tin tube there is an air cushion, and outside of that again a wooden covering, which is bound with wire, and the whole treated with creosote and other materials. In this way a durable and cold-proof tube is secured. At short intervals there are very expensive condensing valves, which make up in themselves the bulk of the cost of laying the pipes, which amounts to $8 per foot. The pipes are laid in a rather peculiar manner, the depth varying from four to six feet, in order to allow a sufficient slant for drainage, for there is sure to be a little water condense in the tubes. This runs off into the sewers.

There are altogether at present some 3,600 feet being laid, which, at the price mentioned above, brings the amount of the investment up to $28,800. Next year pipes will be laid throughout the town wherever there promises to be enough business to make the outlay pay.

The manager of the company says that the rates which would be charged would not lower the heating expenses of the users to any appreciable extent. They would, however, be saved the trouble of paying men to look after their furnaces or of doing it themselves. It is expected, however, that there will also be a considerable reduction in insurance rates, because of the absence of fire in the buildings. The rates will be made up in two ways. There will be a charge based on the number of cubic feet in the building to be heated, which will vary from $3 to $5 per hundred feet, according as there are one or more sides exposed to the weather. On the meter system the charge will be made at the rate of 50c. per thousand pounds of water condensation. He claims that there will be no loss in heat at all, and that the steam will be just as hot a mile away from the boilers as where it enters the pipes.

It is not a new experiment, but has been successfully carried out in Tonawanda, Lockport, and other American cities. The manager of the concern here expects to see the idea taken up by several other Canadian cities as soon as Chatham has successfully demonstrated that it is practical.

The railway, when completed, will be one of the best suburban roads in Ontario. There will be altogether from sixteen to twenty cars in operation, which will run over forty miles of road from Wallaceburg to Erie Beach on Lake Erie. In the power house there will be three 450 horse-power motors, and six Babcock and Wilcocks boilers of like capacity.

P. Filion, tinsmith, of St. Therese, was in Montreal this week, buying supplies.



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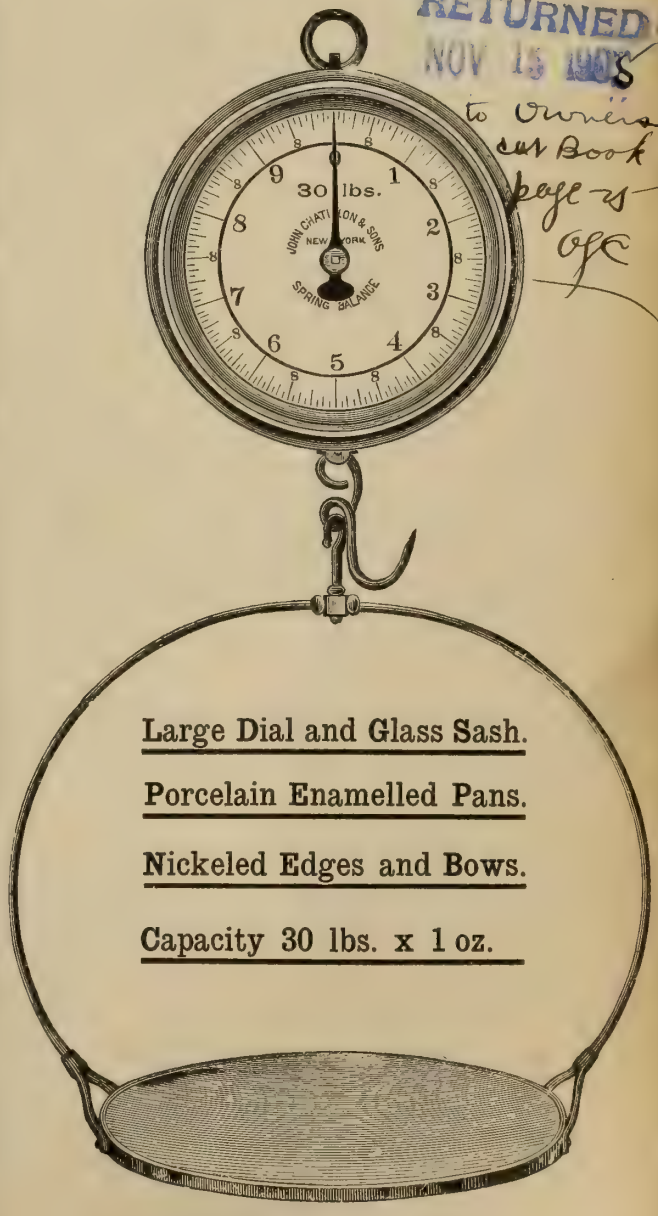
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PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 20, 1905.

MONTREAL plumbers are exceptionally busy at the present time and, from the large orders which the supply houses are receiving from outside points, it would seem that this condition is general throughout the Province. Nearly all the contracts now under way are for heating, though we have been informed this week of a number of big plumbing jobs which have just been let.

The natural result is that enameled ware is in great demand. Canadian baths, sinks and lavatories are commanding a big and increasing sale.

There is a great scarcity of sizes in iron pipe, last week's situation being accentuated. While no advance has yet been made in this line, it may be expected at any time now. The manufacturers are making no concessions, and it is impossible to add to orders now booked. This is a strong indication of approaching advances.

Pig lead has reached a still higher figure during this week, but as yet this has not affected lead pipe or solder.

Range Boilers—No change in prices has yet occurred, but the tendency is decidedly upward. The big manufacturers will immediately advance prices on boiler plates, according to present indications, and the effect will probably be seen shortly, on range boilers. We quote: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—No change is recorded, although pig has taken another jump. We are quoting: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe—Manufacturers are showing a disposition to refuse extension of orders for future delivery. Some sizes are already decidedly scarce, and it is expected that an advance will be shown very soon. Our quotations are: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe, 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings— Business is keeipng in the splendid condition evident for several months past. There are no new features and our prices are unchanged. Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder— Lead is higher again this week, and tin is also firmer, conditions which tend to create interest in solder. We are still quoting: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 20, 1905.

A BIG slash in iron pipe is the talk of the trade in Toronto this week. For some reason the various houses commenced slashing prices last Saturday, some quoting 3 per cent. less than former figures, while others cut their prices 5 per cent. An effort is being made to bring about a steady market again, but at present the situation is somewhat demoralized. The cut coming at this time when prices of iron are higher than at any time this year is most peculiar. An advance had been expected, so that the reduction came as a surprise to most of the buyers and they lost no time in taking advantage of the differences amongst the supply houses. The explanation most generally accepted is that one of the jobbers had a very large stock on hand and was not getting the business he expected, so in order to dispose of his stock he commenced cutting and the other houses had to meet the new figures. The demand for iron pipe at this time is very heavy as heating contracts are being booked in large numbers. Had the cut come, therefore, at the end of the season rather than in the middle of it, the situation would not have been so surprising. Iron pipe fittings have of course been effected by the lower prices for iron pipe, but the cut has not been so general in this line.

Business in plumbing supplies continues very brisk and the demand for enamelled ware is particularly heavy, the Canadian manufacturers being favored with all the business they can handle. The call for lead pipe is also much greater than at this time last year with the exception of iron pipe and fittings prices continue the same.

Lead Pipe—Prices are very firm and an advance is looked for shortly. Our quotations are as follows: Lead 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Demand is active with producers keeping well up to their orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—An open market on iron pipe has caused a big demand for fittings and prices have not been held to firmly. The cutting has not been so general, however, as on iron pipe. We quote as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers— Increasing business is reported owing to the completion of building contracts. The discount continues at 15 per cent.

Galvanized Iron Range Boilers—Trade is quite brisk and prices are strong. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—Instead of the expected advance on iron pipe owing to the high price of raw material an open market has resulted from the price cutting of one of the large houses. Discounts of from 3 to 5 per cent. have been given off list figures, and a very large trade has been done at the lower prices. We quote as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9.00; 2 1-2 inch, $15.75; 3 inch, $30.50; galvanized 1-4 inch $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Firmness in the lead and tin markets keeps solder quotations very strong. Business being done is heavy. We quote: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware—The heavy demand for some lines has caused a scarcity, but on the whole, the manufacturers of Canadian ware have kept well up to the demand. Prices continue un-

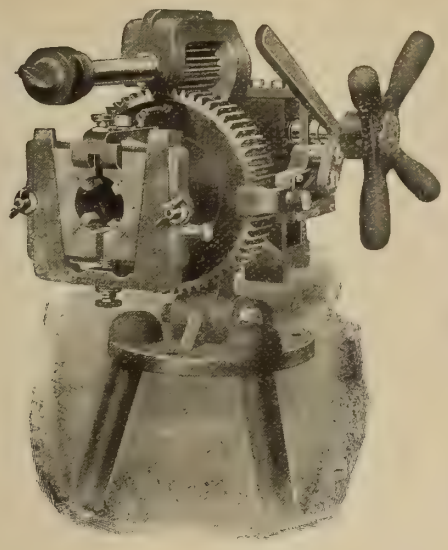
RAMSAY'S ALUMINUM PAINT

The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

Ramsay's Aluminum is right Aluminum.

A. RAMSAY & SON COMPANY

Est. 1842 MONTREAL PAINT MAKERS



½"—2"

"Solid Adjustable" Die Machine

Ask for Catalog J.

More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

Simplicity and Durability.

The Borden Company

16 Sheppard St., TORONTO, CAN.

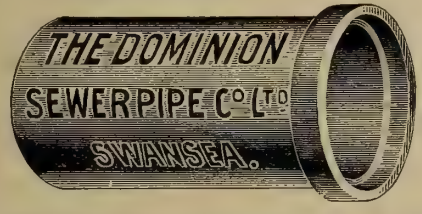
Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea,

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

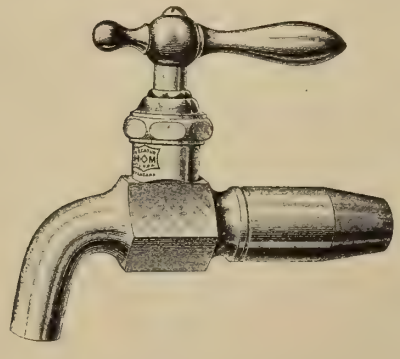
in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

MUELLER FULLER WORK

STANDARD GRADE BIBB



One of the most tedious operations in reassembling fuller bibbs having wick packing, and the hardest to do right, is putting on the packing.

The packing in Mueller Fuller Bibbs is a completely formed piece of rubber composition with a lubricated cloth insertion and slips over the stem just like a washer. The operation is quick and it can't be done wrong.

Muller Fuller Bibbs are made in plain and hose patterns and with tail pieces for all styles of pipe connections.

Each bibb bears the Mueller trade mark and is *unconditionally guaranteed*.

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

changed. We quote as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50; special, $15.50; 3 inch rim, first quality, $18; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality, $19; special, $17; 3 inch rim, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.00.

PROGRESS OF ELECTRIC HEATING.

OUR company have been paying considerable attention to this branch of the business for some time but did not do it systematically. A year ago we possibly had upon our system a dozen flat-irons in residences. About that time we began a campaign for the introduction of a flat-iron as a necessity rather than as a luxury, with the result that we have on the system to-day more than 600 irons consuming possibly seventy-five to ninety cents each, and in our case, being a water-power company, adding absolutely nothing to the expense except office expenses we have introduced these irons in laundries, supplying about eight laundries, the installation varying from fifteen to forty irons. We have displaced gas-irons in a town where gas is sold at ninety cents a thousand cubic feet upon a basis of three cents for the electricity. We find that three cents for electricity in an ordinary flat-iron is equivalent to about $1 a thousand, and our experience has taught us that laundries and families or any one else having to do with the particular apparatus will pay from ten to twenty-five per cent. more for convenience, quickness and cleanliness in the use of electricity as against ironing by any other method.

We have also—and I regret to say that I have not had time to tabulate this particular investigation—for a year past been experimenting with complete kitchen outfits in one of our towns, selling the current for this particular outfit at four cents per kilowatt-hour, with the distinct understanding that the family was to keep a daily record of what they cooked, how long it took to do it, and to read their meter before and after each piece of work, so that this, I take it, will be a somewhat valuable record for this association to have when the results of the experiment are tabulated. We find that the particular family which was given this advantage for the purpose set forth is satisfied with the result, and will from now on continue using this apparatus as against gas which it can buy at $1.50 per 1,000. The question was raised by one of the local companies as to the possible utility of using electricity in laundries in ironing. It seems to me that the experience of that company must have been particularly unfortunate, because this question has not been raised with any of the laundries upon our system. We have been supplying some of these laundries now for about a year.

We do find that electric irons, electric culinary apparatus, curling irons, and those small things which pay anywhere from twenty-five cents to fifty cents or a dollar a month to the central station company can be successfully introduced, but can only be pushed by personal solicitation. We engaged a woman who knew of the advantage of the apparatus, who said to us that she would go upon our system, and we are in a city where there are three competing companies, but that she would confine her work to our lines and would sell these irons for us upon a margin if we would let her have them at cost. We did that gladly and she introduced a great number of these irons for us. We let a lot of them out on a thirty-day trial, and out of the hundreds put out sixty-five per cent. stuck, and we believe this year our revenue from this sort of service will be increased not less than $10,000 a year without any appreciable expense to us. —A. I. Selig, National Electric Light Association Convention.

PLUMBING AND ELECTRICAL NOTES.

Chadwick Brothers, Hamilton, have erected a new factory and are making a fine line of electrical fixtures.

Messrs. Foley, Lock & Larson, Winnipeg, are installing one of the largest electrical plants west of Toronto in their new building. The work is under the supervision of Ernest S. Harrison and the machinery is to be used in connection with the company's new candy and biscuit factory. The installation includes two 100 horse-power tandem compound engines, manufactured by A. L. Hide & Sons, of Springfield, Ill., two 75 k.w., 250 volt generators and 27 motors. The plant will be one of the largest isolated plants ever placed in Canada.

Messrs. Pell & Co., plumbers, of 192 Queen street east, Toronto, have been awarded judgment by Mr. Justice Magee in the Non-Jury Sittings against the executors of the late Elizabeth Young for $1,204, balance of account.

The Canada Brass Manufacturing Company, London, suffered a loss from fire of $35,000 or $40,000 last Saturday night, the damage to manufactured goods being serious. In addition to the stock destroyed, over 2,000 fine tools were lost in the fire, and every piece of brass goods in the place will have to be rebuffed, owing to the effect of the smoke upon it. The loss, however, is fully covered by insurance.

HEATING ONE-STOREY BUILDINGS

"SO far as their construction is concerned, the simplest of all structures requiring ventilation and heating are one-storey buildings, such as mills, shops and exhibition buildings," says an extract from Treaties on Ventilation and Heating, published by B. F. Sturtevant Co., Boston, Mass. But no other form of building has so large an amount of wall and roof surface per cubic foot of enclosed space, or such high and extended rooms; in fact, such a building, as a rule, forms only a single room. As a consequence the most efficient system is necessary; it is not alone sufficient that the apparatus shall be large, to allow for the excessive heat loss from the building, but, above all, the arrangement of the distributing ducts must be such as to most economically utilize the heat supplied; for underheating at the floor and overheating above is one of the most natural consequences of an imperfect system of distribution. Under such circumstances the apparatus itself is frequently condemned as having insufficient capacity, when the trouble lies entirely in the manner in which the heated air is delivered to the building.

In buildings of this type the principal provision is to be made for the heating, for the occupants are generally separated, and the air supplied for heating will answer all the requirements of ventilation. But it is, nevertheless, necessary that they should be provided with fresh air in sufficient quantity. One of the inherent virtues of this method of heating is that it ensures such supply. As the air provided is generally in excess of that required for ventilation, increased economy can be secured by using over again a portion of the previously heated air. This may be done by arranging dampers or doors so that part of the air entering the heater is drawn from out of doors, and part, or if desirable, the whole, from the room. In fact, in the ordinary manufactory the common practice is to nominally take the entire air supply from within the building. This does not result, as might be supposed, in a total lack of ventilation, for a very considerable amount of outward leakage takes place through the walls and around windows and doors. Sufficient, indeed, to cause a similar inward, but imperceptible, leakage at other points in such quantity as to result in a comparatively frequent change of air within the building.

One of the greatest difficulties in a building of this character is to heat it rapidly in the morning, after it has cooled during the night. No other system can so completely and rapidly meet this requirement as that here presented. When it is desirable the engine may be run slowly all night, and the building maintained at a moderate temperature. The exhaust from the engine being used in the heater, no expense is entailed for motive power.

CANADIAN IRON PIPE.

CANADIAN manufacturers of iron pipe take exception to the statements of the English gentleman, Mr. Walton, member of the Iron and Steel Institute, London, Eng., an interview with whom was reported in Hardware and Metal of October 7th. Mr. Walton stated that "at present there is no pipe over 1-inch butt weld made in Canada." This was certainly a mistake as the Page-Hersey Iron & Tube Company of Guelph are producing all sizes of pipe both black and galvanized at their works in Guelph. The sizes manufactured by them include everything between ¼-inch and 4 inches. Mr. Walton further stated "that all the boiler flues and lap weld pipes came from the United States." The reason for this is because the duty on the former is but 5 per cent. and on the latter 15 per cent. In addition to this all large pipe for mining purposes comes in free of duty.

Mr. Walton's views are liable to create misapprehension and if his announced intention of returning to Canada next spring to establish tube works for the manufacture of iron and steel pipes and tubes is based on the statements made in his interview it is evident that he has not correctly gauged the Canadian situation. There are at present three pipe mills in Canada and they have no difficulty in supplying the demand even when running at two-thirds capacity.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

Ask for the J.C.M. Brand of Canadas

Galvanized—
3 Crown, Black
half-polished—
1 Crown.

APPLY TO First-class makes at low prices.

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

No. 50. Standard Side-Cutting Plier

Utica TOOLS ARE UNEXCELLED in QUALITY
WRITE for "THE GREEN BOOK" of PLIERS and PRICES



Only the genuine bear this mark
UTICA
TRADE MARK

Canadian Office. 215 Coristine Bldg., Montreal
Factory, Utica, N.Y. *UTICA DROP FORGE & TOOL CO., 296 Broadway, New York*

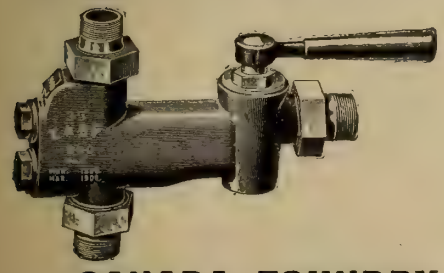
ARE YOU IN NEED OF

SPRINGS?

We make them any shape

Send samples for prices

The WALLACE BARNES CO., BRISTOL, Conn.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.
Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED
HEAD OFFICE AND WORKS: TORONTO, ONT.
District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland.

TIN PLATES

"ELYN" "LYDBROOK" "GRAFTON"

I can supply these famous brands at Lowest prices.

Write for prices and ascertain.

J. A. HENDERSON, Agent for **T. W. & J. WALKER,**
Board of Trade Bldg., MONTREAL. WOLVERHAMPTON.

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO Limited
OTTAWA, ONTARIO

Don't Forget the Name...
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

A PIPE FITTER

In threading pipes, does more hard, exhausting work in an average day than any mechanic in other trades.

Our Pipe Die Reduces the Labor One-Half

Get our die and you will find this statement is not exaggerated.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED
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YEARS YEARS YEARS
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GUARANTEED



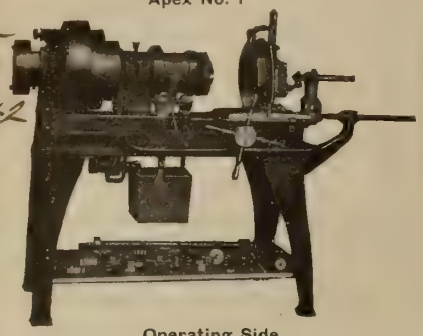
At the Same Price

Isn't it Best to use the Kind that are

GUARANTEED
FOR
5 YEARS 5 YEARS 5
BY
GLAUBER, CLEVELAND, OHIO, U.S.A.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

Capacity of machine from ¼ to 2 inches inclusive. The Pipe Guides for steadying pipe in cutting off are on back of the head and are operated by means of a lever. The Cutting Off Tools are two in number, cutting from two sides of the pipe at the same time. This machine is especially adapted for making nipples.

Catalogue on Request

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Extra Standard

GLOBE VALVES

are of the best quality. They give the best of service and are moderate in price.

Every valve is TESTED, and PACKED, and GUARANTEED.

WRITE FOR CATALOGUE

The KERR ENGINE CO., Limited

Manufacturers

WALKERVILLE - ONTARIO

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Canadian Air Warmer.

JAS. SMART MFG. CO., Brockville, have issued a small folder for distribution by dealers who handle their new Canadian Air Warmer for hard, soft, Souris or lignite coal, coke or wood. Sectional views of the Air Warmer are given illustrating the distinctive features of the apparatus, while a brief description of its workings is given with the cuts. Dealers who have not yet looked into the advantage of this line should send for a copy of the folder so that they may be able to introduce one or more in their district to be tested alongside other makes. If Hardware and Metal is mentioned samples of the folder will be sent to any address.

Never-Slip Clutches.

Ruger Manufacturing Company, Buffalo, N.Y., have sent Hardware and Metal a copy of their small booklet describing their new Never-Slip Clutch and will forward a copy of the booklet to any reader who mentions this paper in a letter of inquiry. Neat illustrations are given in addition to the reading matter.

Sweep Smelting.

A blotter and circular has been supplied Hardware and Metal by the Canada Smelting and Refining Works, London. The circular gives a description of the company's plant where all classes of metals collected in the sweepings of jewelry shops, etc., brass ashes, slag and other scrap metal are refined. The company buy in large quantities and will send further information to any inquirer who mentions this paper.

Independent Gas Heaters.

Independent Manufacturing Company, Cleveland, Ohio, have issued a handsome catalogue of twenty-four pages and cover, illustrating their "Independent" Gas Heaters, many styles being illustrated in the book. Natural gas is now being used in very large quantities in various parts of Canada, both for heating and cooking, and many American manufacturers are finding the Canadian trade worth reaching out for. The Independent line has for its distinct feature that of top radiation, the air being heated directly over the burner and transferred to the top through air tubes. The catalogue is one worth sending for, particularly at this time when natural gas is being developed in so many sections of the country. Any reader who mentions Hardware and Metal can secure a copy on request.

Hardware Shelving.

The J. D. Warren Manufacturing Company, Chicago, have just printed illustrations of their most recent designed cabinets and bases of the Warren hardware shelving, also including illustrations of the cabinets exhibited at the St. Louis World's Fair, many of which are printed in four colors, and in variety and numbers they furnish a most extensive assortment. Among them are a number of combinations of 25½ feet in length, arranged as their experience and judgment suggest, costing from $3 per lineal foot and up. They also have issued a neatly arranged and finely printed net price list of over 300 patterns of their own designs and manufacture of store fixings, which will be forwarded to any asking for same who mention Hardware & Metal.

Sterling Ranges.

The Ottawa Hardware Co., 105 Bank street, Ottawa, have sent us a booklet which presents in very readable form the virtue of the Sterling ranges. Monarch steel range, and Enterprise hot blast heaters. These lines are most seasonable at the present time, and the trade should not be slow to look into the merits of Sterling, Monarch and Enterprise goods before deciding on their Winter's stock. Mention Hardware and Metal when requesting this catalogue.

J. P. Clabrough & Johnson.

The latest catalogue of this well-known English firm has just reached us, in the form of a sixty-four page book, giving complete data and price list of their sporting and military guns, rifles, revolvers, etc. Extra heavy paper is used in the catalogue, thus ensuring attractive typography. The illustrations are copious, all showing the peculiar advantages of the guns made by this firm, which was formerly known as J. P. Clabrough Bros. Canadian dealers who wish to know more about these guns would do well to mention Hardware and Metal and ask for catalogue. The firm's address is Price street, St. Mary's, Birmingham, England.

Pointed Sharpness.

Under this head J. Wiss & Sons' Co., Newark, N.J., are publishing a nicely designed booklet of sixteen pages and cover. On the front cover is embossed the name of the booklet, and a shapely hand pointing out a pair of Wiss scissors. The various points of merit in a good pair of shears or scissors are carefully explained, and the processes necessary to turn out Wiss goods are described in plain language, illustrated by halftones showing men engaged in the detail work of the factory, in all the stages from welding to finishing. Send for a copy of this booklet, and mention that you saw notice of it in Hardware and Metal.

VANDERBILT COULDN'T SEE IT.

When George Westinghouse, the Pittsburg inventor, had completed his air-brake, he submitted it to Commodore Vanderbilt, with the object of installing it on the commodore's railroads. He was only 23. He was admitted to the great railroad manager's office and permitted to explain his mission while the commodore opened his mail. Occasionally Mr. Vanderbilt uttered a grunt merely to signify that he was listening to the enthusiastic recital. When the inventor paused, Vanderbilt was ready with his decision.

"Young man," he said, "do I understand that you propose to stop a train of cars with wind?"

Westinghouse admitted that was the fact.

"Well, young man, I have no time to bother with d—— fools," declared the commodore.—American Illustrated Magazine.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. *Head Office: 98 King St. W., TORONTO*



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

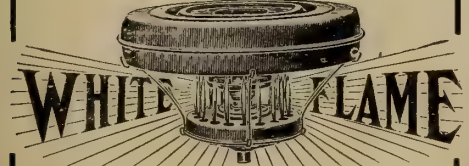
Fall and Winter Sellers

Time for Trade to

ORDER NOW

to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug, 12, page 59; Aug. 19, page 58; Sept. 30, page 72, or send for Catalogue.

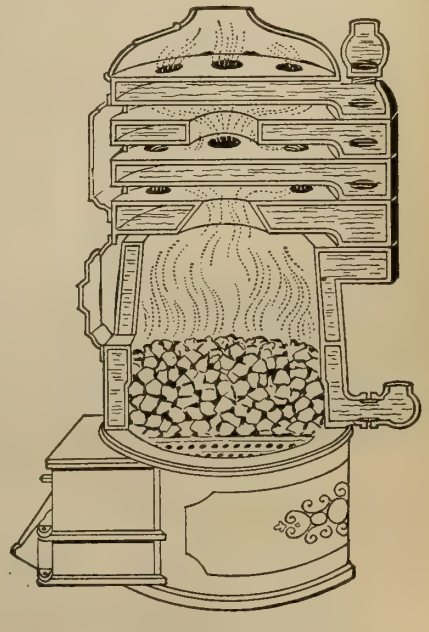
WALTER GROSE, MONTREAL — Sales Agent for the Dominion

Everybody Delighted

Dealers who have installed Oxford Heating Systems are unanimous in their reports of all round satisfaction.

Architects and users alike praise the results, and the dealer is, consequently, enjoying the thanks of all parties interested.

Our Oxford ("B" series) Boiler has made a decided hit. The practical application in combination of some simple scientific facts, hitherto overlooked in Heater construction, has in the Oxford Boiler produced a most powerful and efficient Heating Apparatus.



It has many strong points of superiority, and its universal success is the best evidence of the truth of our claims for it. You can confidently say to your customers "Get it and you'll be comfortable."

Oxford Steam and Hot Water Radiators are a fitting complement to Oxford Boilers, and these, in combination, assure Beauty with Economy, Efficiency and Consequent Comfort.

"The Gurney-Oxford Book of Steam and Hot Water Heating Apparatus" explains many other points worth knowing. Send for it.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 125
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE
768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED
WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.
Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND
Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM
HERBERT RODGERS & CO.
Saracen House, Snow Hill, London, Eng.
Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO. LIMITED.
TORONTO, ONT.

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng
TINPLATES
In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.
R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

Business Changes

Ontario.

Hugh Warren, blacksmith, Marmora, loss by fire.

C. Sproul, blacksmith, etc., Lucan, advertising business for sale.

John Oldfin, plumber, Kingston, assigned to Joseph F. Swift.

The assets of D. A. Baker, tinsmith, etc., Hawkesbury, are to be sold.

Edward Dearing, blacksmith, Marysville, advertising business for sale.

F. J. Watts, hardware merchant, Stratton, has sold out to John McTague.

Canada Brass & Supply Co., London, have been burnt out by fire but were largely covered by insurance.

The stock of J. D. Mills, hardware merchant, Prescott, advertised to be sold by auction on the 25th inst.

W. S. Piper, hardware, stoves and furniture, Fort William, advertising furniture and undertaking business for sale.

A. & G. E. Andrews, hardware merchants, Douglas, have dissolved partnership and the business is being carried on by A. Andrews.

Quebec.

The assets of J. H. Lacroix, hardware merchant, Shawinigan Falls, are to be sold.

The assets of J. H. Daunais, hardware and grocer merchant, Montcalm, are to be sold.

Emile Audet, general store and tinsmith, St. Ephrem de Tring, assets to be sold on the 26th inst.

O. Desjardins, general store and blacksmith, Otter Lake, is offering to compromise at 35c on the dollar.

Western Canada.

E. K. Strachan & Co., plumbers, Nelson, dissolved.

A. G. Clark, agricultural implements, Grand View, has sold out to Challener & Fitzgerald.

J. D. Durie, hardware merchant, Atlin, assigned to W. Pollard-Grant, stock advertised for sale.

The A. M. Forbes Co., hardware, Vancouver, have been succeeded by the Forbes Hardware Co.

THE JOKE ON DUMAS.

Dumas "pere," who was proud of the prices he received for his work, was once boasting of the fact.

"Beyond a doubt," he remarked, "I am the best paid of living men of letters; I receive 30 sous a line."

"Indeed, monsieur!" said a bystander. "I have never worked for less than £5,000 a line. What do you think of that?"

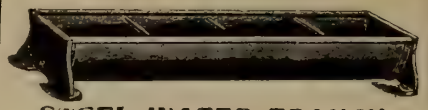
"You are joking," responded Dumas, in irritation.

"Not at all."

"For what do you receive such rates per line?"

"For constructing railways," was the answer.—Harper's Weekly.

HARDWARE MEN: Our



STEEL WATER TROUGH
is a seller—something the average farmer has been waiting for,
We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.
We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.
It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co.
TWEED, Ontario Limited

GET PRICES FOR
GILBERTSON'S
COMET
Brand
GALVANIZED FLAT SHEETS
for any purpose where the best is needed. Wide awake jobbers handle this brand. They are well galvanized, true to gauge and especially soft for working up purposes. Every sheet bears the name "Gilbertson." That is a guarantee.
MAKERS:
W. GILBERTSON & CO., Limited.
PONTARDAWE, SOUTH WALES.

Hardware Store Business Methods
Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.
The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.
Cloth bound, Price, postpaid $1.00

The American Hardware Store
A Manual of Approved Methods of Arranging and Displaying Hardware.
By R. R. WILLIAMS, Hardware Editor of the IRON AGE.
This book is descriptive of the best methods of accommodating and displaying the large variety of goods which are carried in stock in representative American and Canadian hardware stores. Copiously illustrated, and worth many times its cost to every progressive hardware dealer.
Cloth bound, 6¾ x 9¼. 576 pages. Price, postpaid. $3.00

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TECHNICAL BOOK DEPARTMENT,
MacLEAN PUBLISHING CO. LIMITED
TORONTO

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

CATALOGUES TO TRADE ON APPLICATION

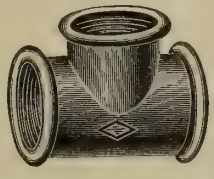
CANADIAN ALUMINUM WORKS, LIMITED

CHAMBLY CANTON, QUE.

H. C. EADIE, Montreal Sales Office, 22 St. John St., MONTREAL







DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

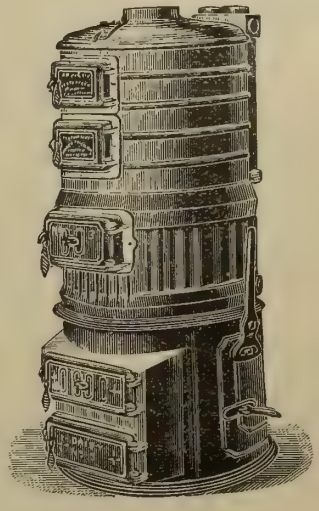
Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL

Try them a while, You can't lose.

Your business needs just such goods as we can supply, because we manufacture with an eye to "wants." Result : Our

"BLACK DIAMOND"

SHEATHING
TARRED FELTS

READY ROOFING
WRAPPING PAPER

BUILDING PAPER

is ordered by your competitor and many another hardwareman. You should make a test of our "Cyclone" and "Joliette" brands of SHEATHING.

WE WILL SEND FULL PARTICULARS.

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Oct. 20, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. 14x60, " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 87½	1 95
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality, best warranted	....	0 18
"I" " warranted	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 70	3 90
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 45	3 65
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10½ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
" ¼ " "		....	5 60
" 5-16 " "		....	4 45
" ⅜ " "		....	3 85
" 7-16 " "		....	3 70
" ½ " "		....	3 55
" 9-16 " "		....	3 45
" ⅝ " "		....	3 35
" ¾ " "		....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	
Jack chain, brass, single and double, discount 40 p.c.	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	....	21 00
Plain, 14 oz.	....	22 00
Tinned copper sheet	....	24 00
Planished	....	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	....	0 22
" 35 to 45 " "	....	0 21
" 50-lb. and above "	....	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 25
Part casks	....	7 50

LEAD.

Imported Pig, per 100 lb.	....	4 00
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06½
Sheets, 3 to 6 lb. "	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality		Special
4 and 4½ ft. 3 in. rolled rim			$18 00	16 00
5 feet			19 00	17 00
5½ "		"	20 50	18 50
6 "		"	23 25	21 25
Plate E II				
4½ feet	2½ in.		16 75	14 75
5 "	2½ "		17 50	15 50
5½ "	2½ "		19 00	17 00
Plate 123 E, lavatories		1st quality		8 90
" 123 E, "		2nd "		7 50
" 127 E, "		1st "		5 70
" 127 E, "		2nd "		4 80
" 128 E, "		1st "		5 60
" 128 E, "		2nd "		4 70
" 129 E, "		1st "		5 40
" 129 E, "		2nd "		4 50
Sinks 18 x 30 in flat rim, A quality				2 45
" " " " B "				2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	....

Galvanized pipe—		
¼ inch	....	2 86
⅜ "	....	2 89
½ "	....	3 14
¾ "	....	4 02
1 "	....	5 78
1¼ "	....	7 84
1½ "	....	9 46
2 "	....	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 "	"	1 75
No. 7 Fuller's	"	2 10
No. 4½ "	"	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	28.00	34.00
120	34.00	45.00
144		55.00

CLAUSS BRAND HOUSEHOLD SHEARS

FULLY WARRANTED

The best Shear on the market for general house use, being an exceptionally fine cutting and wearing Shear.

Manufactured by our secret process.



ASK FOR DISCOUNTS

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	..	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07½
No. 1	....	0 06½
No. 2	....	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case. from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—

	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00

" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	15 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discoun 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PU PS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in.	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5	"
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net, 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley s discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	9 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		0 22	0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	....	4 50
12 in. up	"	....	3 25
Spring, No. 20, per gro. pairs		....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000		0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval / Head
M.R.M. Co. brand, 55 per cent.
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.		2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	....	7 80
" "	"	....	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

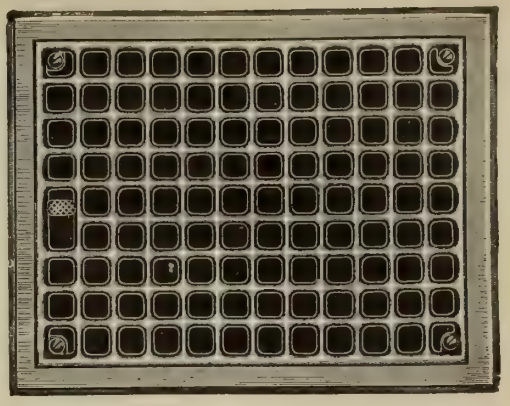
Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.

HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.



PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 10½
Pure Manilla		0 15
"British" Manilla.....		0 11½
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅛ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel. discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	9 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent..... .....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
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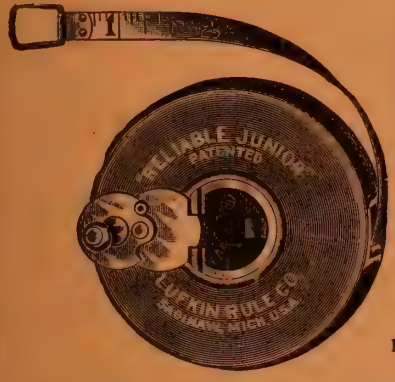
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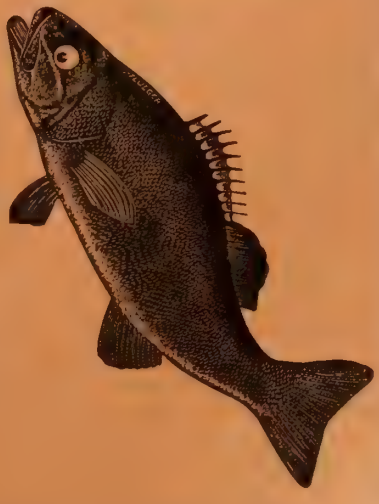
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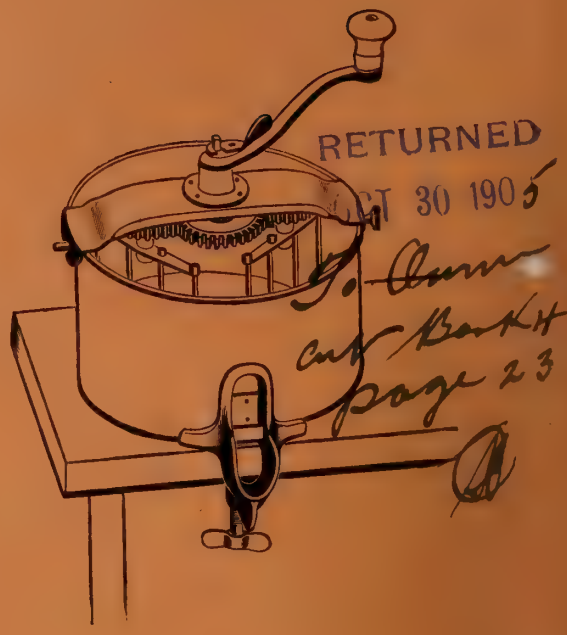
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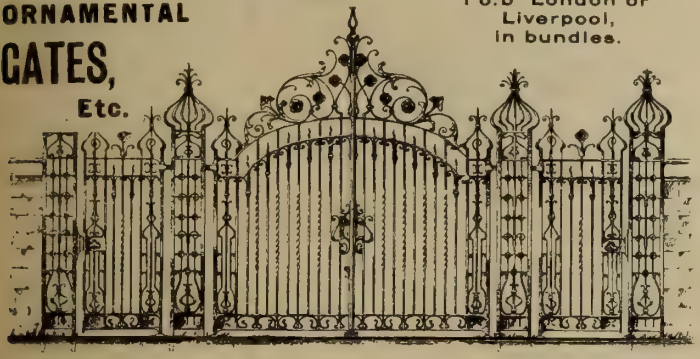


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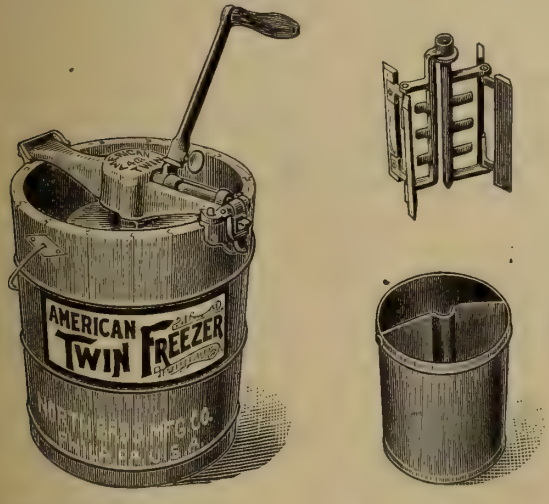
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THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.

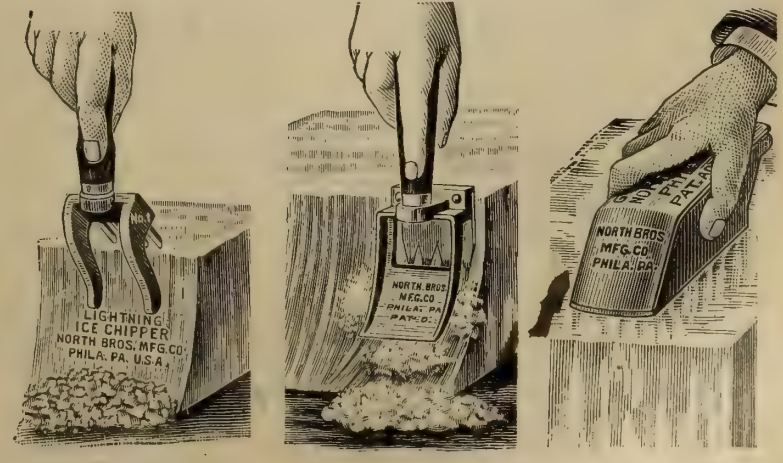
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Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

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Self-Loading Magazine



Mauser. For 7.63 M/M cartridges with solid nickel or soft nose bullets.

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Increased accuracy and range.
The Holster protects the Pistol from rust and dust.

This pistol is not a toy, but is made for heavy service.

It is gun metal finish throughout, with a walnut stock and holster, and has a very attractive as well as useful look.

"The inventor terms it a self-loader, and the title is so far justified that it is almost as quick to charge the magazine with the 10 cartridges as it is to load one of the chambers of a revolver."

Lt.-Col. K. M. Foss, in the "PIONEER OF INDIA"

Top cut shows cartridges in patent clip, ready for loading.

WRITE FOR PRICES

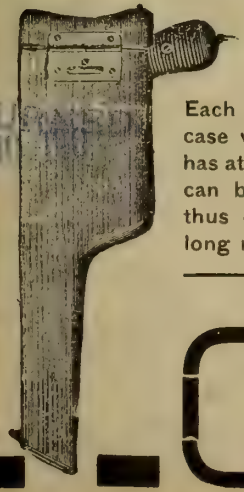
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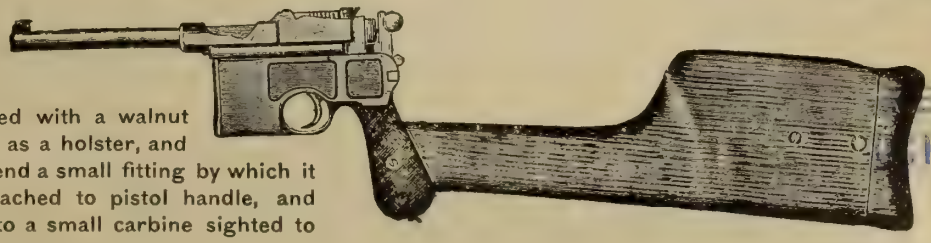
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Each pistol is fitted with a walnut case which serves as a holster, and has at the narrow end a small fitting by which it can be readily attached to pistol handle, and thus converted into a small carbine sighted to long ranges.

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OWEN SOUND WIRE FENCE CO., Limited
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Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



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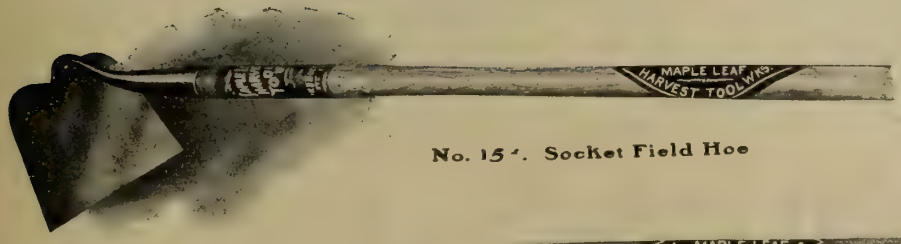
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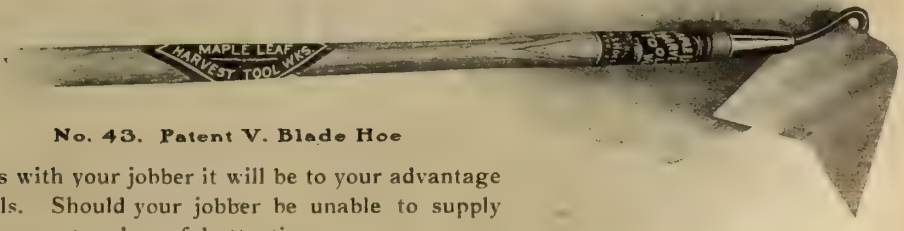
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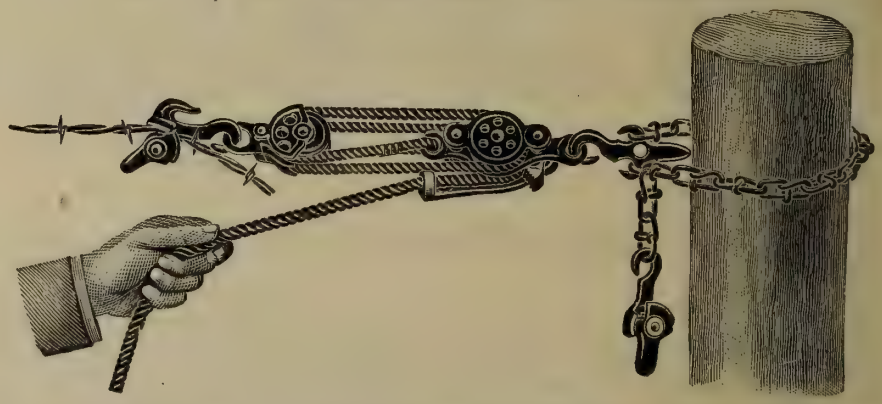
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OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

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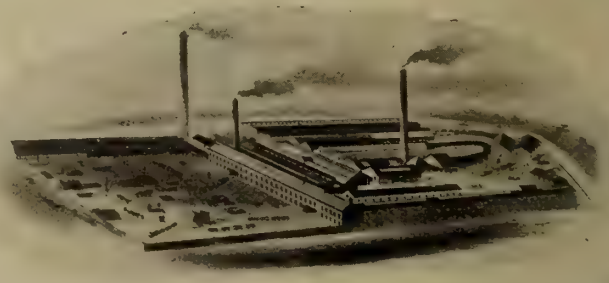
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GALVANIZED SHEETS

IN ENGLAND

One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal

The "Universal" Bread Maker

mixes and kneads Bread in three minutes. The hands do not touch the dough. Simple, Easy, Sanitary. Does away with hand kneading and Makes Perfect Bread.



Gold Medal St. Louis 1904

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What causes the popularity of "Universal" goods?

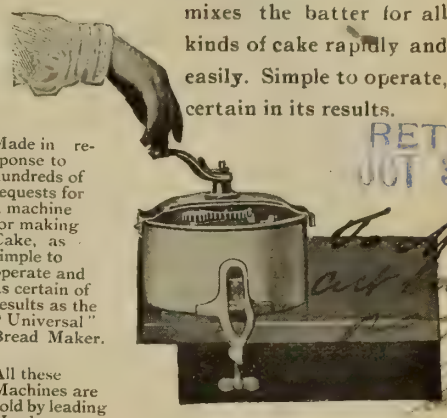
Mechanical perfection—unquestioned superiority in operation. Liberally advertised by the makers, every woman knows of their merits.

Display stands, cook books and electros furnished free.

The retail trade supplied by

The "Universal" Cake Maker

mixes the batter for all kinds of cake rapidly and easily. Simple to operate, certain in its results.



Made in response to hundreds of requests for a machine for making Cake, as simple to operate and as certain of results as the "Universal" Bread Maker.

All these Machines are sold by leading Hardware Dealers.

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Wholesale Hardware and Iron Merchants,

F. & W.

FOUNDED 1809. MONTREAL, CANADA

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
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couldn't secure you more fully.

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FULLY WARRANTED

If found defective upon reasonable trial the purchaser may return it to the Ironmonger from whom he bought it and who is hereby authorized to replace it free of charge or to refund the price paid.

If returned, this label, properly filled in on the reserve side, must be attached to the saw.

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To every hand saw we send out is attached a label corresponding to this.

You assume no risk in selling our saws—your customer takes none in buying them.

We stand behind you and guarantee satisfaction.

Couldn't have anything fairer than that could you?

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SHAFT GONGS



No. 32.—Four cast bells, nickel plated.



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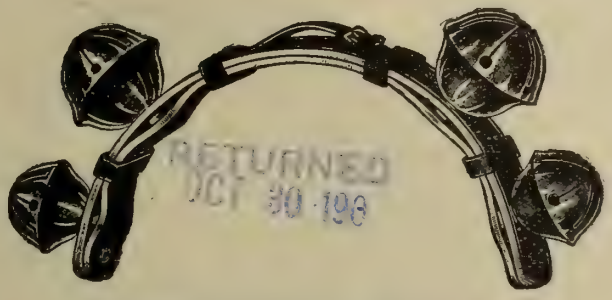


SADDLE GONGS

No. 7.—Stamped brass, nickel plated.



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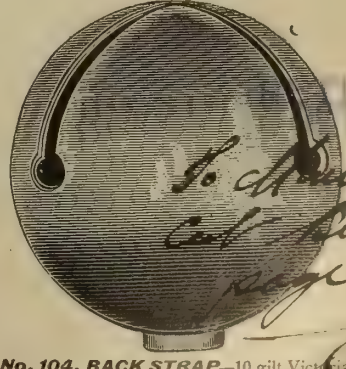
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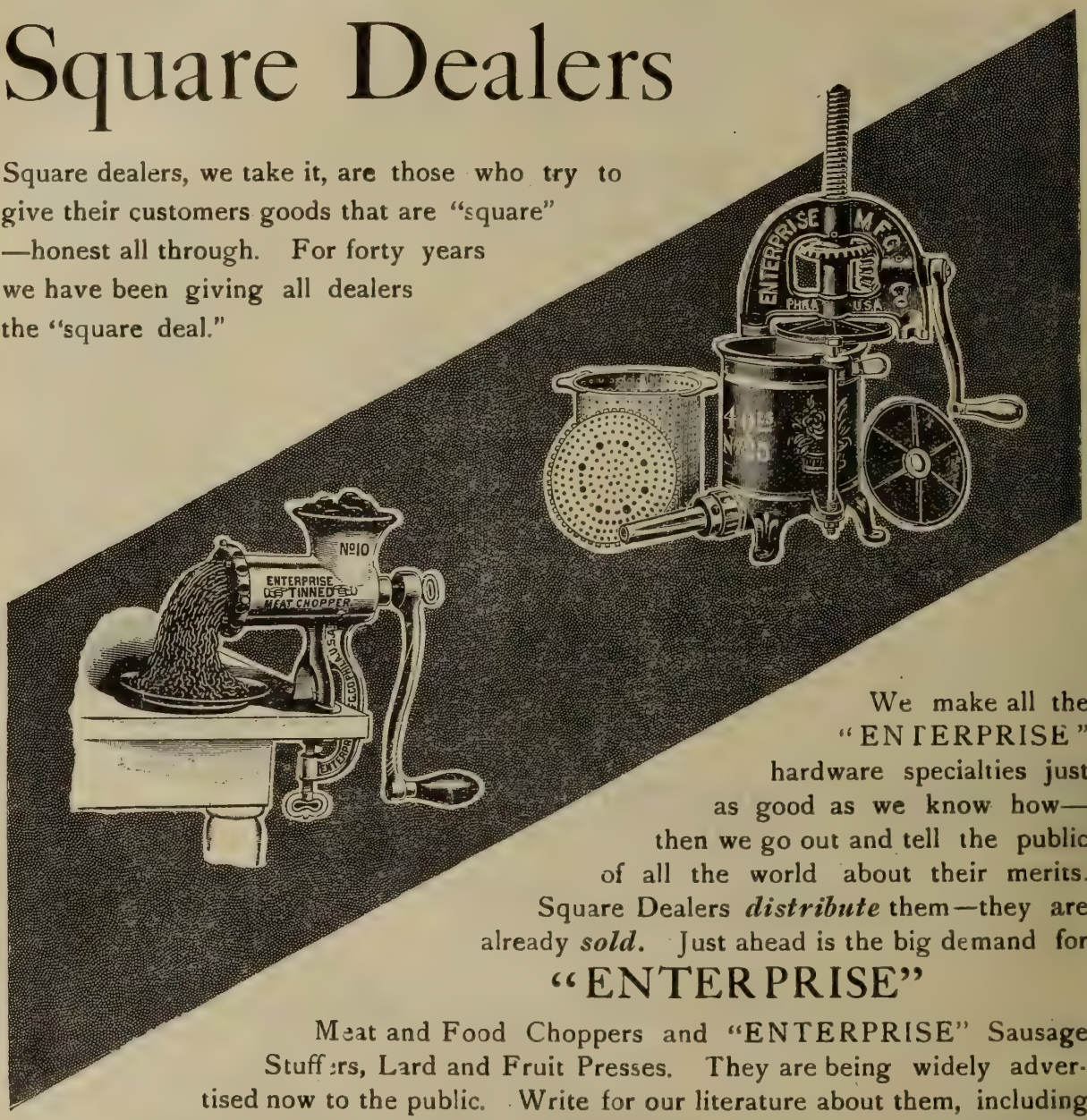
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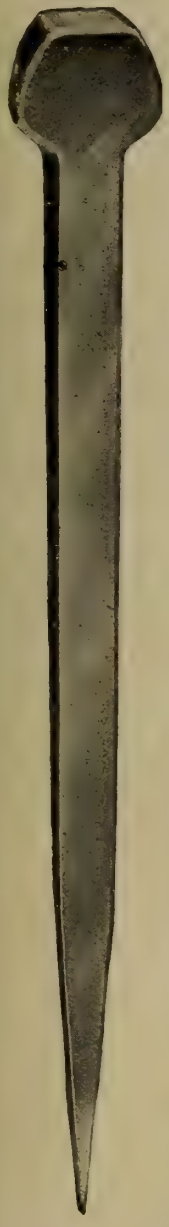
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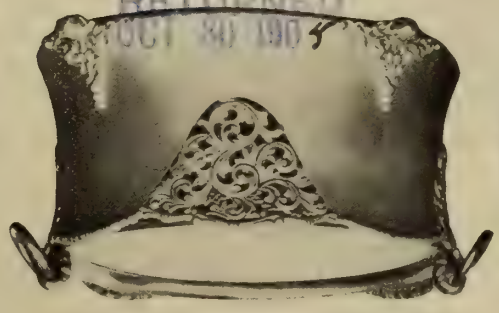
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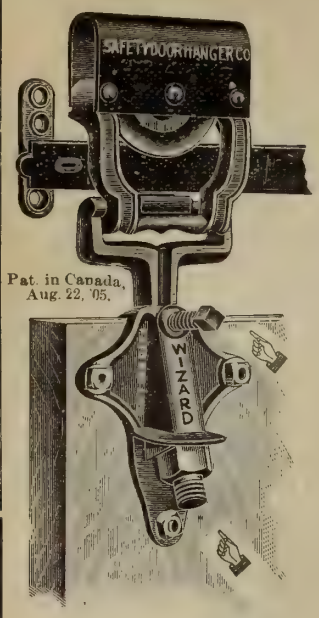
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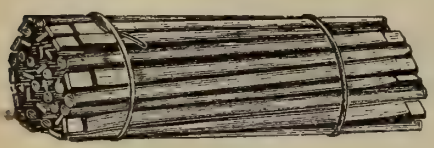
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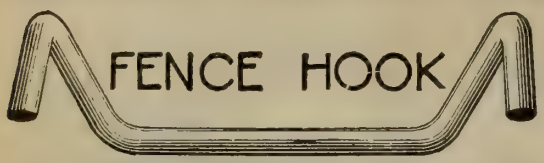
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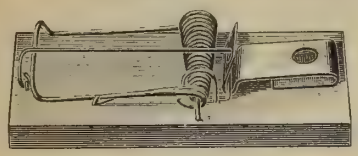
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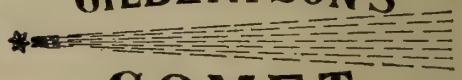
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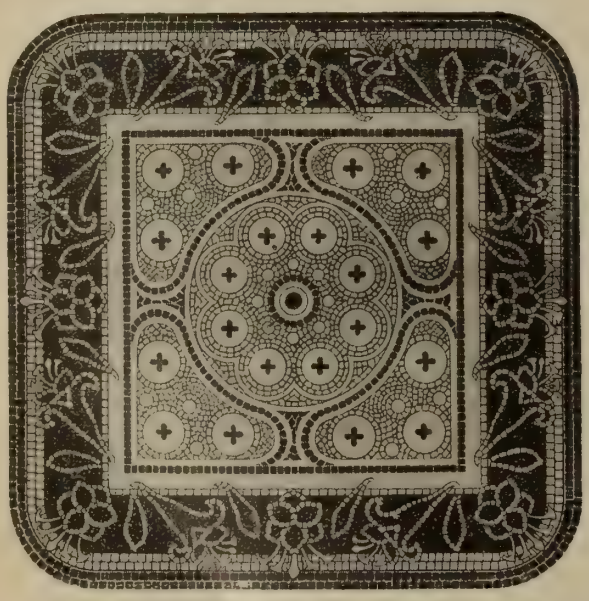
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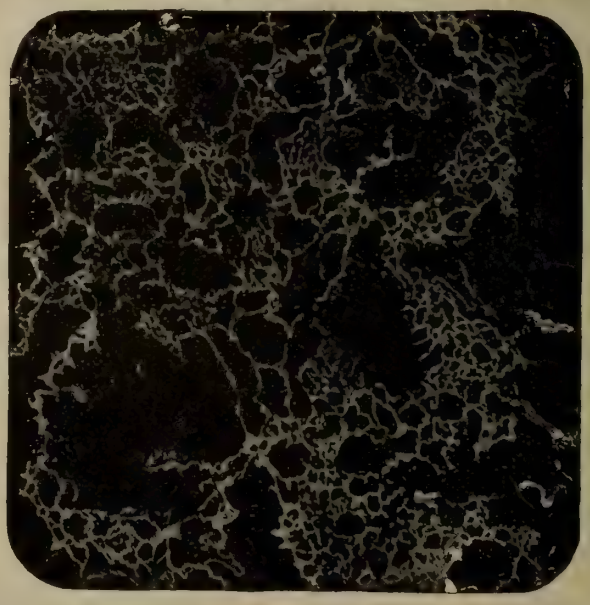
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THE "BUMPER" CROP AND THE WESTERN TRADE

IN Western Canada during the weeks and months that constitute the critical period in the growth of the wheat crop the weather is by no means a mere commonplace subject of polite conversation. So much depends upon it that it is one of the most important topics and it is discussed in Winnipeg, not casually but seriously—on the street, in the business office, at the club, in the home, and always in its bearing upon the season's wheat crop.

"Our crops get on my nerves," remarked a prominent business man in Winnipeg to a representative of this paper one day in August. "Of course we can't get along without crops in this country but I wish I could forget about that wheat crop for a few hours each day. I can think of nothing else but wheat and rust scares. Every time the sky is cloudy during these days when we want bright sunshine I think of the wheat, and I begin to calculate the dangers of rust and the probable loss expressed in dollars and cents just as in the Spring reporters on the daily papers give full scope to their imaginations in calculating how many million dollars each rainfall was worth to the west." This man is not in the grain business, he is not a speculator in grain. The chances are that in all his life he has never bought or grown a bushel of wheat, but he is a wholesale man with large investments in a big business, with a great amount staked upon the prosperity of the country and he knows the importance to business men in all parts of Canada, east as well as west, of a "bumper" wheat crop in 1905.

Splendid Crop Reports.

Interest was by no means confined to the west. Eastern newspapers devoted almost as much space to "crop stories" as did the Winnipeg papers. Winnipeg newspapermen who act as correspondents for Toronto and Montreal dailies were never at a loss for news to send east during July and August. Crop stories, news and interviews were always acceptable and the papers paid the telegraph tolls without a murmur. And the east had good reason to be interested this year, for the Montreal and Toronto business houses had staked very much upon the success of the crop. Their accounts in the west are large and they are looking for payment from the proceeds of the wheat sales. Moreover, it is in the west that all big Canadian wholesale and manufacturing firms find a field for the expansion of their trade. A prosperous west means a ready-market during the coming year for commodities of all kinds.

Crop estimates differ according to the temperament, optimistic or pessimistic, of the man who estimates, but there is something in the bracing western atmosphere that breeds confidence in the present and future of the country and the optimists have a large majority with many country polling sub-divisions yet to hear from. Probably the optimists have had so much their own way in the discussion that the actual figures will be disappointing, but if so it will be because the over-confident predictions have led the general public to expect too much.

It will be remembered that the over-confident estimates of the population of Winnipeg by real estate men in that city led to a general impression that there were at least 100,000 people in Manitoba's capital. Hence there was keen disappointment a few months ago when it was found that the actual population is, in round numbers, 80,000—foolish disappointment when it is remembered that the population has actually doubled in four years.

Some Close Estimates.

But whether the crop estimates have or have not been too optimistic it is certain that the 1905 wheat crop is by very much the largest on record. Conditions have been unusually favorable and the area under cultivation is larger than ever before.

In an interview about two months ago Hon. R. P. Roblin, Premier of Manitoba and Minister of Agriculture, stated that he was willing to go on record with an estimate of 100,000,000 bushels. His position at the head of the Department of Agriculture in one of the three prairie wheat-growing Provinces gives Premier Roblin some exceptional opportunities to form an accurate idea of the size of the crop.

The Manitoba Free Press each year sends out during the critical period in the growth of the crop a corps of special staff correspondents and from their reports of conditions in all the wheat-growing districts of the west an estimate of the total crop is made.

If the Free Press correspondents err in the preparation of their reports it is not on the side of over-confidence. Their stories of rust last August were vigorously denied from certain districts which considered themselves maligned and in many instances there would seem to be good ground for the complaints. Certain it is that damage by rust this year has been infinitesimal.

Last year the Free Press estimate of the total crop was probably the closest made by any paper, consequently the estimate of that journal this year is entitled to due respect, and when it places the 1905 wheat crop at 90,000,000 bushels most people are prepared to believe that Premier Roblin's estimate of 100,000,000 bushels may be very nearly correct.

With unpardonable lack of respect for Professor Mavor the Swan River and other districts which in his report he classes as unfit for cultivation have produced large quantities of wheat, in many places the average production being 25 and 30 bushels to the acre.

Now what does this mean to Canada? It means that during the next few weeks and months perhaps $70,000,000 will be paid to the western farmers for the 1905 wheat crop. The banks have been making every effort to provide the necessary cash and the railways the necessary rolling stock to handle this immense crop as quickly as possible. Thanks to our elastic and fluid branch bank system the banks have had little trouble and from the lack of complaints it would seem that the railways are satisfying the exacting demands of the impatient grain grower.

There was a time in the infancy of the C.N.R. and when the C.P.R. in the west was under less efficient management, when the western grain growers were loud in their complaints that the railways could not supply sufficient cars to handle the grain. But since the C.N.R. lines have been extended and the C.P.R. in the west has been under the capable management of Vice-President Whyte, a western man in whom all the west has absolute confidence, these complaints are seldom heard. The task is greater this year than ever before, but complaints are conspicuous mainly by the infrequency with which they are heard.

All Canada is interested to know what proportion of the crop the railways can handle before the close of lake navigation, for all Canada is interested in knowing the approximate amount of money the western farmer will have immediately available. How will he dispose of this ready money? Will he buy more land, pianos or automobiles with his ready cash, or will he pay his debts first and make his investments for profit or pleasure with the balance? This is the question in which all business men are interested and they all agree that the debts must be paid first.

The Obligations of the West.

Not in years has so much depended on a single crop. The obligations of the west are heavy; the country storekeeper has been carrying his farmer customers, the wholesalers and manufacturers have been carrying the retailer and they themselves have been supported by the banks. All are interested in seeing debts paid before any further land speculation is indulged in. The crop is large enough to pay off these debts and leave a surplus for investment. The wholesalers and retailers are determined to collect their outstanding accounts and if they can do so there is no doubt that the immediate net result of the 1905 "bumper" crop will be to place the prosperity of Western Canada upon a solid foundation.

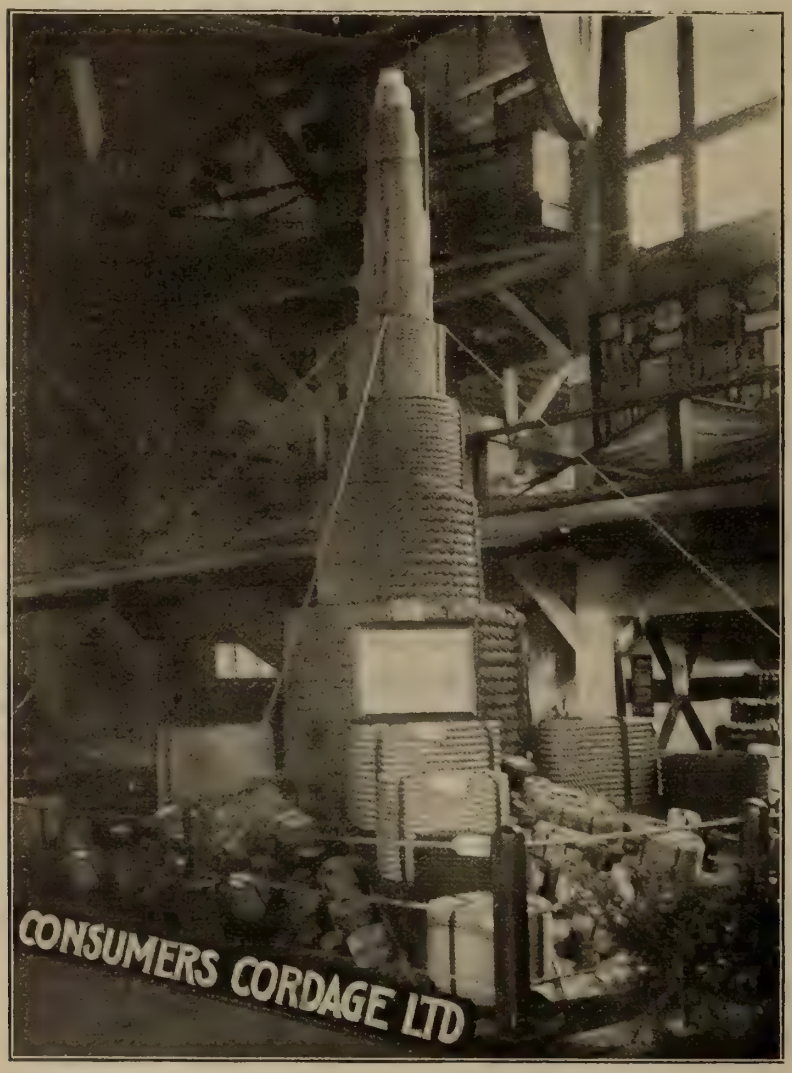
The 1905 crop is large enough to pay all outstanding store bills and leave a handsome surplus in the pockets of the consuming public of the west. There is, therefore, an excellent market in the new country west of the Great Lakes for manufactured products of all kinds. Canadian, British and foreign manufacturers are well advised in looking to Western Canada for the expansion of their trade. The west wants the best that is made and in a prosperous year it is able to pay cash for what it receives. The encouragement of the spirit of enterprise among manufacturers and merchants in the east is greatly to be desired and cannot fail to meet with success and in the very near future reap

the richest rewards when the population and buying powers of the west are much greater than they are now. The advantages of "getting in on the ground floor" are obvious and they need not be elaborated upon. He is a rash man who would attempt now to set bounds to the development of the Canadian Northwest.

Probably no man is better qualified to judge of the possibilities of the Northwest than Dr. Saunders, the Director of Experimental Farms. In his well-known pamphlet on "Wheat Growing in Canada," he says, under the heading "Reasonable Prophecy":

"The total imports of wheat and flour into Great Britain in 1902 were equivalent in all to about 200,000,000 bushels of wheat. Were one-fourth of the land said to be suitable for cultivation in Manitoba and the three provisional Territories under crop with wheat annually, and the average production equal to that of Manitoba for the past ten years, the total crop would be over 812,000,000 bushels. This would be ample to supply the home demand for 30,000,000 inhabitants (supposing the population of Canada should by that time reach that figure) and meet the present requirements of Great Britain three times over." This estimate deals only with a portion of the west, and it leaves the large eastern Provinces out of consideration altogether. From this it would seem to be quite possible that Canada may be in a position, within comparatively few years, after supplying all home demands, to furnish Great Britain with all the wheat and flour she requires and leave a surplus for export to other countries.

With a rural population on the western plains in 1902 of about 400,000, over 67,000,000 bushels of wheat were produced. Add to this the wheat grown in Ontario and the other eastern Provinces and we already have a total of over 93,000,000 bushels. These figures are full of promise for the future of Canada as a great wheat-exporting country."



Prize-Winning Cordage Exhibit at Halifax Exhibition.

SOME SPECIAL NUMBERS.

THE Australasian Hardware and Machinery issued its Spring number on September 1st, it being a very well gotten up number, thoroughly representing the hardware and machinery trades of Australasia. The number is well bound in a red cover, and contains 128 pages of advertisements to 48 pages of reading matter, included in the advertising being one advertisement of twenty pages, the complete catalogue of an English and Australian firm. This advertisement shows bad taste, however, in the selection of the color of the paper, the advertisement appearing in black type on red paper, and showing up very poorly. The reading matter comprises some very bright and educational articles, in addition to illustrations and descriptions of new novelties which are presented to the trade in Australasia. The issue is, on the whole, a very creditable one.

The Ironmonger, London, Eng., issued its Autumn number on September 30th. On the cover is the reproduction of one of the finest hardware stores in England. The issue comprises 376 pages of advertising to about 80 of reading matter, and as the advertising includes many beautiful illustrations and colored inserts, the overplus of advertising makes the issue even more readable than if it were made heavy by a larger amount of reading matter. A peculiar feature of the English Postal law is that it allows publishers to insert catalogues and supplements of uneven size, one of the inserts in this number of the Ironmonger being a catalogue of over 150 pages, issued by Hobbies, Limited, of Deerham, England. The reading matter given includes many special features of interest at this season of the year, several of the articles being illustrated. About twenty pages are devoted to illustrating the latest novelties and movements in the special lines being introduced to the trade in Britain. The issue is printed on very fine and expensive paper, and the grey cover gives the whole volume a very neat appearance.

Another number of the Ironmonger, issued on September 30th, is the special "Iron and Steel Institute Number," this issue containing 96 pages of reading matter and 96 of advertisements, the former including a very comprehensive report of the recent convention of the Iron and Steel Institute of Sheffield. Portraits of the leading men connected with the institute are given, and many other illustrations are reproduced, to illustrate the various addresses and special papers read before the gathering. To any one interested in the metal trades this number is of particular interest, containing as it does a practically complete report of this important convention, together with tables giving statistics of the industry in England, and the description of several of the plants visited by the delegates.

The Beck Mfg. Co., Penetanguishene, is installing a Sturtevant dry kiln outfit for drying pail and tub staves. This apparatus consists of a large steel plate fan driven by direct connected horizontal engine and drawing the air through a heater.

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Pretentious Lock Catalogue.

ONE of the most pretentious catalogues of the year is the Yale & Towne Manufacturing Company's No. 18, which has just reached us. The reader is instantly struck with the splendid binding, which is done in half cloth, the cover showing green background with gold lettering, while the back is of red cloth. Besides giving prices and illustrations of the extensive lines manufactured by this firm, the two hundred odd pages of the catalogue contain an instructive glossary and some interesting articles on such subjects as "Lock Primer," "Lock Picking," "Master Keyed Locks," and "Hand and Beveled Doors," which are taken from Mr. Towne's "Handbook of Locks and Builders' Hardware," for architects. All hardwaremen will be interested in this book, which will be sent express paid upon request. Kindly mention Hardware and Metal in writing.

The Crane Elephant.

Hardware and Metal has received from the Crane Company, Chicago, one of the Crane elephant desk paper weights issued by them in commemoration of the 50th anniversary of the establishment of the company. It is estimated that 50,000 of the elephants will be required to supply the trade. Readers of Hardware and Metal who are connected with the plumbing and steamfitting trades can secure one of the paper weights by mentioning this paper.

General Supply Catalogue.

The Canadian Fairbanks Co. are now at work on the first section of their new general supply catalogue. They expect to have the same ready for distribution in a month or six weeks. The first section will be devoted to pipe and steam tools and any reader of this paper who writes asking for a copy can secure one. As the supply may not be large enough to satisfy the large demand expected, readers should send their requests for copies in at an early date.

Inverted Gas Burners.

The latest developments in inverted gas-lighting are to be found in the new list of the New Inverted Incandescent Gas Lamp Co., Limited, of 23 Farringdon avenue, E.C., London. Amongst other things mention may be made of the lobby lamp, which is quite shadowless, and beautifully finished in green and gold. There is also a cluster lamp for outside lighting, a variety of ingenious adapters for converting existing fittings to inverted lighting, and a large collection of new designs in pendants, brackets, with choice glassware, silk shades, etc.

Pflueger's Fishing Tackle.

The Enterprise Manufacturing Company, Akron, Ohio, make the celebrated Pflueger fishing tackle, consisting of everything a fisherman needs, including hooks, flies, trolls, spinners, phantoms, reels, furnished lines, etc. These goods have a standard reputation and are known to fishermen the world over. To any dealer in sporting goods the company will send free, express prepaid, a 155-page illustrated catalogue, No. F23, and a metal fish sign and window transparency in 8-color lithograph.

Let Us Push Two Good Paying Specialties for You.

We are pushing *Sherwin-Williams Buggy Paint* and *Sherwin-Williams Enamel Leather Dressing* for the benefit of our agents and dealers. If you are one of them, you know that our methods bring profit and permanent trade—if you are not, write us today for particulars of the way in which we are increasing the demand for these goods in every locality.

S-W. Buggy Paint and S-W. Enamel Leather Dressing are as steady sellers the year around as any paint specialties the dealer can put on his shelves.

S-W. Buggy Paint is an exceedingly tough and durable gloss paint, in handsome, permanent colors. All owners of vehicles have constant occasion to use it in refinishing their buggies and carriages. Its durability makes its use popular on boats, porch and lawn furniture, and other surfaces exposed to the weather.

S-W. Enamel Leather Dressing is unexcelled for refinishing carriage tops, curtains, etc. It keeps them soft and pliable and fitted to withstand the effects of rain and mud.

The honesty and efficiency that your customers find in S-W. Products bring them back for other things you sell. Can you afford to neglect such an important point in your business?

Write today to our nearest office.

THE SHERWIN-WILLIAMS CO.
LARGEST PAINT AND VARNISH MAKERS IN THE WORLD
Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St. E., Winnipeg.

The Fairbanks Standard.

Vol. 1, No. 1, of the Fairbanks Standard has been issued by the Canadian Fairbanks Company, who intend to publish the little magazine monthly hereafter, supplying valuable suggestions and information in regard to new inventions and new installations by this company from time to time. The first number is a neat booklet of sixteen pages and cover, well illustrated and containing several interesting articles in addition to descriptions of several of the lines of goods carried in stock by the company. Any readers of this paper who desire to receive the Standard regularly should write mentioning this offer and the Fairbanks Company will be pleased to add their names to the mailing list gratis.

A FINE CORDAGE EXHIBIT.

At the Provincial Exhibition recently held in Halifax, N.S., the attention of everybody was won by the display of the Consumers Cordage Company, Limited. As is well known, this company manufacture every conceivable kind of rope, from twine to the largest hawser, and all of these lines were shown in the display here illustrated. Taking into consideration the variety of grades and the effective manner in which they are shown, it is small wonder that the authorities of the Exhibition awarded first prize for attractive display to the Consumers' Cordage Co., Limited.

C. P. R. NEW ATLANTIC LINERS.

Two new steamers are being built for the Transatlantic service of the Canadian Pacific Railway by the Fairfield Company of England, and the first will be launched in a few weeks. They will be named Empress of Britain and Empress of Ireland and will run between Montreal and Liverpool, but are built with a view to a possible transfer to the company's Pacific fleet. They are 550 feet long, 64 feet beam and of 14,-

500 tons, with twin screw balanced engines designed to give them a sea speed of 19 knots. The mail contract is now held by the Allan Line, as its two new turbine steamers, the Victorian and the Virginian, are faster than any of the present vessels of the Canadian Pacific Railway line, and the competition has led the latter company to improve its service.

RETARDING TRADE.

THE Canadian commercial agent at Leeds writes to the Department of Trade and Commerce that the operation of the Quebec commercial travelers' tax is causing him no end of trouble with the Yorkshire exporting firms, and is having a very retarding effect upon Canadian trade. The average exporter, he says, does not readily grasp the difference between a Dominion and a Provincial tax. They say: "Why do you impose a duty upon our goods, and at the same time impose a tax upon our travelers? It is unfair, and in direct violation of the spirit of the British preferential tariff." The agent remarks that British exporters having resident agents in the Province of Quebec are in grave doubt as to the position in which members of a firm would be if they went over to Canada to assist their resident agent. The large firms in the West Riding of Yorkshire pay their resident Montreal agents either by salary or by commission, and they think it very hard that, having such resident agents, the head of a firm desiring to take an occasional run over to Canada to assist his agent should run the risk of incuring penalties ranging from $500 to $1,000 for each offence.

IT IS SAFE



As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

LOOK HERE for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them, anyway—it costs you nothing. If you will ask for it, we will gladly send you our bright little booklet, 'Shots,' together with our handsome catalogue

New York Office: 99 Chambers St.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

SUBMARINE IRON ORES.

THE Nova Scotia Steel & Coal Company of New Glasgow, Nova Scotia, acquired some time ago four and one-half square miles of submarine iron ore areas to the north of Belle Isle, Newfoundland. It has been found that the Wabana deposits from which the Dominion Iron & Steel Company and the Nova Scotia Steel & Coal Company have been drawing continue to the north under the sea. The Nova Scotia Steel & Coal Company is now mining ore in its Wabana areas at or below the sea level, and it has found that the ore at that point is of the full thickness of that worked on the land areas and of equal analysis. The company believes it is justified in assuming that a large body of ore exists in the submarine areas and estimates the quantity at 100,000,000 tons. It is believed that the cost of winning this ore will exceed by only a few cents per ton the cost of underground mining on the land. From the character of the roof and overlying strata no serious mining or engineering difficulties are anticipated.

ARGENTINE TRADE THREATENED.

Many Canadian manufacturers have been greatly exercised by the receipt of news from the Argentine Republic that it is proposed to levy a prohibitive duty on parts of agricultural machinery entering that country.

For years it has been the practice to sell machinery of this character on a close margin, relying on the profit in furnishing parts and repairs in future seasons to make the business profitable.

Consequently the serious nature of the proposed change can readily be understood. The United States Government officials have called for a report on the matter from A. M. Beaupre, the American minister at Buenos Ayres, with a view to addressing the Argentine Government on the subject, if on investigation it is found that the matter can properly be brought to its attention.

THE FIRST HORSESHOE.

HORSESHOEING is an old art, it having been begun in Italy about the eleventh or twelfth centuries, but greater progress has been made in it during the past twenty-five years than in all the time before that period. The first horseshoe was a thin iron plate having a rim on the outside which covered the whole ground surface of the foot. The shoes were held on by leather thongs fastened to the hoof and pastern. These were followed by a plate which had a rim held to the outside of the hoof by pointed hooks. The hooks were soon displaced by nails which had square heads. The Germans made the first horseshoes with a crease in them during the fifteenth century, and soon after shoes were made with calks. From these clumsy shoes to the present machine-made shoes was a work of slow growth, but perfection has not yet been reached by any means and the man who adds to the general knowledge of horseshoeing is a public benefactor.

CALCIUM STEEL.

A NOVEL material, likely to assume a high importance for the ceramical industries in case the statements made in regard to its properties are borne out even partially, is called calcium steel, says the Scientific American. This product is obtained from feldspar sand and a lime flux and is a compact, homogeneous, and plastic mass of great hardness, resisting oxidation and not affected by the influence of the atmosphere or of acids; it also is a poor conductor of heat and electricity. Its specific weight is 3.2, and its crushing strength about 2,500 kilogrammes per square centimeter. Calcium steel can be worked like a metal, and can be filed, bored, chiseled, polished, enameled, painted on, or otherwise decorated like glass and porcelain. For the manufacture of articles from this product two processes are available. After mixing the two components, viz., feldspar sand and lime, in a proper ratio and in a finely-powdered condition, the mass can either be molded cold and compressed like bricks and the articles thus obtained heated up to the temperature required for the combining of the components, or else the mass may be simply melted together and poured out like the metal in molds after having become liquid. The cast articles would have to be carefully annealed and cooled slowly.

Calcium steel is of a white color, but can be colored by the addition of metal oxides or the like. Its extremely favorable physical properties make it an excellent material for water conduits, gas pipes, and other underground piping.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

BISSELL'S "CYCO" BEARING CARPET SWEEPER



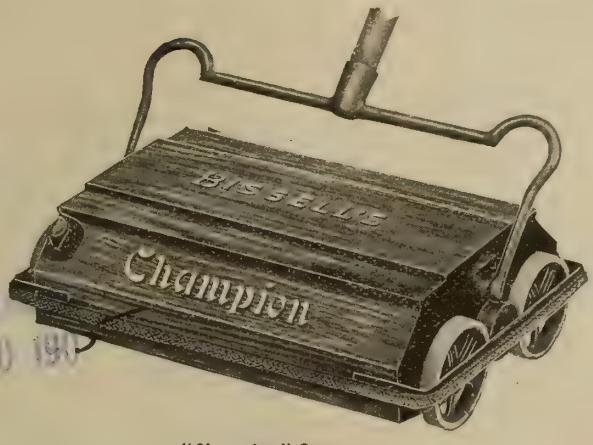
Bissell's No. 3 Easel

Furnished gratis with one-half dozen or more high grade Bissell's Sweepers.



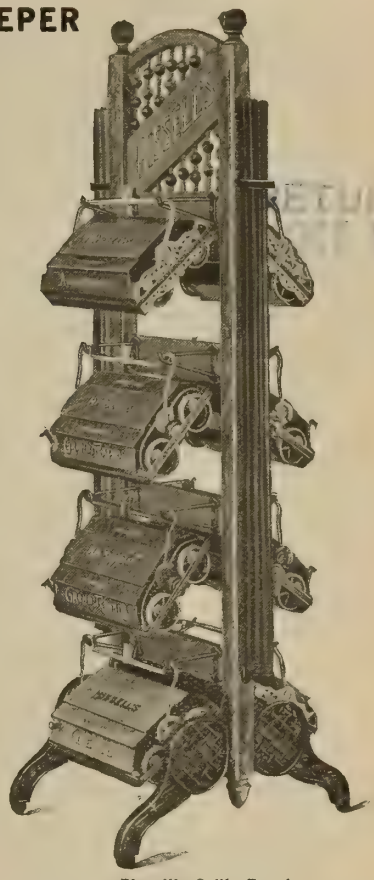
Bissell's

"Cyco" Bearing Carpet Sweepers save carpets, time, labor aad health.



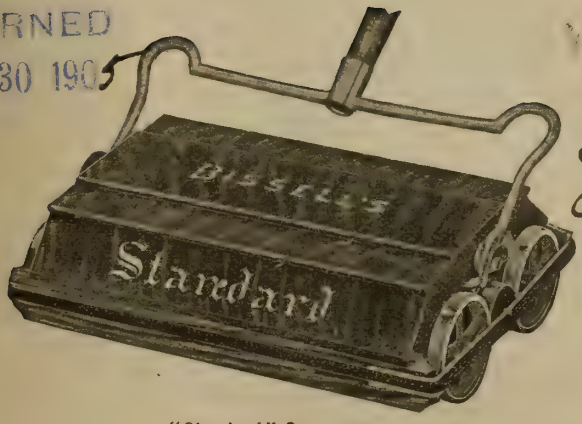
"Champion" Sweeper

Bissell's "Cyco" Sweeper has four rubber-tired outside wheels, rubber furniture protectors, spring dumping device, both sides open with one pressure; pure bristle brush.



Bissell's Grille Easel

When requested, we will include the Easel gratis with your first order for two dozen or more "Cyco" Bearing Sweepers to be shipped at one time.



"Standard" Sweeper



"Grand Rapids" Sweeper

Write us for prices for our Special Christmas Offer of Carpet Sweepers.

H. S. HOWLAND, SONS & CO., LIMITED Toronto

Our prices are right

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

We ship promptly

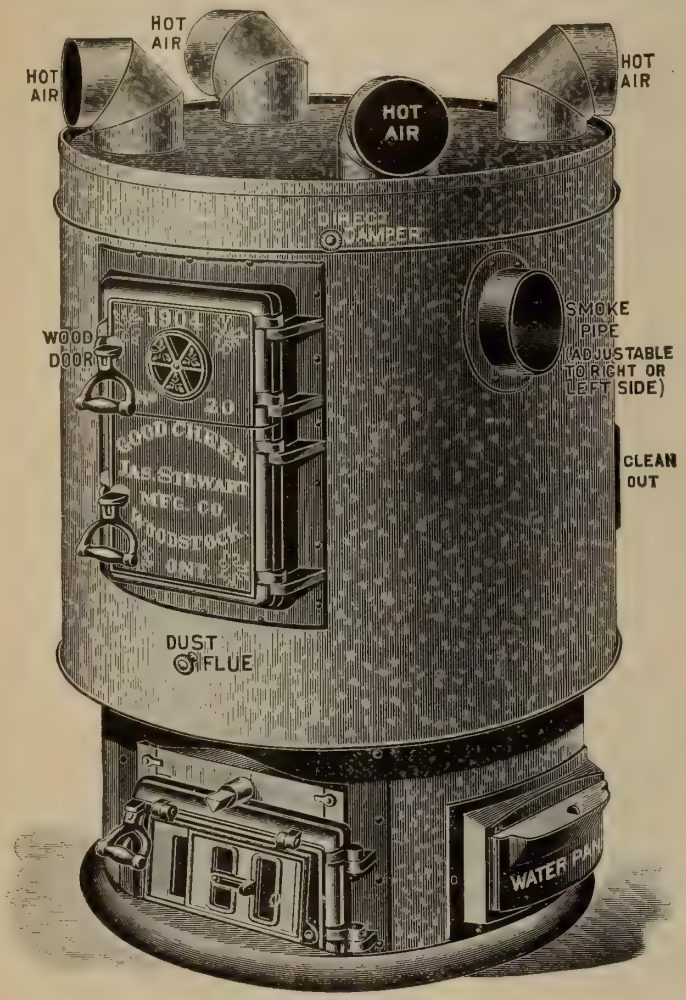
THE "GOOD CHEER" FURNACE

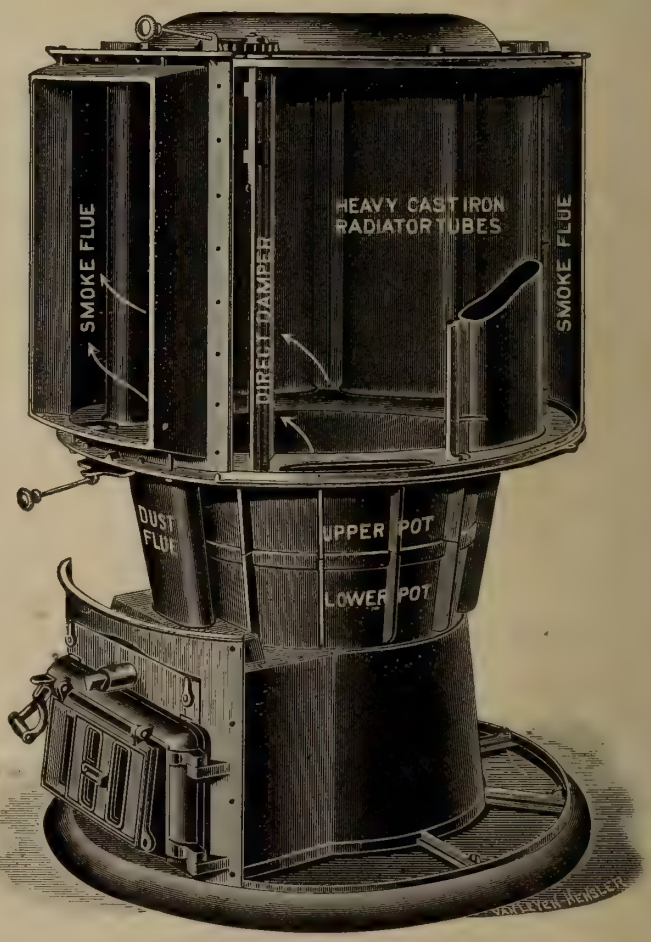
PATENTED

A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.





Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

STOVES AND TINWARE

B. & B. OIL HEATERS.

OIL stoves are invaluable in the chilly, raw weather of Spring and Fall, when furnaces cannot be run to advantage and coal stoves make things a little too warm. They are also very popular for heating bath or sick rooms. The Glazier Stove Company, Chelsea, Mich., manufacture a popular oil heater called the Brightest and Best, which has been called a portable hot air register. The burners are said to produce perfect combustion of the oil so as to cause no trouble with smoke or odor. The tank is constructed so that the oil is said to remain cool. Thus explosion is made impossible. Absolute safety is guaranteed the user. Circulars will be sent on request if the name of this paper is mentioned.



Brightest and Best Oil Heater.

RETURNED
OCT 30 1905
To Owner
Art Book
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THE CREATION OF DRAFT.

ALTHOUGH the ultimate object of any means of draft production must necessarily be to create draft or velocity sufficient to provide the required amount of air and to carry off the gases, yet this portion of its work is almost infinitesimal as compared with the demand made for sufficient pressure to overcome the resistance of the fuel and the boiler. In other words, the ability to create sufficient pressure difference is the primary requisite to burning a given quantity of fuel, rather than the ability to move a certain amount of air. Draft-producing apparatus is not, therefore, to be based merely upon the total number of cubic feet to be moved per hour, as determined by multiplying the coal consumption by the allowance of air per pound of coal. If this were the case a low chimney or a large slow-running fan would meet the requirements. In reality the relatively immense resistances of fuel and boiler demand that the chimney or fan shall first be designed to create sufficient intensity of draft to overcome these resistances and to create the requisite velocity. This velocity must be such that if multiplied by the full area at which it is measured the product will equal the volume of air necessary for the combustion of the stated amount of fuel. The height of chimney or the diameter and speed of fan necessary to create the draft thus shown to be required having been determined, it is only necessary to make the capacity such as to accommodate the given volume of air. — From Treatise on Mechanical Draft by the B. F. Sturtevant Co., Boston, Mass.

AN IMPROVED ASH SIFTER.

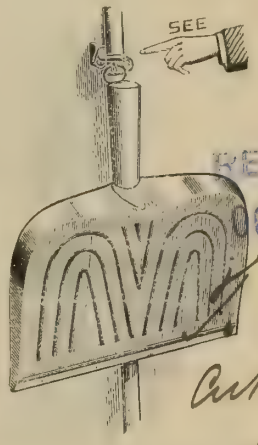
THOSE who are in the habit of building their kitchen fires afresh each morning will be interested in a recently invented ash-sifting device. The device is arranged to permit of sifting the ashes without filling the surrounding air with dust. The improved sifter comprises a box consisting of the main or body and an upper auxiliary section. These sections are fitted together with a tight joint and are securely fastened with hasps and turn buttons. The upper section is provided with a hinged cover which, when closed, forms a dust-tight joint therewith. A hasp and turn button lock the cover in closed position. A handle on this cover provides means for carrying the device. Sockets are formed in the upper edge of the auxiliary section, at opposite sides, to provide bearings for a shaft. This shaft carries a tray which is rigidly attached to it. The cover of this tray consists of a screen of semi-cylindrical form. The shaft is operated by a lever thereon which carries a crank handle at one end. Normally the shaft is prevented from turning by studs at each end of the lever engaging lugs of the outside of the upper section. In use the pan of ashes which is to be sifted is placed in the tray and the screen cover is then fastened down, also the main cover of the device. Then the lever on the shaft is pulled outward so as to clear the lugs. The handle may now be rotated to invert the tray and pan of ashes, after which it should be rocked back and forth to sift the ashes through the screen. When the screen has been sufficiently rocked, the lower section may be disengaged to permit removal of the ashes. This body section is provided with two bails which may be swung over, when the body part may be readily lifted and carried in one hand. Legs are formed on the bottom of this section to space it from the floor and thus prevent scorching the floor or carpet when hot ashes are sifted. A patent on this ash sifter has recently been granted to Mr. Eugene A. Bagby, Bowling Green, Ky.

EAGLE MOP WRINGER.

A line that is meeting with a large sale throughout Canada is the combined Eagle Mop Wringer and Bucket, it being a most convenient contrivance and being made of the highest quality of materials. Dealers who have not yet looked into this line as a seller should ask their jobbers for information or send direct to the manufacturers, Eagle Cooperage Works, Circleville, Ohio, for printed circulars.

BROOM AND DUST PAN HOLDER.

E. E. Josef Manufacturing Co., Buffalo, N.Y., are the manufacturers of a little device which they are introducing through the trade which is intended to screw up in some convenient place, about 5½ feet from the floor, where the housekeeper can prevent her broom from getting out of shape by using the device and suspending the broom therein. Can also be used to securely hold the dust pan as well. They are made to be sold at a moderate price. The manufacturers will quote discounts on application.



Acme Broom and Dustpan Holder.

RETURNED
OCT 30 1905
Owner
Art Book
page 2

STOVE ITEMS.

E. A. McTaggart, Hensall, Ont., has invented a new frying pan attachment.

* * *

John E. Wilson has begun work on the extension to his foundry at St. John, N.B. Workmen are now putting down the foundation for a building 100 by 45 feet. This will be closed in this Fall, and other buildings will be erected next year, greatly increasing the output of the factory. Mr. Wilson intends among other things to go into the manufacture of stoves.

* * *

Elihu Thomson, of Evansville, Ind., has recently invented an electric stove suitable for kitchen use. The combination of the parts is said to be such that the whole interior of the stove may be maintained at red heat with a small expenditure of energy. It is said that without too great a cost, the stove may be kept available at all times for instant service. The stove is heavily jacketed externally with a layer of good heat insulating substance and is provided with a lid of the same construction. Within the jacket is a mass of refractory material, imbedded in which is a granular resistance material such as silicon.

"Alberta National Hot Blast"

For all kinds of Coal

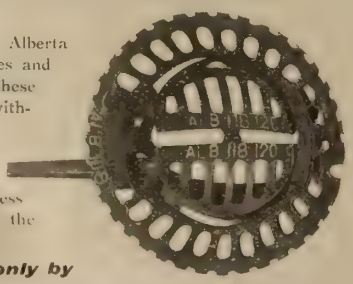


THE double heater in the Alberta is made of one piece of stamped steel securely rivetted to body. The flue around the fire-pot is gas-tight. An entirely new way of hanging the fire-pot does away with the usual legs. A patent has been applied for on all the above features, so that our customers will have exclusive control.

No smoke when firing up. The swing top is provided with a cover for the kettle. The hot blast draft enters through feed door and allows the hot air to be spread over the top of the fire, burning the gases.

We are fitting up the Alberta this year with duplex grates and annular shaking ring. These can be taken out in pieces without removing the fire-pot.

The fire-pots also have been made nearly straight, giving larger capacity and less trouble from holding up the clinkers and ash.

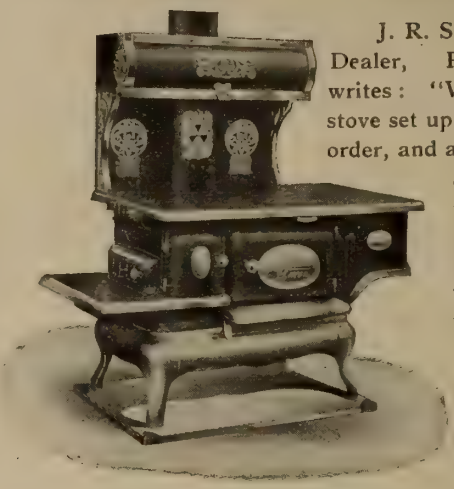


Made only by

THE MOFFAT STOVE CO., LIMITED

Winnipeg **WESTON, ONT.** **Calgary**

Even Baker Good Heater



J. R. Sproule, Hardware Dealer, Penetang, Ont., writes: "We now have your stove set up and in working order, and are pleased to be able to say that it works with complete success, it being an even baker and a good heater."

Here is a dealer who had enough faith in

The Empire Queen Range

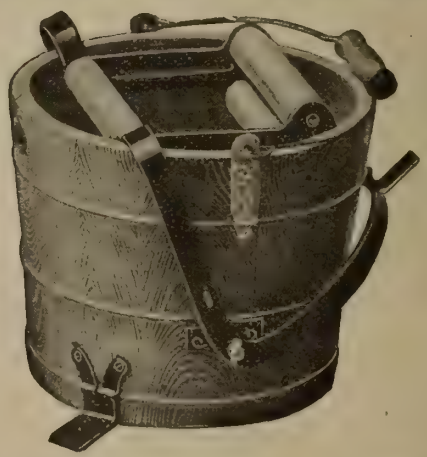
to give it a practical test, with the result shown. Many other dealers who likewise have tested it, are now enthusiastic agents. Why not **YOU**.

The Canadian Heating & Ventilating Co.

OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS

CIRCLEVILLE, OHIO, U.S.A.

Sole Manufacturers.

DOUBLE THE PRICE

couldn't buy a better sifter than the

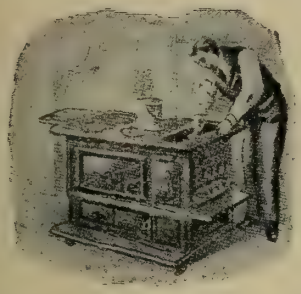
Metallic Ash-Sifter

because a better sifter isn't made. We have a patent on the **Double Lock Fold**, which means that no other sifter—wooden or metallic—possesses this feature. Then, the **Metallic Ash-Sifter** is adaptable to our **Patent Wire Bale**, and our **Metal Cover**, both of inestimable value. It is safe to say you cannot find a better sifter proposition than what we can offer you. Write us and see.

C. M. CUTTS & CO., Toronto Junction, Ont.

Sole Makers

The Newest and Best Thing



that has ever been put in the firebox of a stove is

Sterne's Asbestos Stove Lining

It is plastered in like mortar and gets as hard as iron. No heat can destroy it. Clinkers will not adhere to it. And it is cheaper than brick. Let us send you prices.

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

ARK-EL-ITE TRADE MARK

Ark-el-ite Asbestos Stove Lining has been thoroughly tested and can stand any heat. It will give better satisfaction than fire brick and will outwear it two or three times over.

There is no danger of a misfit. No chance of being sent the wrong size. No tedious delays such as are often met with in trying to secure fire bricks for certain sizes and makes of stoves.

A small investment only is necessary.

$1.50

pays for trial order of 10 six-lb. packages.

There is absolutely no risk as we guarantee satisfaction.

MANUFACTURED BY

THE FRANCIS-FROST CO. LIMITED

TORONTO

Makers of the Celebrated "Ark" Brand Paints.

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



THERE ARE NONE BETTER OR WE WOULD HAVE THEM

There's a summary of the excellence of our

FURNACE CEMENT AND STOVE PUTTY

You, of course, are "catching" this trade. You want the goods that are likely to "take." We manufacture Cement and Putty just as skilfully as we manufacture Varnishes. You know what that means. Our ***Furnace Cement*** and ***Stove Putty*** are put up in barrels, half-barrels and small packages.

WHAT QUANTITY DO YOU WANT?

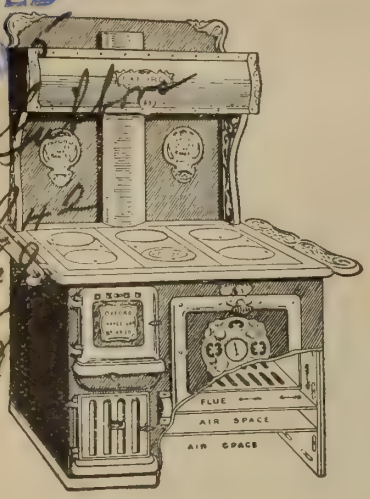
SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

THE STEEL RANGE



There is a constantly increasing demand for Steel Plate Ranges.

No stove selling establishment is now complete without a first-class steel range on the floor. The

OXFORD CHANCELLOR

is a very satisfactory steel range and should be in your stock. It is made of the best quality steel sheets, to which is closely riveted an interlining of asbestos millboard.

The oven is very roomy with drop oven door.

It burns either soft or hard coal or wood, as desired.

For soft coal burning, cast iron fire-box linings are supplied throughout.

For wood burning the fire-box is fitted with modern dump centre grate and is very large, with extra large door.

Hot water reservoir of planished copper is detachable.

Everything that goes to make a durable, satisfactory and easy-selling range is in the Oxford Chancellor.

We also manufacture cast iron Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Hot Water and Steam Boilers and Radiators, Warm Air Furnaces and all kinds of Cooking and Heating Apparatus, Plumbers' Supplies.

Let us send you Catalogue 61

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER** 72

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta

Seasonable Goods



COAL HODS

Plain, Striped, Gold-Striped, Japanned and Galvanized

9 sizes and 13 styles



McCLARY

ELBOWS

4 sizes

Made in Polished and Galvanized Iron and Tin

STOVE BOARDS

Crystalized Lithographed in 7 styles and sizes. Crystalized in 8 styles and sizes.

These goods are moving fast these days. Do you need a further supply?

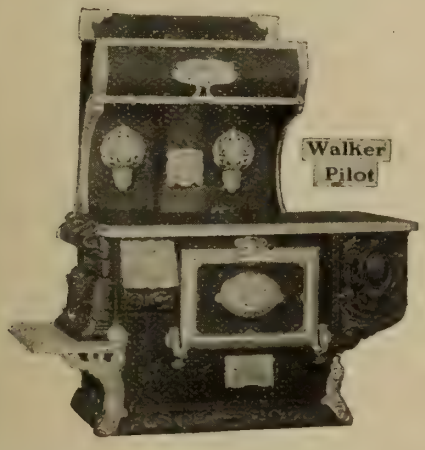
The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

The "Up-to-Date" and the "Ordinary"

As a practical salesman wouldn't you rather sell an "up-to-date" range rather than the "ordinary" kind ?



Particularly when the "up-to-date" is bristling with points of merit and is arranged with all practical features of convenience and utility ?

And when through its modernness and thoroughness of construction it will save fuel and time, thereby eliminating expense and worry ?

And when the up-to-date will assuredly make you a friend ?

And when this friend will therefore give you his other business, and you will have obtained actual advertising results without actual expense ?

Better decide to be "up-to-date" and handle the

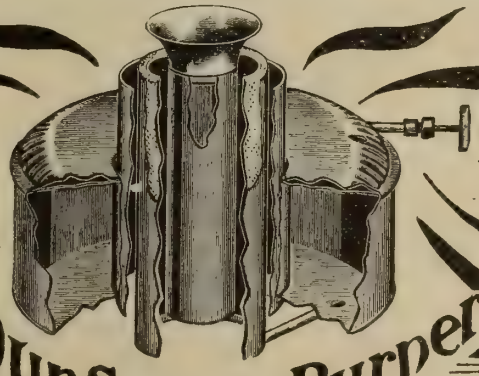
Walker Pilot Steel Range

Because it possesses all the above "up-to-date" advantages, and yet ***sells at a competing price and makes you about double the usual profits.***

SEND A POSTAL FOR PARTICULARS.

The Walker Steel Range Company, Limited

Grimsby, Ont.



Our Safety Burner

The ALUMINUM OIL HEATER



Sales over the million mark solely through superior merit

Explosions are impossible in the Aluminum Oil Heater, because perfect ventilation and perfect combustion are secured by the liberal air passages on all sides of the wick and oil fount—see that safety burners solid gallery, solid flame-spreader, no perforations there to clog up. No other oil heater has this grand safety burner.

No direct contact between oil fount and wick—a small tube feeds the wick only as much oil as it can take up instantly.

And the Aluminum Oil Heater is handsome in design and finish, thoroughly well made, and the only oil heater which can and does radiate the heat in every direction. Heats by radiation as well as by circulation. Get your orders in early—the demand is swelling larger and larger every week.

We guarantee every one.

Metal Stamping Co., Dept. 12.—Jackson, Mich., U.S.A.

W. J. McMURTRY, Galt, Ont., Canadian Agent.

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

The MacLean Publishing Co.
Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

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Published every Saturday.

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NEW ADVERTISEMENTS.

Alabastine Co., Paris, Ont.

CUTLERY AND SILVERWARE.

A WHOLESALE jobbing house which deals extensively in cutlery and hardware, was recently asked by a Hardware and Metal representative as to the condition of this branch of the trade at present. The answer was that an increasing number of hardwaremen were adopting these lines from season to season and, from present indications, it would seem that the approaching Christmas trade will be a record breaker in this respect.

Much greater attention than formerly is now being given to cutlery in all up-to-date hardware stores. Particularly in the west there is a strong demand for the better grades, except, of course, for shanty purposes, where finish is not particularly essential. One of the great advantages possessed by fine cutlery is that it is always saleable. Patterns do not change to any appreciable extent, so that it entails no ultimate loss to carry over a stock.

In this connection it is interesting to note that safety razors are taking a firmer hold on the market. All grades and nearly all makes are selling well, but the more desirable lines are those with a number of cutters. Safety razors are no longer an experiment as part of a hardware stock, but they are sufficiently new to be an innovation in most of the country hardware stores, and it would be a wise thing for dealers with a high class trade to try selling them this Christmas. We are confident that they would be pleased with the results.

In silverware it is seen that many hardwaremen are rapidly working up a good trade in plated flatware—forks, spoons, and knives. There is also an increasing sale for such specialties as berry spoons, pie knives, coffee spoons, butter knives, sugar shells and sugar tongs. In fact, as the profits are good, the hardware trade is taking up all kinds of plated ware to a really large extent. It is stated that in this line at any rate the jobbers are able to give their customers prices which will enable them to compete successfully with the catalogue houses.

If there are any of our readers who have not given this matter their consideration, we desire to bring it to their attention as a means not only of making good profits but also of attracting the best class of trade.

VALUE OF REPUTATION.

QUEER thing, this reputation. It takes toiling and moiling to get it —takes singleness of purpose and capacity to resist temptation to cheapen, but once you've got it its value is transcendent and can't be computed in dollars or cents. How infinitely better it is to build on a foundation of quality and worth rather than to chase the will-o'-the-wisp of cheapness, which leads you into bogs and swamps. "But my trade won't pay the price," wails some timorous soul. Your trade, dear merchant, is what you make it. If you insistently talk quarter, ten and five-cent brooms, and five-cent brushes, and ninety-nine-cent apples, and fifteen-cent oranges, how in the name of sense can you expect your trade to ask for anything else? Try the other. Talk quality, emphasize worth, lay stress on inherent goodness, and watch the result. Cut loose from cheapness, for you are leaning on a broken reed that will give you a bad fall one of these days. Profit and prestige lie in selling good goods. Is any feeling so all-satisfying as the consciousness that your name stands for the best?—for quality?—for blown-in-the-bottle goodness?—for stamped-on-the-bottom worth?

The successful men are those who have talked quality. There are a number of businesses in Toronto right under the nose of the large departmental stores making anywhere from three to ten thousand dollars for their proprietors, and they are only having about half the worry of the price cutter who usually finds it difficult, even with a larger turnover, to make his business show a net profit of more than one thousand dollars.

THE QUEBEC TRAVELERS' TAX.

WESTERNERS are accustomed to think that their part of the country is monopolizing "the growing time," and to scoff at the pretensions of the east, while, as a matter of fact, the Province of Quebec is also progressing very rapidly at this time. The northern country, with its fine timber and fertile lands, is now being opened up by the Provincial Government, so that a vast expenditure of money is being made for colonization purposes. Reforms in the educational system are also under way and the Government are giving more practical encouragement to agriculture than ever before.

Under these circumstances the public purse is being very heavily drawn upon and the Government is face to face with a financial crisis. Owing to unwise expenditures made and subsidies granted by former cabinets, the debt of the Province now amounts to twenty-six millions, and the fixed interest charges are one million seven hundred thousand dollars. As the revenue is less than five millions, it will be seen that only about three millions are at the disposal of the Government to devote to education, colonization, agriculture, etc.

This, then, is the condition of affairs which caused the imposition of a three hundred dollar tax on all travellers for non-Canadian firms doing business in the Province. It was expected that the revenue thus derived would do much to meet possible, nay probable, deficits, but nearly all the interests affected have put forth a strenuous opposition to the tax, the effect of which has, beyond doubt, been to cripple trade.

During the past fortnight deputations from the Canadian Manufacturers' Association have waited upon the Provincial Treasurer and the Cabinet meeting as a whole, to impress the views of this body upon the Government. An announcement was then made that the tax might be reduced to one hundred dollars, but the association sent another deputation to oppose not only the amount, but also the principle of the tax. Very little encouragement was given them and the final outcome is dubious.

That the Quebec Government has need of an increased revenue is admitted on all sides, but any attempt to raise this by putting shackles upon trade and interfering in spirit, if not in letter, with the rights of the Federal Government, must be deplored. To cope with these difficulties The MacLean Trade Newspapers put themselves on record as advocating an increased Provincial subsidy, which, under the circumstances, seems to be the only way of obviating these odious interferences with the rights of commerce.

MACHINE TOOL EXPANSION.

THREE Canadian machine tool firms have shown great energy and enterprise within the past month in taking steps to increase their output very considerably. These are John Bertram & Sons Co., Limited, Dundas, the London Machine Tool Co., London, and the Jenckes Machine Tool Co., Sherbrooke.

At the Bertram works a new foundry is now under way which will be one of the largest in the country, to be equipped with all the modern devices known, and will facilitate increasing very materially the already large output of this growing concern.

The London Machine Tool Co. have already given contracts for the construction of a new plant at Hamilton. They have bought eight acres of ground and are erecting at present a machine shop 250 feet long, 140 feet wide, a portion of which is saw-tooth construction. This building is to be ultimately extended to 400 feet long.

After due consideration as to whether they should extend their plant at Sherbrooke or build a new one it was decided by the Jenckes Machine Tool Co. to erect a new plant at St. Catharines, Ont., this place offering various advantages, important amongst which was lower freight rates. The new works are in course of erection and it is expected to have them in operation by the end of the year.

DEATH OF JOHN MILLAR.

ON Saturday evening, October 21st, after a long and painful illness, Mr. John Millar died at his late residence, 99 Rose avenue, Toronto. He was buried in the family plot in St James cemetery on Monday afternoon.

Born at Aberdeen, Scotland, in 1843, the son of an officer of the Cameron Highlanders, his earliest recollections were of Gibraltar, where his father's regiment was stationed in his boyhood His father, having been appointed a captain in the Royal Canadian Rifles, emigrated to Canada, and in 1855 Mr. Millar began an apprenticeship with Chown & Co., tinsmiths, at Kingston, Ont., serving with them for seven years. His apprenticeship completed, he commenced business for himself in London, Ont., in 1863. From 1870 to 1875 he was engaged in the business of oil refining and then resumed his stove business at London, continuing there until about 1886, when he removed to Toronto. About 1887 he accepted a position with the J. F. Pease Furnace Co., and, with the exception of three years spent in Chicago, remained with them until his enforced retirement from active work early in 1904. During the last five years of his connection with the Pease Company Mr. Millar occupied the position of head of their engineering department. He first became prominently known in the heating trade about 1888 when in competition with a large number of engineers he won the first prize for a complete set of heating plans in a contest by a well known trade journal in the United States. Since that time he was a frequent contributor to trade publications, his articles being distinguished by clearness and direct, practical information, helpful to the trade and singularly free from all mystifying technicalities. He thus became widely known to the heating trade both in this country and the United States and was greatly esteemed as a careful, practical and reliable engineer, and while eminently conservative, he possessed in a marked degree that fertility of resource which is an absolute essential to success as an engineer.



The Late John Millar, Toronto.

Mr. Millar married in 1865, Annie, youngest daughter of the late William Rowland, dry goods merchant, of London, Ont. Besides his widow, he leaves five sons and three daughters, Messrs. Harry D. Millar of Cleveland, Louis Millar of Chicago, and Rowland J., John M. and Arthur Millar, Mrs. W. A. Brophy and the Misses Beatrice and Katie Millar, of Toronto. He is also survived by two brothers and two sisters, David Millar, of Toronto, and Robert D. Millar, Mrs. John Cameron and Mrs. D. A. McDermid, of London, Ont.

While it was as a successful engineer that Mr. Millar was best known among the heating trade, those who had the good fortune to know him intimately mourn the loss of a true friend and a noble character. Modest and retiring in his disposition, he was devoted to his family and his home life was particularly happy and admirable. Among his business associates he was loved and respected by all. Possessing always the absolute confidence alike of his employers and those who worked beside him through a long term of years, he was especially esteemed by the "boys" who have grown up around him and to whom he was always ready to give a helping hand and the benefit of his ripe experience and large store of information and helpful advice. Among those with whom he came into competition he was everywhere respected because of his invariable courtesy and manliness and the high standard of honor which he invariably maintained and which was evident to all with whom he came in contact. Kind and considerate, he was also a strong man with the courage of his convictions, who possessed the spirit of his Highland ancestors and was never afraid to do the right thing as he saw it.

And when he came to the long struggle with the incurable and painful disease that caused his death he met it in a manner that was characteristic of his whole life—with marvellous patience and resignation and a fortitude worthy of the noble-hearted Christian gentleman he was.

MONTREAL RETAILERS ORGANIZE.

STRONGLY supported by trade newspapers and even urged by wholesale houses, the retail hardware dealers of Montreal have finally organized, under the name of "The Association of Retail Hardware and Paint Merchants of Montreal."

The primary object of this new association is to protect its members against the slaughtering of prices, and the retailing of goods by wholesale houses. Owing to the diversity of interests in the Montreal retail hardware trade, and the lack of sympathy between the dealers, there has been very little uniformity of price—a circumstance which has been disastrous. But the determination to make common cause against their difficulties has at last brought about an understanding between the retail merchants, with the result shown above.

On the 4th of October a meeting of the interests involved was held in the rooms of l'Union Commerciale, those present including the most prominent hardwaremen in the city.

The chair was taken by M. Francois Martineau, while M. J. A. Beaudry acted as secretary pro tem. Mr. Martineau explained the objects of the meeting, which were first to decide whether the time was ripe for a revival of the Association of Hardware and Paint Dealers, and second, whether the association should affiliate with the Association of Retail Merchants of Canada. After a discussion in which many of the gentlemen present took part, it was resolved

to reorganize the Association of Retail Hardware and Paint Merchants of Montreal, and to affiliate with the Retail Merchants' Association of Canada.

The election of officers was then proceeded with and resulted as follows: President, Francois Martineau; vice-president, L. J. A. Surveyer; second vice-president, David Dripdale; treasurer, F. C. Lariviere; secretary, Jos. Versailles.

With this strong executive the association will no doubt have a most useful existence, and it is to be hoped that the retail hardwaremen all over Canada will follow this example and organize a national association.

THE GOLDEN WEST.

ALL attention is now directed to the Great West and its enormous crop, and naturally so, as reports from all parts point to the greatest grain yield the west has ever seen. The west, however, is only in its infancy, and greater things may be expected in future years. The average yield in Southern Manitoba, where this paper's representative is now traveling, is 25 bushels to the acre; in some places it is as high as 45 bushels. This means a big increase in business to the merchants of the west. The merchants have been carrying the farmers for some time, enabling them to buy more land and machinery, and there is many a hundred dollars' worth of goods out on credit which will now be turned into cash along with increased business.

The credit business has reached enormous proportions in Western Canada, and the merchants are now making a determined and combined effort to bring it to a cash basis. The Manitoba Retail Merchants' Association are doing a lot of good in this direction, and if their resolution to do a cash business between the 1st of November and March is carried out, it will help much to bring the merchant to a better position financially. Some merchants are doing an entirely cash business with good results, while others claim it is impossible to carry on a cash business in the west.

* * *

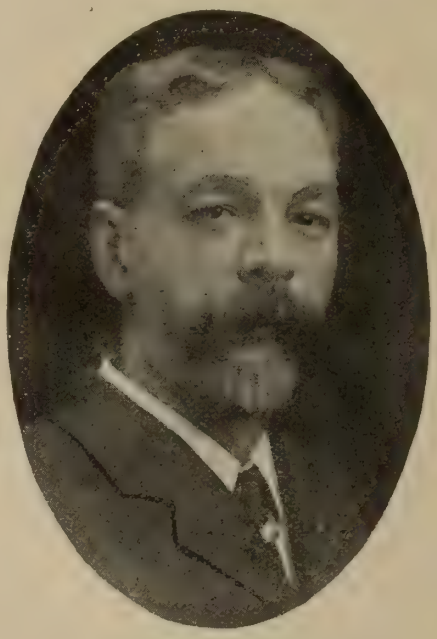
One of the strongest advocates of the cash business is A. E. Code, of Morris, Man., who has been doing a strictly cash business for over a year now, and says it is a great success. He hasn't lost any trade; he knows exactly where he stands, is not bothered by keeping books, and is free from the worry that a credit business always involves, and is also able to sell at a lower figure, which has materially increased his business. Our readers are soon to have the benefit of Mr. Code's experience, as he has been induced to write a series of articles on these lines, which will no doubt be very interesting to the trade in general, and especially to those in sympathy with this movement.

* * *

Travelers are as thick as bees in all parts of Manitoba and the west, and are all doing a fine business. Merchants are all stocking up for the Fall and Christmas trade, which should be a record breaker. There is a tendency all along the line to purchase the better class of goods, and merchants say there is a bigger demand for the high-class article than formerly, which, of course, comes with the increasing prosperity.

* * *

The MacLean Publishing Co.'s papers were to be found in nearly every store, and it was great satisfaction to hear the many complimentary things that



J. A. Lindsay, Winnipeg, Man.
Secretary Western Retail Hardware Dealers' Association.

are being said as to their value and assistance in carrying on an up-to-date and progressive business such as you find in Manitoba and the west.

In conversation with Bertram J. Durrell, who sells paint for Geo. Stephens & Co. and, by the way, is booking large orders, he said that he saw Hardware and Metal everywhere he went, and it was referred to more than any other paper of its kind in the west. Although we have always claimed this, we like to hear others say so, and specially from one so well acquainted with the trade in Western Canada.

The James Smart Manufacturing Company, Brockville, have secured contracts to heat and ventilate the Presbyterian Churches at Harrow and Kingston.

RESIGNATION OF J. A. LINDSAY.

HIS legion of friends in the hardware trade not only in Western Canada but also in the east will be sorry to read of the resignation of J. A. Lindsay, who for so many years has been in charge of the retail business in Winnipeg of the J. H. Ashdown Hardware Co. Mr. Lindsay's intended resignation has been no secret for a long time to his friends, as his health has not been of the best. Close application to business for so many years has injured his health and a rest has become imperative. Mr. Lindsay had intended resigning his position a year ago but when the disastrous fire occurred in October of last year his loyalty to his firm kept him at his post another year until the business should be put on a normal running basis again. During the year that has passed since the fire the handsome new Ashdown block has been erected and Mr. Lindsay feels that he can now tender his resignation. He will be succeeded in the management of the business by James Law of Calgary.

To Hardware and Metal Mr. Lindsay laughingly remarked that he had nothing in view for the future except to put his feet in slippers and enjoy a rest.

Mr. Lindsay has been president of the Western Retail Hardware and Stove Dealers' Association since its organization about fifteen months ago and if his retirement from active business involves his resignation of that position at the next meeting it will be a matter of deep regret to the western retail hardware trade whose interests he has served so faithfully.

THE CARE OF RIFLES.

RIFLES should be well oiled before being laid aside for any length of time or while laying in the dealer's show cases. This will not only keep the action in perfect order, but will preserve the finish of the arm.

After a day's shooting the barrel should be thoroughly cleaned until perfectly bright, and then oiled well with vaseline or gun grease.

If a rifle is well taken care of very little trouble will be experienced with "leading."

If the barrel should be leaded, plug up one end and pour in quicksilver. As this is rolled backward and forward in the barrel, the lead will unite with the quicksilver, and in this way be wholly or nearly all removed.

Never try to clean out lead with emery or other gritty substances, and never try to enlarge calibre of your rifle, this work should always be done at factory.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 58.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Bright Staples are now being quoted at $2.50 in 100-lb. lots.

Galvanized Canada Plates have been advanced 52's to $4.00, and 60's to $4.25.

Galvanized Sheets are stronger, advances having been made in Queen's Head and Gorbal's "Best Best."

Black Sheets have experienced a rise. 28 gauge has been advanced .10, and other guages .05.

Old Rubbers are stronger and now command 6¾c. to 7c.

Iron Pipe is now being sold at new discounts, showing an advance in price.

Summerlee Pig Iron has advanced sharply to $20.00 and $20.50.

TORONTO.

Canada Plates are now subject to new list quotations which show an advance of 25c.

Galvanized Sheets have also advanced 25c. as shown in the new list.

Pig Lead shows a 10c. increase, and is now quoted at record high figures.

Crude Petroleum has advanced 2c. on all lines.

Plumbing Supplies. A general revision is to be made next week, and some advances are likely owing to higher prices of such metals as iron, copper, brass and lead.

WINNIPEG.

Linseed Oil has dropped 3c.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 27, 1905.

THE touch of cold weather during the week has given the needed impetus to trade, and Fall goods are now going out in great volume. Some of the wholesale hardware merchants here have been forced to engage extra help in their shipping departments in order to keep pace with the increased business.

Shelf goods have become much more active within the past few days, but the chief demand has been for snow shovels. The trade is unanimous in realizing that the season for these goods is very close at hand. All other seasonable articles are also selling well, with perhaps special emphasis on cutlery and sleigh bells. It is worth noting that every season a greater demand is now shown for the more expensive grades of cutlery, though the preference for different brands varies in different districts.

Horse blankets are now pretty well in the hands of the trade with the result that orders will be somewhat sluggish until the sorting season is at hand. Rifles, also, are now being ordered only occasionally, as the trade are well stocked up. Retailers, however, report a brisk demand.

The only change of consequence in the wholesale lines is in bright staples, which are now selling at $2.50 in hundred pound lots.

Axes—Good sized orders are being filled almost daily. We are quoting: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles — We still quote: Axe handles No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Sales are increasing and good prices are being commanded on standard makes. Our quotations are: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—Prices are unchanged. The following figures still rule the market: Cold blast, $4.50; No. 0, Safety, $5.00.

Rivets and Burrs—Trade is quite active, owing to an impression that prices will soon be amended. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—A steady demand that has been in evidence for some months is yet maintained We quote: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—Large orders are being sent out in all directions, thus maintaining the steady tone natural to this season. Our quotations are as follows: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—An uneasy feeling in the trade that prices will soon be withdrawn has led to an active demand at the following prices: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—We are still quoting: $2.20 per keg f.o.b. Montreal.

Horse Shoes—These goods are remarkably active now as blacksmiths all over the country are stocking up for the winter trade. We quote as follows: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Rifles are being shipped in fair volume still, but sorting orders for ammunition are perhaps the feature. In this section of the country snowshoes and tobogans are now being stocked in anticipation of a splendid winter's trade in these lines. Our quotations are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Business continues satisfactorily active. Prices are unchanged.

Cordage—Orders which are now coming to hand are mostly of the sorting variety. The conditions generally are such as to keep prices firm.

Cement and Firebrick—There is no great activity manifest so far as large jobbers are concerned, but there are lots of small jobbing contracts which call for considerable cement of all kinds. We still quote: as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags; $2.05 in barrels in round lots.

Coil Chain— We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—The season has been somewhat unsatisfactory and lacking the activity of former years. We quote: Little Star, $4.85; Hudson, $5.00; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—This is a line which is very strongly in evidence in each day's orders. We still quote from 25c to $2.50, according to quality.

Sleigh Bells—Business is exceedingly active for all grades. We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2;

team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined$12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—This line is becoming more popular with the hardware trade. Snowshoes are very strong at prices ranging from $15 to $35 per dozen pairs, according to quality.

MONTREAL WINDOW GLASS.

Conditions remain much the same as last week. Arrivals are few and as the close of navigation approaches the prospects for getting in a good supply of British and Belgian glass are rapidly diminishing.

The cargo of the wrecked Virginian has been regained, but the glass is, of course, badly damaged, and for the greater part, unsaleable. It is thought that bids for this stock will come only from the largest jobbers, who can repack the boxes before shipment. On the whole very little relief has been experienced by the arrival on the local market of the Virginian's cargo.

One effect of the scarcity of British and Belgian glass has been an awakening in the demand for the article manufactured in the United States. This is being sold here at a price but slightly in advance of the cost of European glass laid down in this city, and the makers are prepared to fill orders for any specified size. We quote: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75, seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, October 27, 1905.

LAWN mowers and shooting material are the features of the week's market, practically every order being received by the jobbers including rifles and ammunition in fair quantity. Hunting is becoming more general and the shot gun is giving place to the rifle.

Lawn mowers are subject to open prices for 1906 and the figures we quote this week show a decided reduction on last year's prices. The business being done is not exceptionally large, however, although the low figures encourage the retailer to book his order early.

Cutlery continues to have a large sale, especially as some dealers will not buy ahead to any extent, relying on sorting up when the retail trade demands it. Sleigh bells are selling well and weather strip is being called for more frequently.

With the exception of lawn mowers prices continue firm and unchanged.

Lawn Mowers—Prices for 1906 are being cut up badly in the open market now prevailing. This is bringing some extra business on booked orders. We quote: Woodyatt, 12 to 20 inch, $3.95 to $5.00; Woodyatt ball-bearing, 12 to 20 inch, $5.60 to $7.45; Star, 12 to 16 inch, $2.75 to $3.05; Daisy, all sizes, $2.50; Philadelphia, King Edward and Grass Boxes, 50 per cent off 1905 quotations.

Sporting Goods—Rifles are having an enormous call, being included in every order sent in. Ammunition and shells are also in very active demand.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chains are selling well. Our quotations are: 1-4 inch, $6.50; 5-6 inch, $4.45 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Trade continues active, manufacturers being rushed to make shipments of goods ordered. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Barb and Coiled Spring Wire—Some wire is still being sold but the volume of business is decreasing. No change in quotations.

Wire Nails—Demand continues very keen, but quotations remain the same.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Axes—Trade is increasing and the outlook for a large trade in both handles and blades is excellent.

Horseshoes—Prices continue unchanged with the outlook for business excellent. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—Blacksmiths are ordering in large quantities and dealers have no complaints to make.

Cutlery—Trade continues very active and the season's business bids fair to be a record one. Sorting orders are coming in freely.

Skates and Sleigh Bells— Merchants are ordering well, particularly for sleigh bells.

Screws—Demand is strong and the market is very firm.

Rivets and Burrs—The possibility of higher prices is giving an impetus to trade. Prices remain as before.

Bolts and Nuts—The high prices of iron has made prices very strong, but no advance has been made as yet.

Cordage—Sorting orders are being received. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—The season's demands have been very heavy and there is little of a surplus on the market. As the bulk of the business is done, however, there is talk of a fall in prices on the higher priced brands. For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—Business is picking up and prices continue as before. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Business is active, the heavy building being done calling for a large quantity of goods. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool—The market in these lines has made no material change since our last report. Demand continues very active with supplies coming in about equal. Expectations are general that a change in the situation is imminent which will bring the market to a more stable basis.

We quote:

Hides, inspected, No. 1 per lb.		0 12
" " " 2 "		0 11
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelts, best city slaughter		1 00
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 15½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, October 27, 1905.

HIGHER prices in a number of metals have been reached this week, with the market holding most firmly at the advanced figures.

As was announced in our last issue, new lists have been issued by the jobbers, showing advances on nearly all heavy goods. Conditions all around seem to indicate that these new prices

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For all purposes requiring the best quality.
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will not only be held firm at the new quotations, but may even be advanced still further before long.

Copper remains unchanged in price and the shortage is still noticeable. There is no indication of any break in the near future at any rate.

Tin is again firming up with prospects of an early increase in price. Tin plates have again been advanced to importers, which gives added strength to the figures here quoted.

Pig lead has once more been advanced to the importers, but jobbers' prices have not been changed. This goes to prove, however, that the top price for lead has not yet been reached and we may expect more records to be broken by this metal, before the end of the upward movement is reached.

The pig iron situation is decidedly interesting just now The remarkable buying of Scotch pig iron is being wonderfully maintained with the result that Old Country producers have advanced the price during the week 8 to 10 shillings. Prices from now on will keep going higher, especially as stocks in the hands of Canadian dealers are said to be light. It is confidently predicted by men most closely in touch with the market that the high prices asked two or three years ago will be reached before the present situation is relieved. The effect of such a condition will inevitably be increased prices for all kinds of manufactured articles produced from iron, as raw material.

Canada Plates—As we predicted last week an advanced price has been set for galvanized plates. Our prices now are: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $4.00; 60's, $4.25.

Copper—The situation is unchanged, with a shortage still apparent. Our quotations are: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—Shows a disposition to reach higher prices before long. The market is growing considerably firmer. We are quoting: 36c to 36 1-2c. per pound.

Pig Lead—It is expected that still higher prices will shortly be demanded for this metal as import prices have already advanced again. Our prices are: $3.85 to $3.95 per hundred pounds.

Boiler Tubes — We quote prices as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c., 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, per foot net.

Pig Iron—We are this week quoting an advance in Summerlee to $20 to $20.50. Indications are for higher prices right along, throughout the winter. We quote:

"Disc," No. 1	$16.50	delivered Montreal.
"Dom.," No. 1	17.50	" "
Usual difference in price for lower grades.		
Ferrona No. 1	$18 00	delivered Montreal.
" No. 2	17.50	" "
" No. 3	16 50	" "
" No. 4	16.00	" "
Londonderry	$18.75 to $19.25	" "

INGOT METALS

Tin—"Straits" and "L & F"
Lead—Best English
Copper—Lake and Casting
Spelter—"V M" and Ordinary
Antimony—Cookson's

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Glengarnock	18.25	delivered	Montreal.
Gartsherrie	19.25	"	"
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Carron No. 1	21.00	"	"
" (special)	20.00	"	"
Ayresome No. 1	20.00	"	"
" No. 3	19.40	"	"
Summerlee	20 00 to 20.50	"	"
Clarence No. 1	19 00	"	"
" No. 3	18.50	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—No further change in price has been reported beyond that mentioned two weeks ago. We quote: Sleigh shoes, $1.97 1-2, tire, $2.12 1-2; spring, $2.75; toecalk, $2.67 1-2; machinery iron finish, $2.07 1-2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash 30 days.

Cold Rolled Shafting—Our quotations are: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Several advances have taken place during the week. The demand is very brisk and the market firm. We quote: as follows: Queen's Head, 28 gauge, $4.25; 26 gauge, $4.00; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.65; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.45; "Windmill Best," 28 gauge $3.95; Sword and Torch 28 gauge $4.05; in less than case lots 25c. extra.

Black Sheets Advances have been declared in nearly all guages. We quote: 28 gauge, $2.25; 26 gauge, $2.15; 22-24 gauge, $2.05; 19-20 gauge, $2.00; 8-10 gauge, $2.30.

Antimony—No further weakening has occurred sufficient to lower prices as reported last week. We give the following prices: 14 1-4 to 14 1-2c. for Cookson's.

Tin Plates—Big advances have lately been made to importers, but we are still authorized to quote: Cokes, $3.75; charcoal, $4.00.

Ingot Zinc—Prices remain as before, with the market exceedingly steady. We quote: 6 3-4c. to 7c.

Bar Iron—Conditions are unchanged. We still quote: $1.87 1-2 base, f.o.b. Montreal.

Scrap Metal.—The iron market remains the same as before. There has been an advance in the American markets, but there is little here, for wrought iron, as the mills are using steel for nearly all the products which are in greatest demand. Cast iron on the other hand, has been sold pretty regularly and local stocks are small. The old rubber situation is curious and there are indications that the price cannot be kept down much longer as the figures obtained for Para rubber are out of all proportion to those which old rubber commands. Although no transactions are being made public the price is advancing and it is doubtful if the reclaiming interests will be able to pull it down to its old place. We quote: Copper wire 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 1-2c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 6 3-4c. to 7c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 27, 1905.

DESPITE the remarkably high prices at which most metals are quoted, there is a very large volume of trade doing. Many orders are being booked for forward delivery and the total of the month's business has been exceptionally large.

As predicted last week an advance has been made in Canada plate and galvanized sheets. Ordinary Canada plates are now quoted at $2.75 an advance of 25c., a similar rise being recorded in galvanized sheets.

Iron is very strong and the product of some mills cannot be procured at any price owing to booked orders. All ingot metals are likewise strong while pig lead has made another advance and is now quoted at $4.10, the highest figure on record.

Pig Iron—Advances in outside markets give added strength to the local market. Prices are firm and trade active. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 00
Londonderry, at furnace	16 50 to 17 00

Bar Iron—While no further advances are reported the market holds strong and still higher prices are likely as the mills are pushed to their utmost capacity to supply the active demand. We quote $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—Market is active and demand very keen. Quotations have fluctuated, but are now steadier.

Tin Plates— Demand is active with considerable strength shown in prices.

Galvanized Sheets—As predicted last week new lists appearing this week show an advance of about 25c. The demand continues very active.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Another advance has been made and the market has reached record figures. Buying continues heavy and prices firm. We quote: Pig lead $4.10 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Trade is brisk and prices quoted are firm. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Business being done is quite large, no falling off in the demand being reported. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Increased activity is reported and prices are a trifle stronger.

Old Material—Lead is in better demand and copper is weaker. Iron is not as active here as in the States. Dealers' buying prices are as follows: Heavy copper and wire, 13c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $7.50 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 1-4c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Possibility of a strike in both the anthracite and soft coal fields is making business active. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

$1.25; run of mine, $1.05; nut, 90c.; N. 3-4 inch, $2.35; mine run, $2.35; slack,

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age October 26 1905

BOOKINGS of finished iron and steel continue on an enormous scale and thus far this month are nearly up to the record-breaking rate of September. The pressure in many quarters is enormous and the plants are provided with work for long periods. There is the most intense activity in all directions.

In the eastern steel trade there has been another outburst of buying of basic pig iron for delivery during the winter and fully 75,000 tons have been taken at advancing prices, with negotiations pending for at least half as much more.

A scarcity of pig iron for steel making is developing in the Chicago district and it is likely that iron may be shipped from lower lake ports to that district by water before navigation closes.

The United States Steel Corporation has secured options at $16 and at $16.50 on practically all the Bessemer pig available in the Mahoning and Shenango Valleys till the end of the year, the only exception being one lot of 10,000 tons held by a merchant.

These purchases of iron are necessary in spite of the fact that the Steel Corporation is operating all its blast furnaces except three, of which two are out for repairs.

In the steel rail trade a number of fair orders have been booked and some additional large tonnage is looming up.

Thus one system which has already bought 140,000 tons is again in the market for 20,000 tons more.

Inability to make prompt deliveries of structural material continues to be the only serious phase of the situation in that branch. A large tonnage for future requirements is being booked. With the large orders for cars in hand and in sight the plate mills have an exceedingly busy time before them.

The amount of business done in bars has been large and sellers are holding back. Among the orders for merchant pipe just placed is one for a 33-mile line in Louisiana.

The cast iron pipe shops are very busy with some large work coming up. Included in the latter is a good order for New York City. The shops cannot yet think of working for stock, which they usually begin to do at this time of the year.

There has been a heavy movement in tin plate, and there are included in recent sales nearly 7,500 tons of tin plate for export.

Canadian buyers are very urgent for steel and finished material the volume of business there being extraordinary, but our mills are not in a position to take much of it.

The reports from foreign markets are excellent, the bookings of shipbuilding material in England, in particular, having been very large.

The line of "Metallic" Stone and Brick Fronts which we offer to dealers in Sheet Metal goods this year contains many patterns, some of them simulating cut stone so perfectly that only close inspection reveals the pressed metal. The effect may be still further perfected by the use of paint and fine screened lake sand.

While our "Metallic" Fronts are for more exact in imitation of stone or brick, and are made of better metal, they cost no more than the poorly made sort.

We are after the trade on the score of price and quality combined.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.

OF CANADA, Limited

(Established Twenty Years)

Toronto ***Winnipeg***

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Material of every description.

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LONDON METAL MARKETS.

From Metal Market Report, October 18, 1905.

Pig Iron—Cleveland warrants are quoted at 53s. 6d, and Glasgow standard warrants at 51s. 10d, making prices as compared with last week 6d lower for Cleveland warrants and 6d lower for standard warrants.

Tin—Tin opened firm at £149 2s. 6d, futures at £148 5s., and after sales of 100 tons of spot and 150 tons of futures closed easy at £148 15s. for spot and £147 17s. 6d for futures, making price as compared with last week 2s. 6d lower on spot and 7s. 6d lower on futures.

Copper—Spot copper opened steady at £72 5s., futures £71 5s., and after sales of 250 tons of spot and 600 tons of futures closed firm at £72 7s. 6d for spot and £71 2s. 6d for futures, making price as compared with last week 2s. 6d lower on spot and 2s. 6d lower on futures.

Lead—The market closed at £14 15s., making price as compared with last week 3s. 9d lower.

Spelter—The market closed at £28 15s., making price as compared with last week 2s. 6d higher.

Nova Scotia Trade News

PRICES have taken a sharp advance in some lines of hardware since last report. Bar iron is quoted at $2.10 base, an advance of ten cents. Zinc is quoted at eight cents by the cask, and 8½ cents for lesser quantities. Sheet lead is selling at 5 cents per pound by the roll, and 5½ cents for smaller quantities. Black sheet iron 18 by 24 gauge is quoted at $2.25, and 26 gauge at $2.40. Galvanized sheet iron 18 x 24 is selling at $3.75 and 26 gauge at $4 per hundred pounds.

The stove dealers are consuming large quantities of these goods at the present time, and orders are coming in quite freely. They are extensively manufacturing stove pipe and bake pans. Business generally continues most satisfactory, and no complaint is heard regarding the condition of trade. The outlook for the mining industry in the Province is more promising than it has been for some time, and from some sections good orders have been received. Some firms here have filled good orders for iron pipes, and the demand for lumbermen's supplies continues very good. Blasting powder is being sold quite freely, also ammunition, and a considerable quantity of bar iron is being sent out of the warehouses. Dealers here decline to quote prices on glass. A number of them have large stocks on hand, but they prefer to hold the article rather than part with it, even at the advanced prices.

Some of the firms are now busy shelving their new cutlery and small wares.

During the week the last span of the superstructure of the Hillsboro bridge at Prince Edward Island was placed in position. Considerable work remains to be done before all is ready for railway and carriage traffic, but the placing of the last span marks a noteworthy date in the progress of the work. The bridge is by far the most important project of its kind ever attempted within the Island Province. Both the Federal and Provincial Governments have contributed and will contribute, though in very different proportions, to its cost of maintenance, and it is expected that about the first week of November trains will be operated on the Southern Railway, thus giving daily communication by rail for the first time between the southeastern section of that Province and Charlottetown, and marking an important era in railway development in the Island.

Dominion No. 3 colliery, Glace Bay, was idle during the week, the miners having gone on strike on account of the new explosive, "Bobbinite," introduced by the company. The miners claim the plug powder is not as effective for their work as the loose powder. The price of the former is also higher. At a conference between the officials of the Dominion Coal Co. and the men it was decided to test the leading safety explosives on the market, together with Bull Dog and Bobbinite, at all the collieries of the company. In the meantime the men have consented to return to work.

The steamer Trebia, which arrived here during the week, landed 18,346 steel rails for the South Shore Railway Co.

DOMINION CO.'S ANNUAL MEETING

THE annual meeting of the Dominion Iron & Steel Company, held in Montreal on October 18, brought together an unusually large number of shareholders, and was marked by some interesting announcements. The most important of the latter was made by Mr. J. H. Plummer, the president, when he stated that Mr. Frederic Nicholls, the vice-president of the company, had decided to retire from the executive and board of the company. On the occasion of his withdrawal, Mr. Nicholls was offered a very handsome remuneration by the directors, but this he absolutely refused to accept. The directors then presented him with a very valuable piece of silver, as a slight token of all that he had done for the company. A very hearty vote of thanks was extended to him by the shareholders.

As the financial statement submitted at the meeting was only up to May 31st President Plummer, on request, gave some interesting figures of the four months to October 1. This statement showed that for the four months the total earnings had averaged $73,000 a month, while the interest charges had aggregated $56,000, leaving a net profit of between $16,000 and $17,000 a month to be applied for sinking fund or other purposes.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Oct. 27, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

BUSINESS in all lines of general hardware continues very active there being an especially heavy movement at present of heavy goods. Shelf-hardware is also in good demand. Prices are fairly steady in all lines.

Lanterns—Wholesale prices are steady and are quoted as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Since prices were fixed for next season there have been no new features of interest. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized, 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire, 14	3 30
" 15	3 45
Annealed wires (unoiled) 10c. less	

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Immense quantities of wire nails are being hurried in before the close of navgation. The price has been steady since the decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4 00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c
Pure fibre, plain	60c.
" tarred	80c

Ammunition, Etc.—Sorting orders are still coming in. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 16 to 16 gauge, 100 lb.	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—There are rumors of an advance in some makes of galvanized sheets. Prices are firmly maintained at following prices:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tin plate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum and Gasoline— Prices are still quoted as follows:

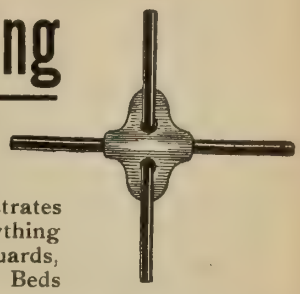
Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74 76	27c.
Gasoline, 7 -72 (Engine)	25c

(In barrels f.o.b. Winnipeg.)

Paints and Oils—Business continues brisk at unchanged prices. We quote:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls		0 02½
" " in kegs		0 02¾
Turpentine, pure, in barrels		0 96
Less than barrel lots		1 01
Linseed oil, raw		0 57
Boiled		0 60

Railway and Farm Fencing



We are prepared to place Munro's Lock Wire Fence in the hands of Hardware Merchants.

No patent tools required to fasten lock. Cut illustrates another style of galvanized lock that is superior to anything on the market. Write us for prices on Window Guards, Counter Railing, Steel Ladders, all kinds of Spring Beds and Mattresses. Largest works in Canada West.

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

TRADE MARK

This design a guarantee of quality.

WRAPPING PAPERS

ALL GRADES, AND BEST OF EACH

GREY, RED-BROWN, MANILLA, FIBRE, TEA, ETC.

SAMPLES AND PRICES FOR THE ASKING.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

Established 30 Years. Quality Tells.

We have seven factories producing daily 120,000 Files and Rasps, which are distributed throughout the four quarters of the Globe, and the excellent reputation which our Files maintain is the result of many years experience, and the expenditure of a large amount of money in designing the most elaborate machinery and tools for producing our INCREMENT CUT FILES, in all sizes and shapes, for all purposes.

We manufacture several Brands at our Dominion Works, all of which are warranted for their excellent cutting quality.

Sold by all prominent hardware and mill supply merchants.

NICHOLSON FILE COMPANY
Dominion Works, PORT HOPE, ONT.

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

FOR SALE.

A ONE-THIRD interest in the hardware and implement business of George Stephens & Co., Chatham, Ont. For particulars, apply to D. H. Douglas, Chatham, Ont. [43]

ONE No. 3 Warrington Steel Pile Driver, length, 8 feet; diameter of cylinder, 8 inches; normal stroke, 30 inches; weight of striking parts, 1,800 lbs.; total weight, 3 800 lbs; distance between jaws, 18 inches; width of jaws, 6¼ inches; fitted with patent end base; interchangeable; complete with all fittings and steam hose. This hammer has been used but two weeks by a private concern (to hustle work delayed by contractor) which has no further use for it. It is practically as good as new. Box 285, HARDWARE AND METAL, Toronto. [45]

VALUABLE Canadian patent for a very useful pocket tool; cost one cent to manufacture; retails for 10c.; half a million sold in the States. For particulars or interview address Perry, Box 397, Norwich, Conn. [45]

UNITED STATES manufacturers of burglar proof window lock and ventilator would like to sell Canadian patent to manufacturer of hardware specialties, or to establish an agency and sell to the hardware trade. The lock is automatic and has proved a good seller in the United States Address all inquiries to Box 288, HARDWARE AND METAL, Toronto. [44]

SITUATION WANTED.

WANTED—Situation as traveller with experience in hardware lines, either stoves, tinware or hardware specialties. Address Box 289, HARDWARE AND METAL, Toronto. [43]

WANTED.

WANTED—Foreman for forge shop of large agricultural implement manufactory, one used to designing drop hammer and bulldozer dies for producing duplicate parts at a low cost; up-to-date shop and pleasant surroundings; none but first-class, experienced men will be considered. Apply Box 286, HARDWARE AND METAL, Toronto. [43]

WANTED—First-class salesman for line of locks and hardware specialties for Canada on commission. Safe, Padlock & Hardware Co., Lancaster, Pa. [43]

FOR SALE.

OLD ESTABLISHED HARDWARE BUSINESS in one of the best Manitoba towns; first-class wheat district; good stock and buildings; paying trade; suitable terms; a fine opportunity for anyone wishing to go into the business. For information apply to **The J. H. Ashdown Hardware Co., Limited**, Winnipeg, Man. [46]

EXPERIENCED ADVERTISEMENT WRITERS

who are open for a situation are requested to register their names with the MacLean Publishing Co., at any of their offices. Inquiries are occasionally made by manufacturers and wholesale houses who contemplate establishing their own advertising department.

Window Glass—We quote as last week.

10-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

British Columbia Trade News

Vancouver, B.C., Oct. 19, 1905.

ONCE more the "largest shingle mill in the world" is being erected. This time it is to be on the west coast of Vancouver Island. The last time it was in the city of Vancouver, and the mill then erected, owned by the Hastings Shingle Manufacturing Co., has continued to hold the championship in size and daily capacity. The new mill is being erected by the Seattle Cedar Manufacturing Co., which has secured large holdings of choice timber lands on Vancouver Island. The mill is to cost half a million dollars and is to have a daily cutting capacity of 380,000 every ten hours. The location selected is on Mosquito Harbor, Mears Island, and the same company intends erecting a smaller mill on Nootka Sound. The company has begun operations, and the manager, H. G. Pake, has been in the city of Victoria this week buying and forwarding supplies by the coast steamers, by which he has also been sending up men. The increasing scarcity of cedar in the coast districts of the State of Washington is driving millmen of that State to British Columbia, where they are buying everything in sight in the cedar line.

* * *

The White Pass & Yukon Railway Co. has established a record in the handling of freight. On October 13 there was not a pound of freight left between Skagway and Dawson to be forwarded. Everything had been cleaned up although the river is still open for navigation. Last year when the river closed there were 800 tons of cargo piled up at White Horse. As most of the perishables were forwarded first, the bulk of that held up was hardware and similar goods. These were in their way as important as the provisions, but not being of perishable nature nor liable to reduction in value intrinsically, the other articles had the preference when it came to a delay. For the first time on record Dawson merchants have in hand all the stock forwarded to them.

* * *

Fire destroyed a dry-kiln and a portion of the lumber sheds with the stock they contained at the mill of E. H. Heaps & Co., Vancouver, on October 17. This, with the exception of the fire in the Red Cedar Lumber Co.'s mill a few weeks ago, is the first mill fire of any extent for some years. though the number and capacity of the plants in operation on Burrard Inlet and False Creek has almost if not quite doubled in that time. The damage to the Heaps plant was not sufficient to close the mill down, though the loss is estimated at $10,000.

* * *

Activity in zinc properties in British Columbia seems to be on the cards. Last year C. Fernau erected a zinc-enriching plant at Rosebery on Slocan Lake, to reduce low-grade zinc ores to concentrates. This year he has completed at Frank a zinc smelter of large capacity. Heretofore all zinc went to Belgium from this Province for smelting and refining. It is more than rumored that many zinc properties close to Vancouver have been quietly acquired under bond, and some developments of importance in the mining of this metal are expected shortly.

* * *

After a long and tedious series of negotiations the City Council of Vancouver has reached a conclusion with the telephone company whereby the city agrees to permitting the company to put its wires underground, a change which was completed some weeks ago, the terms only being under discussion. Everything is now arranged satisfactorily, and the company has the moral support of the council to the placing of their wires underground. The council never opposed the principle of underground wires but held that the company was bound to recognize the city and to act under supervision of civic authority. Meantime the work was prosecuted under difficulties until a provisional agreement was made, the work was carried out, and the final agreement reached.

* * *

Mining in the Boundary district is particularly active at the present moment. The big Granby smelter at Grand Forks is running full capacity, its eighth and last stack having been blown in. The company has been handicapped all summer by lack of power. They are now anticipating the completion of the new power transmission line of the West Kootenay Power Co., and in the meantime are taking advantage of cheap water power afforded by the Kettle River, which is at present at a high stage.

* * *

In the Similkameen country the big Nickle Plate mine, owned by Marcus Daly and associates of Butte, Montana, is doing extremely well. As soon as the Great Northern branch now being built reaches Hedley, which will not be long, the mill will be increased from 40 stamps to perhaps three times that number. There are about 150 men now employed round the reduction works. Mr. B. R. Lamb, an Australian, has recently been appointed manager of the mill. Mr. M. K. Rodgers remains general manager of the mine and all the company's interests in the Province.

* * *

The opening of the Crofton smelter on Vancouver Island has given encouragement to many island and coast properties. There is every likelihood of a number of mines in the Mount Sicker camp getting on the shipping list.

* * *

In the interior the Hall Mines smelter at Nelson will be shut down for some time to instal new machinery and increase its capacity. The latest reports from London show a sudden increase in the value of this company's stock in the market.

PERSONAL MENTION

Quebec.

W. Gaulin, tinsmith and plumber, of St. Cesaire, was in Montreal on Thursday.

J. B. Bordua, of St. Charles, Que., was in Montreal this week looking after his business interests.

Chas. Leblanc, hardware merchant, of Joliette, paid a business visit to the metropolis on Friday.

P. Gaudet, proprietor of the water works, St. Ours, visited Montreal last week to purchase supplies.

J. C. Harbeck, hardware merchant, of St. Johns, Que., visited Montreal last week on a buying expedition.

W. H. Dorken, of Dorken Bros. & Co., hardware importers, Montreal, visited Halifax and St. John last week.

Geo. J. Crowdy, of Jas. Hutton & Co., importers of cutlery, Montreal, has returned from his European trip.

G. C. Davis, of Frothingham & Workman, Limited, is spending a few days on Lake St. Louis, duck shooting.

P. D. Dods & Co., makers of Island City paints, Montreal, are enlarging their factory on St. Patrick street.

M. Guertin, of Hebert & Guertin, general merchants, St. Charles, visited Montreal wholesale houses last Monday.

Willie Gaucher, agricultural implement agent, of St. Damase St. Hyacinthe county, Que., spent Saturday in Montreal.

Jean Roux, proprietor of the saw and grist mill and electric lighting plant at Ste. Therese, was noticed in Montreal last week.

M. H. Day, general manager of the Consumers Cordage Company, Limited, Montreal, spent a few days of last week in Toronto.

James Kinsman, representing North Bros. Manufacturing Co., of Philadelphia, was in Montreal and Toronto this week calling on the wholesale trade.



John A. McAvity, St John, N.B.
President Maritime Provinces Wholesale Hardware Association.

R. H. Cowan, of the Traders' Company, Buckingham, Que., was a visitor at some of the Montreal wholesale warehouses on Tuesday. Mr. Cowan reports that trade in his district is remarkably brisk, and dealers are looking forward to a big season.

The Montreal branch of the Canadian Manufacturers' Association and the wholesale hardware dealers met in joint session Monday to consider some matters in reference to the new car service rules. Mr. J. R. Marlow of the Manufacturers' Transportation Department, attended the meeting.

Ontario.

The new building of the Wampole Co., Perth, is nearly ready for occupation.

Aaron Charles, hardware merchant, Gravenhurst, is advertising his business for sale.



E. K. Spinney, Yarmouth, N.S.
Ex-President Maritime Board of Trade.

Wm. Vallance, wholesale hardware merchant, Hamilton, is erecting a $3,000 stable.

A. E. Kemp, M.P., was a caller at the Toronto office of Hardware and Metal a few days ago.

W. F. Cockshutt and Mrs. Cockshutt, Brantford, have returned from a month's trip to the Pacific coast.

Alex. Saunders, of the Goderich Organ Co., attended the meeting of the Central Supply Association in Toronto this week.

The wife of D. A. McNab, of McNab Bros., hardware merchants, Orillia, died at the Toronto General Hospital last Friday.

Joseph Shildrack and wife of Hagersville have just returned from a holiday trip to Cleveland, Buffalo and other American cities.

T. H. Stephens, of the Empire Brass Co., London, was in Toronto this week attending the meeting of the Central Supply Association.

C. C. Ballantyne, of the Sherwin-Williams Company, Montreal, was in Toronto a few days ago on Manufacturers' Association business.



A. M. Bell, Halifax, N.S.
Second Vice-President Maritime Board of Trade.

Major Allen, hardware merchant, Newmarket, is spoken of as the probable Conservative candidate in North York, to oppose the Hon. A. B. Aylesworth.

W. W. Near, president of the Page-Hersey Co., Guelph, was a visitor in Toronto this week, attending the meeting of the Central Supply Association.

H. T. Bush, of the Standard Ideal Sanitary Company, Port Hope, was a visitor in the city this week, attending a meeting of the Central Supply Association.

L. N. Patterson, general manager of the Patterson Roofing Co., Toronto, has been confined to his home this week owing to a severe attack of rheumatism in his shoulder.

John Burns, manufacturers' agent, representing D. Moore Stove Co., Burrow, Stewart & Milne, and the Canada Screw Co., Hamilton, and the Belleville Hardware Co., Vancouver, was a caller at Toronto office of Hardware and Metal this week.

MARITIME HARDWARE DELEGATES.

AT the convention of the Canadian Wholesale Hardware Association in Toronto last week the Maritime wholesale hardware merchants were represented by a strong delegation three of whose portraits are reproduced herewith, and the fourth, Mr. W. H. Thorne, St. John, we expect to present to our readers in an early issue. Mr. McAvity is president of the Maritime Provinces Wholesale Hardware Association, Mr. Spinney is past president of the Maritime Board of Trade, and Mr. Bell is at present second vice-president of the latter body. It will be seen, therefore, that the delegation was particularly representative and their influence, thrown into the effort to bring about a strong organization of wholesale hardware dealers throughout Canada, should so much towards aiding in the success of the effort.

PAINT, OIL AND BRUSH TRADES

STAINING COLORS IN THE PAINT TRADE.

COMPLAINTS are rife among some of the paint-grinding houses that trade in staining colors (by which are commonly meant ochres, siennas and umbers in oil, and a certain proportion of oxide colors and chemical colors) has dropped on seriously of late. Individual firms may be in a position to assign definite reasons for this, but there is one factor in the case which is undoubtedly exerting a potent influence, and which appears to be overlooked by many. It is the present fashion in "white work." For outdoor work light colors are all the vogue. Houses are now finished in white or light tints of cream, stone, ivory or grey, whereas in years gone by full tints were prevalent. In connection with interior work the change is even more marked. White or light-tinted enamels are universally adopted. "Plain painting" in colors, which used to be an important branch of the painter's trade, is now a dead letter, practically speaking, and the present popularity of water paints and washable distempers, enamel and white woodwork, will undoubtedly have the effect of curtailing the use of staining oil colors in the near future. The decadence of graining and marbling has also operated in the same direction. —Oil and Colorman's Journal.

NEW WHITE LEAD PROCESS.

THE Australian White Lead Manufactory of Sydney hold the patent right for a new process for the manufacture of white lead, which it is claimed has been successfully put into practice. The firm has been experimenting for about three years past, and it is claimed for the process that the product is pure metallic, non-poisonous, durable, unaffected by noxious gases and insoluble to acids and salts. The Railway and Public Works Departments have accepted the lead after testing it. Expert analysis has reported within .3 of absolute purity, baryta and sulphuric acid being entirely absent. Those officials who have used it report that it is soft and fine, and weight for weight will account for a greater surface than will the usual dry product. The raw material in the process of manufacture is galena, which first dried and sifted is run into a furnace to which the atmosphere has a free access. Therein it is changed into sulphate of lead in the form of vapor. This vapor is precipitated in a calico flue 2,000 feet in length. Its passage leaves a residue, which is the pure white lead. Within the flue while the cooling process is going on sulphuric acid and other fumes escape. The manager of the factory claims to be able to manufacture to sell at from £24 to £25 per ton, as against £28 per ton English standard price. A feature of the process is the entire absence of waste, the soiled product being refined by another passage through the furnace, the slag being treated in a blast furnace. The sole fuel used is coke. The finished produce presents a distinct greyish tinge, due it is said to the absence of adulterants.

TURPENTINE FROM STUMPS.

As recently announced in Hardware and Metal a newly invented mechanical process for the extraction from wood of turpentine, creosote, tar and other commodities is now in operation at Barry's Bay, near Eganville. The result of the working of the plant is expected to be the organization of a company with a large capitalization, and the development of the industry on a large scale. Red pine stumps are found to contain the largest proportion of pitch and the only expense connected with production is the wood consumed in heating the retorts. A lease of a large tract of land in the lumber limits has been secured and supplies for about forty years operation are said to be available.

The plant consists of a series of retorts—tank-shaped vessels around which heat circulates and exhales from the wood the vaporable properties which as they pass from one to another are refined until they reach the purest stage of the different liquids. The wood is placed in the large central retort and heat applied to a specific degree, when of course the more volatile substance rises and is carried off, leaving in each as it passes through the retorts and gradually cools, its heavier property. Thus the lighter vapor will reach the last retort as pure turpentine; others will receive it in a more crude state of refinement, while again it assumes the quality of creosote. Acetic acid is also produced. The degree of heat used to exhale these vapors will not extract the heavier substances and more is applied, bringing out what forms itself into oil of tar and pure tar. The large retort in which the wood is placed is of course air-tight and when it has been completely vaporized the substance left is the finest charcoal, so that every particle of the wood is utilized.

The Northern Oil & Gas Company, who have been drilling for oil near Manitowaning, Manitoulin Island, have struck a flow of oil producing 400 barrels per day with a pressure of gas amounting to 2,500 lbs.

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depend upon every tin of Elastilite Varnish you sell doing its share in meriting the confidence of the buying public. That yours is a store to be depended upon for goods of first quality.

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PIANO, ORGAN AND CABINET VARNISHES

If you have never carried these varnishes, now is a good time to commence. There is a steady demand for such-like goods, and you are entitled to a share of the business. We will send you samples with pleasure. Drop us a line.

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Paints and Varnishes to measure up to a certain standard. Users now know what that standard is. You can attribute your sales to it, and we can attribute your second order to it. There is a satisfaction in handling satisfactory goods. You know that.

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Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manu facture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.

BRANDRAM BROS & CO
BRANDRAM'S B. B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 27, 1905.

THE demand for all classes of paints and varnishes continues good, though not abnormal and October will go on record as having been a good healthy month in the trade. Turpentine remained steady during the week without any further advance, thus justifying our predictions of last week.

Shellac continues steady with a good demand. The indications are that owing to the high price of turpentine and shellac varnish will have to be advanced for the winter. If present prices are held, and there is every reason to believe that they will be, an advance must occur.

Red lead is another article which must command a higher price very soon, certainly as soon as navigation closes. The prices we are quoting are considered the very rock bottom at present.

Turpentine—The demand during the past week has been quiet and there seems to be an impression that better prices will be obtained before long. We are still quoting the following prices: Single barrel, 98c. per gallon. Two barrels or over, 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Old Country markets remain active and prices there are firm with an upward tendency, but this has not yet affected conditions locally. We quote: Raw, one to four barrels, 45c. five to nine barrels, 44c.; boiled, one to four barrels, 48c.; five to nine barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—We quote: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal,

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—Prices are unchanged but are considered very firm. The strength of spelter being reflected in this market. Our prices are: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc—(Ground in oil) — We give the following prices: 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—We give the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Our prices are considered to be somewhat low, but they are nevertheless quoted by some of the local firms. We quote: Genuine red lead in casks $4.50; in 100-lb. kegs $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—The figures we give are benig shaded in some quarters, but we still quote: Fine orange, 55c. per lb. med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—Business is active and the demand is good. Our quotations are: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Prices still remain $1.20 to $1.40 per gallon.

Castor Oil—We are still quoting 8 1-2c. to 9 1-2c., according to lot. These prices, however, are being slightly shaded by a few of the jobbers.

Refined Peroleum--Business active and steady. A big rush of orders is expected until the close of navigation. No advance has been made on the local markets in spite of strength in the United States, and we are still quoting as follows: American water white, 16 1-2c. to 17c.; Canadian prime white, 14 1-2c.; 18 1-2c. ex warehouse.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Oct. 27, 1905.

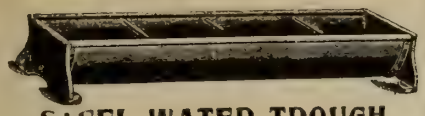
A SCARCITY of turpentine on the local market has kept prices very firm, but no further advance has been made. The market in the south is weaker but it may rally before any of the cheaper product arrives in the north. Linseed oil is also quite strong at last week's figures.

Crude petroleum has advanced 2c., but refined is still the same. Shipments of the latter are very heavy and until navigation closes the movement of goods to the outlying districts is certain to be very large.

General business continues very active, some large purchases of white lead having been made owing to the looked for increase. Both barn and mixed paints are selling actively, while varnish is also in fair demand.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb.

HARDWARE MEN: Our



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is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. TWEED, Ontario Limited

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packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs.. $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c.; boiled, 50c.; 5 to 9 barrels, raw, 46c.; boiled, 49c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Shipments to the north and west are very large and will continue until the close of navigation. Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c; 18 1-2c. ex warehouse.

Crude Petroleum—An advance of 2c. has been made on crude petroleum, the rise holding good on all lines. We quote: Pennsylvania, $1.38; Ohio, 94c.; anadian, $1.34.

The International Lumber Company are purchasing large timber limits in New Ontario and are understood to intend to erect a mammoth saw mill at International Falls.

* * *

The contention made by the United States steel companies that the Canadian tariff on certain classes of iron and steel is certain to be lowered because the Canadian steel companies cannot meet the large demand is entirely scouted by the steel interests in Canada, who state that they are quite capable of filling any orders placed for rails, etc., and the different bridge and equipment companies can easily extend their plants in a way that will enable them to handle increased business.

COMPETITION

is no longer the life of trade ..... On the contrary..... too much ..... competition ..... is the ..... DEATH of TRADE... CO-OPERATION..... is the powerful factor which makes trade profitable..... Up-to-date Hardware men will..... CO-OPERATE..... with the CANADA PAINT COMPANY, Limited, of Montreal, Toronto and Winnipeg, the leading manufacturers in the Dominion of Canada of

PAINTS COLORS AND VARNISHES



THE CANADA PAINT COMPANY LTD

Pease
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Boiler

We want your boiler orders to-day.

The Boilers will be shipped the same day as order is received

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

HAMILTON, situated at the extreme west of Lake Ontario and about forty miles from Niagara Falls, has for its size attracted more industries within the last couple of years than probably any city in Canada. The reason for this is not altogether due to favorable location, but more so to the enterprise of the public-spirited citizens of the place. They realized that this was Canada's growing time and made the most of it. It was not by holding out alluring baits that most of the enterprises were secured, but by having a straight business proposition to offer to any firm inquiring concerning manufacturing conditions within the municipality. When a manufacturer expressed his desire to look into conditions he was invited to pay a visit. When in the city he was taken over the ground and shown exactly what the city had to offer, told within a few dollars of what the land would cost, what would be his taxes, and any other information that a manufacturer needs must know when considering the cost and possibilities of a new enterprise. This spirit on the part of the officials of Hamilton met with a quick recognition and no doubt due to this fact many of the new industries are located there. The building of so many plants and bringing in such a large number of workmen within such a short space of time has given rise to a serious problem regarding workmen's houses but this is being rapidly overtaken, and street after street of attractive dwellings have been and are still being erected to provide for this contingency. Among the new industries recently attracted to that city are the London Machine Tool Co., the Canada Meter Co., the Union Drawn Steel Co., Canadian Drawn Steel Co., Samson Elevator Works, Petrie Mfg. Co., F. W. Bird & Sons, Holton Shovel Works, Canadian Tool & Shovel Co., and the Canadian Westinghouse Co., all of which are in a prosperous condition and employing from a few dozen up to about 1,000 men.

The John Gooderson Threshing Co., who recently purchased the works of the Canadian Machinery Co. at Point Edward, destroyed by fire a month or so ago, are making extensive improvements to their plant, the new additions including a wood-working room, a paint shop, etc.

The Doherty Stove Works at Sarnia have been enlarged.

The Marine City Sugar Co. may remove their factory from Michigan to Canada.

The Imperial Oil Works, Sarnia, is making improvements to its plant to cost $35,000.

Work on the Canadian Metal Company's smelter at Frank, Alta, is progressing favorably.

The Cleveland-Sarnia Saw Mills Company contemplate establishing a match factory at London.

The Merchants' Rubber Co., Berlin, are to build another large factory in order to increase their output.

Thomas McGill, Kearney, Ont., proposes to organize a $40,000 company and manufacture chairs at Cornwall.

The Toronto Railway Co. have purchased 2,000 tons of 90-pound rails from the Lorraine Steel Co. of Pennsylvania.

The American LaFrance Fire Engine Co., Elmira, N.Y., are considering the advisability of opening a new factory in Winnipeg.

The Durant-Dort Carriage Co. of Flint, Michigan, and Sarnia, is to enlarge its establishment in the last named place.

The Baynes Carriage Co. are locating a new factory in Hamilton, bringing the plant for their new works from their Buffalo factory.

Companies Incorporated.

The charter of the St. Thomas Gas Company has been surrendered.

The Superior Portland Cement Company, head office to be changed from Toronto to Orangeville.

The Dominion Engineering & Construction Co., share capital $100,000. The directors are Messrs. E. Mitchell, Edward Fabre Surveyor, Charles Mackay Cotton, Joseph William Weldon and Stephen John LeHuray, all of Montreal.

Waltham Cabinet Company, Toronto, share capital $40,000, purpose to manufacture, sell and deal in cabinets, shop fittings and fixtures, etc. The directors are to be John Morrison, Frank Shapter, and Roan Hamilton Clark, all of Toronto.

The Electric Meter and Stamping Company, Toronto, share capital $200,000, purpose to manufacture, sell and deal in all electrical supplies, etc. The directors are Anthony Krane, William Bullock, John Creighton, Fairlie Sinclair and George Kerwin, all of Toronto.

The Peterborough Sandstone Brick Company, share capital $50,000, purpose to manufacture, sell, trade and deal in bricks and other building material made of sand. The directors are John Joseph English, Hastings, Andrew Brown, John James Hartley and Ernest Simpson, all of Peterborough.

The Thorn Plumbing Company, Toronto, share capital $20,000. purpose to deal in plumbing supplies, furnaces, gas and hot water fixtures, etc. Directors are John Henry Thorn, Arthur Joseph LaFay, Frederick William Jenkins, Arthur James Jackson and Frederick George Garbutt, all of Toronto.

The Silver Hill Mining Co., Mattawa, share capital $50,000. purpose to carry on in all their branches the operation of a mining, milling, reduction and development company. Directors are John McLellan Deacon, Louis Henry Timmins, Octave Napoleon Gaurreau, Henry Morel and Edward Rowan Legg, all of Mattawa.

The Standard Ideal Company, Port Hope, share capital $500,000, purpose to manufacture and trade in enamelled ware, sanitary water, steam and other pipes, plumbers' supplies, etc. The di-

rectors are Hiram Thomas Bush, Albert Edward Pipher, Pauline Lee Bush and Alice Margaret Pipher, all of Port Hope.

The Imperial Silver Mining Company of New Liskeard, share capital $250,000, purpose to carry on in all its branches the operations of a mining, milling, reduction and development company. The directors are Murdoch McLeod, James McGie Young, William Earl Kerr, Richard George Zahalan and Albert Norton Morgan, all of New Liskeard.

The Niagara Engine Works, Niagara-on-the-Lake, share capital $50,000, purpose to manufacture and sell gas and gasoline engines and other classes of engines and machinery. The directors are Egerton Ryerson Lundy, Haggai Gustavus Adolphus Cook, Francis Gustavus Kick, Hamilton Merritt Robinson, and James Albert Keyes, all of Niagara Falls, Ont.

The Haldimand Natural Gas Company, share capital $40,000, purpose to supply natural gas for light, heat and power and to construct, maintain, complete and operate works for the production, sale and distribution of natural gas for light, heat and power. The directors are Richard Anson Harrison, Francis James Ramsey and Francis Ramsey Lalor, all of Dunnville.

The Majestic Oil Company, Toronto, share capital $100,000, purpose to carry on in all their branches the operation of a mining, milling, reduction and development company, including the exploring for, boring for, refining, piping, etc., petroleum oil and natural gas. The directors are John Thomas Mullany, George Lyman Lovejoy, Thomas Henry Graham, all of Buffalo, N.Y.

Ruethel Mining Company, Windsor, share capital $250,000, purpose to carry on in all their branches the operation of a mining, milling, reduction and development company. The directors are William Augustus Thorpe, Henry Clay Rees, William Wilmon Newcombe, Charles Mallory Hovey, Archibald McPhail, John William Wolst Baker, and George Joslin Munsell, all of Detroit, Mich.

The Triple Link Mining and Developing Co., New Liskeard, share capital $40,000, purpose to carry on in all their branches the operations of a mining, milling, reduction and development company. The directors are Everard Brown, William Cotier Cragg, George Hansman, Edward Charles Symon, John Albert Badger, Joseph Irwin Dixon and Fred Wellington Ferguson, all of New Liskeard.

The Automobile Import Co., Montreal, share capital $20,000, purpose to manufacture, buy, lease and deal in all kinds of vehicles, pleasure boats, whether propelled by electricity, steam, naptha, gasoline or otherwise. Incorporators are Arthur Ellegood Hayes Crawford, Frederick Rubidge Crombie, Waldo Whittier Skinner, Ronald Cameron Grant and George Gordon Hyde, all of Montreal.

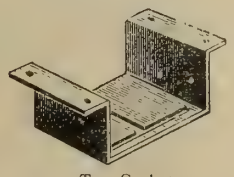
Municipal Trenching Co., Montreal, share capital $1,000,000, to undertake the work of excavating, trenching and dredging, removing rock and other material, and to manufacture, operate and sell all kinds of machinery connected therewith. The incorporators are Frederick Carleton Austin, Chicago, Ill.; Joseph William Harris, Harold A. Richardson, Frederick Henry Markey and Ronald Cameron Grant, all of Montreal.

Pedlar Talks

"KEEPING EVERLASTINGLY AT IT BRINGS SUCCESS"

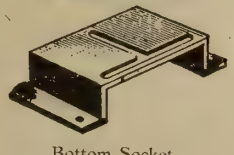
No. 27. OSHAWA, ONT. Oct. 28, 1905

Pedlar's Steel Solid Partition Stud



Top Socket





Bottom Socket

FIRE PROOF PARTITION STUD

Lumber having gone up in price Builders are now turning to Fireproof Partitions. We have lately introduced a

FIRE PROOF PARTITION STUD

made from a very heavy grade of sheet steel. Used in conjunction with **Perfect Metal Lath** nothing can better commend itself to builders. Judging by the enquiries we have received our **Fire Proof Partition Stud** will be as eagerly sought as **Perfect Metal Lath** has been. We are also making a **Sheet Steel Furring Strip** and everything in the line of **Roofing, Siding, Ceiling, Covering,** etc., etc. No matter what you want, just write us. Our numerous branches can deliver the goods. Let us have your order—**now**.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

PRESENTATION TO MR. ROGERS.

MR. E. R. ROGERS, Toronto Junction, who recently retired from active business to accept the responsible position as Inspector of Prisons and Asylums under the Ontario Government, was tendered an address and presented with a suit case by the members of the Toronto Retail Hardware Association on Monday evening, October 23rd. Mr. Rogers was president of the association and the esteem in which he is held is well evidenced by the action of his fellow members. The address read as follows :

"Dear Sir :—We, the officers and members of the Retail Hardware Merchants' Association, on learning of your retirement from our line of trade, could not let the opportunity go by without showing some appreciation of your services as president of the said association. During the years you were president we learned your value as ia citizen and as an officer of the association. Although your duties at times were very arduous, you accepted the situation in a manner which only a man of your ability can accept. On the evenings when we assembled together the president was always in his place when no doubt his business and home demanded his services, but these he overlooked for the time for the welfare of our trade.

"The association takes this opportunity of congratulating Mr. Rogers on his appointment by the Ontario Government to such an important position as they have seen fit to appoint him to. We know in him they have a man who will give a good account of his stewardship. On behalf of the members of the association we present this suit case to you as a slight token, for the very valued services you have given us, and we wish you and yours every prosperity.

"Signed,
"JOHN CASLOR,
"J. E. HALL,
"S. J. GREER."

BIG STEEL RAIL ORDER.

Two thousand five hundred tons of steel rails have been ordered by the York Radial Railway Company from the Algoma Steel Works at Sault Ste. Marie. The rails are for the Metropolitan Railway extension from Newmarket to Sutton on Lake Simcoe, a distance of 24 miles. The road has been graded and now awaits the laying of the tracks. The York Radial will purchase another two thousand tons of steel rails for the Mimico extension.

WE WANT YOU TO KNOW WHY

DOMINION BRAND
TARRED FELT

our Tarred Felt, Roofiing Pitch and Coal Tar will give you better satisfaction than any other you can handle. We can't tell you all about it here, but, if you will write us, our traveller will call on you and convince you.

"Dominion Brand" Roofing Materials

Are made only by us

LOCKERBY & McCOMB, 65 Shannon St., Montreal

Is Your Business Being Worked to the Full?

IS IT? We want to know because we are interested in our trade. You ought to know because you ought to be interested in your trade. Locks are always in demand. Remember, buildings are always going up and renovating always going on—in your locality, too. A share of this business goes to him who prepares for it—gets in a stock.

GURNEY CYLINDER LOCKS

have more good points to recommend them to both seller and user than any other lock extant. We think we could show you that there is profit for the retailer handling these goods. Will you send a card for Catalogue No. 7 and Supplements? It illustrates **Gurney Cylinder Locks** and numerous designs in artistic trimmings.

THE GURNEY, TILDEN CO., LIMITED

HAMILTON

BRANCHES:
WINNIPEG—Tilden, Gurney & Co., Limited
VANCOUVER—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P. Q.,—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

BUILDING IN TORONTO.

TORONTO has begun the last quarter of the year with a record for building permits which is already ahead of the value of the permits during the whole of 1904. Since the first of this year plans for buildings which represent a value of $7,945,787 have been approved by the department. This is an increase of $3,382,296 over the corresponding period of last year, when in the nine months the value of the permits reached $4,563,188.

That the building industry is not yet on the decline is shown by the fact that during last month plans for no less than 261 buildings were approved, whereas in September of last year there were but 186 permits. The values of the permits were $877,005 in September, 1905, and $546,275 in September, 1904. Somewhere in the neighborhood of 2,100 permits were issued this year, and 2,424 buildings were actually erected, some of the permits being for half a dozen houses. Last year there were 1,445 permits issued to September 30 and 1,248 new buildings erected.

HEIGHT OF BUILDINGS.

The height of buildings in Budapest is fixed by ordinance according to the width of the streets. Where the latter are not more than 33 feet wide the buildings must not exceed three stories above the ground floor, or a total of about 65 feet. Where the streets are 49 feet or more wide four stories above the ground are allowed, or a total height of 82 feet. Any public building or specially designed private structure may be run up a few feet above these limits by securing permission from the city authorities.

BUILDING NOTES.

A new theatre, to cost $200,000, is to be built at Winnipeg.

The Roman Catholics are to erect a $50,000 church at Arnprior.

A new fire station is to be erected in Montreal, at a cost of $100,000.

The Home Bank are to erect a branch bank in Toronto, to cost $12,500.

The Vancouver Athletic Club have let a contract for a new $12,000 club building.

A new school house is to be erected at East Kildonan, Man., to cost $1,600.

Contractor Mawhinney of Hartney is erecting a convent at Grande Clairiere, Man.

Building permits issued so far this year in Winnipeg amount to about $10,500,000.

New buildings to the amount of $20,000 have been erected at Oak Lake, Man., this year.

George Morring, Port Arthur, is having plans prepared for a $12,000 brick and stone block.

A new school building is to be erected at Kenora, Saskatchewan; tenders are being called for.

The Elk Lumber & Mfg. Co. are to rebuild their sawmill, recently destroyed by fire at Fernie.

The Dominion Government are to erect a branch postal station in Toronto, to cost $90,000.

J. T. Abrey, proprietor of the Cosmopolitan Hotel, Vancouver, has plans prepared to erect a large hotel.

Thomas McCormick, London, is to erect a seven storey cottage in connection with the Muskoka Cottage Sanatorium, the cost to be $6,000.

E. Cote, contractor, Quebec, is constructing a store building to cost $5,000. Two buildings under construction in the same city are being erected by M. Cauchan, to cost $3,000, and P. Dion, to cost $2,000.

Minneapolis capitalists have bought a billion feet of timber and have built an immense sawmill in Vancouver. The output of the mills will probably be between forty million and seventy million feet of timber per annum.

Amongst the building uermits recently issued in Hamilton are the following: Twentieth Century Club, club house, $7,000; A. W. Peene, two dwellings, $3,600; J. Stewart, residence, $2,500; Samuel Landers, residence, $3,000; W. H. Fogwell, dwelling, $2,000; Stewart & Witton, stable, $3,000; J. Hammell, dwelling, $1,600; Thos. Allen, three houses, $6,000; Armstrong Bros., stable, $1,500; Thos. Robson, residence, $3,000.

MONTREAL BUILDING PERMITS.

A. Asselin, 132 Dufresne street, dwellings, $1,500.

A. Menard, 40 Aylevin street, dwelling, $1,500.

Zotique Leveille, 189 Dumont street, dwelling, $1,800.

Alph. Carnere, 3019 St. Hubert street, dwellings, $1,800.

Alex. Belanger, 503 Moreau street, dwellings, $2,000.

C. Courtois, 42 St. Louis street, dwellings, $3,600.

Clement Renaud, 352 Rachel street, dwellings, $1,800.

Jos. Legare, 409 Breboeuf street, dwellings, $1,800.

D. Raymond, 1526 St. Hubert street, dwellings, $2,000.

J. B. Gratton, Sherbrooke street, Lafontaine ward, dwellings, $5,500.

Ovila Regunbale, Marie Anne street, Duvernay ward, dwellings, $2,500.

Ludger Clement, Christophe street, Duvernay ward, dwellings, $9,200.

Patrick Kelly, Ropery street, St. Gabriel ward, dwellings and store, $4,000.

P. Vanier, St. James street, St. Joseph ward, (add. 1129 Dorchester street,) dwelling, $3,000.

Protestant Board of School Commissioners, 595 Sherbrooke street, educational building, $100,000.

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OF ONTARIO Limited
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For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
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Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
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Cables— "Machinery," Newport.
Emlyn Engineering Works
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HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical-Superintendent for the Ontario Government.
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ARTICLE XIX.

HINTS ON HOUSE PLUMBING.

WE have dealt at some length in preceding articles with break-syphons, showing, first, what they are and what work they accomplish, and, second, how they should be connected to the fixture.

We have said that a break-syphon should always be connected to the stack above the highest fixture in order that no waste matter could be discharged through it, and this, in most instances, is easy of accomplishment, but occasionally some obstacle presents itself and must be overcome.

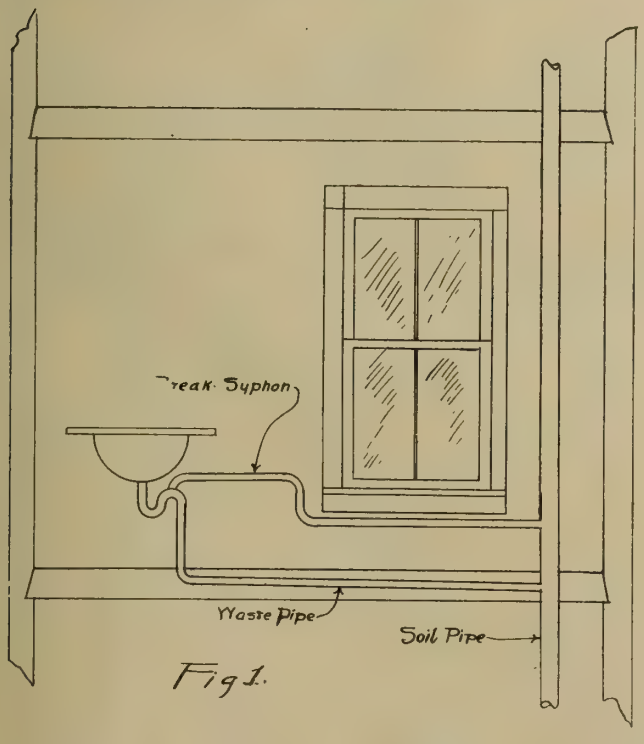


Fig 1.

In Figure 1 we have such an obstacle. It will be noted that in this case the soil pipe stack is situated on the right side of the window, while the wash basin is on the left side. Now, obviously, if the break-syphon is to connect to the stack above the basin, and at the same time be so arranged as to prevent waste matter passing into and fouling it, it must be carried over the top of the window and connect with the stack near the ceiling. Such a course, however, is usually objectionable inasmuch as that, except where the conditions are unusually favorable, it mars the appearance of the whole room.

It will be equally plain that if the pipe were carried below the window as shown, and then up close beside and connected to the stack above the basin level, that that portion of the break-syphon below the window would form a trap which would fill with waste water or condensation, thus defeating the object aimed at.

It will be clear, then, that in such a case as we are dealing with some other plan must be adopted and we show in Figure 2 the correct way in which to connect a break-syphon under such circumstances.

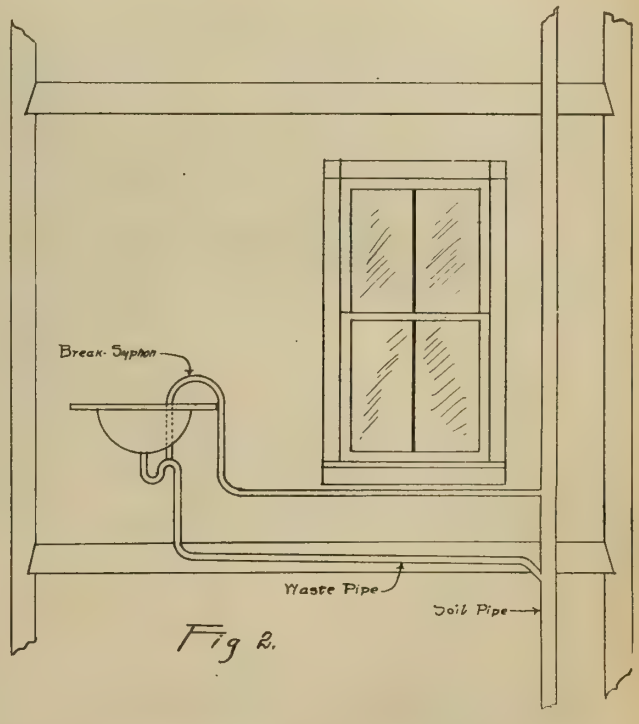


Fig 2.

In this case it will be seen that instead of running directly off the top of the trap toward the stack, that the break-syphon first rises to a point above the basin (though if there is any special reason for having it lower, the top of the bend may be kept down as low as the slab), and then turns down to a point below the window sill and thence to the stack, care being taken that there is a slight continuous fall from the bottom of the "goose-neck" to the stack, in order that any condensation will drain away. With such a connection as the one shown in Figure 2 it will be apparent that no waste water can escape through the break-syphon, and that the latter cannot become fouled, and that such a connection on the upper floor of a building would be just as effective as those shown in our last article on the subject.

In the case of a fixture on the lowest floor in a building requiring a connection such as is here described, it could not be connected directly to the stack as shown, for the reasons given in a previous article, but would have to rise between the stack and the window and connect to the latter above the highest fixture. Where this is necessary the bottom of the vent stack cannot be drained into the top of a trap, after the manner indicated in our last article, without filling up the vent where it passes under the window, an objection already urged against another form of connection in this article, and hence the vent stack, as well as being connected to the soil pipe stack "above the highest fixture," must also be connected to it below the lowest one.

Such a connection is indicated in Figure 3 in which case a reducing "Y" is placed in the stack below the lowest waste connection and, as will be apparent, will provide perfect drainage for all of the vents or breaks connected to it.

Regarding the sizes of pipe required or necessary for break-syphons, many arguments have been advanced, but generally the rule is to have them one size less than that of the trap to which they are connected, up to 2 inches in diameter, as follows: 1¼ and 1½-inch wastes to

have 1¼-inch vents, 2 and 3-inch wastes to have 1½-inch vents and 4-inch wastes to have 2-inch vents. The conditions under which a system is installed, however, will have a large bearing upon the sizes of vents required. For instance, it is easy to understand that a 1¼-inch vent connection twenty-five feet long cannot be nearly as effective as one two feet long, for the reason that while in the short one the air can be moved from end to end in a fraction of a second, it cannot be moved nearly so quickly in the longer one, not only because of the greater amount of air to be moved, but also because of the friction due to greater length of pipe, so that while a comparatively small break-syphon would do where the connection is a close one, it is not safe as a rule to have them too small. It will be found good practice, therefore, to have them of the sizes mentioned.

It is usually possible to entirely hide from view the break-syphons used in connection with a plumbing plant by cutting a "chase" in the wall to receive them, and as this is easily done in most cases, even in an old house, the plumber should go to the small amount of extra trouble involved if for no other reason than to obtain the advertisement furnished by a thoroughly completed job free from objectionable features, and there is perhaps no more unsightly thing than vent pipes crossing the walls and ceiling of a room which is otherwise well finished.

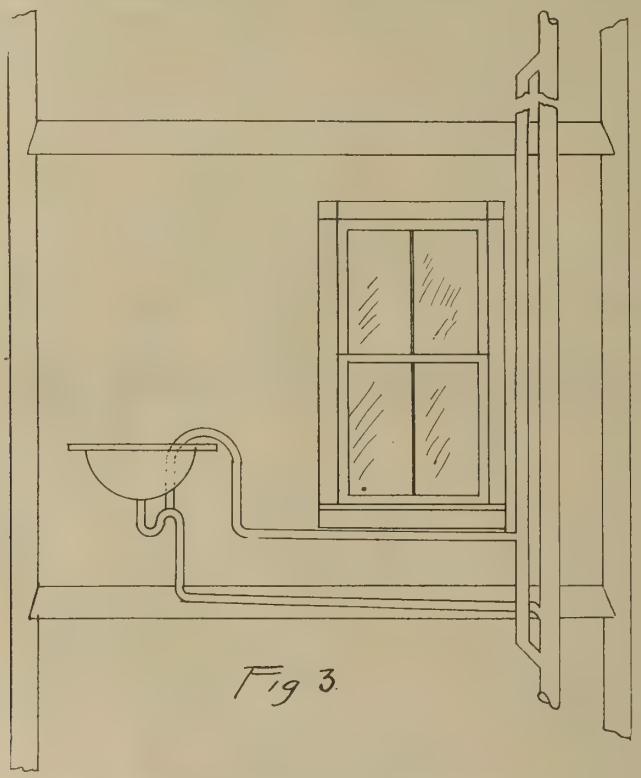


Fig 3.

Where it is absolutely impossible without great inconvenience or expense to put in such a break-syphon as is described in this and preceding articles, then the plumber may use one of the three or four automatic devices on the market which are connected to the top of the trap and secured to a nearby wall and are so arranged as to permit the entrance of air from the room when the slightest suction from within the waste pipe takes place.

While this class of break-syphons are often used they are certainly not as good or as safe as those already described, and for obvious reasons are not recommended.

In this connection it may be mentioned incidentally that the patented break-syphons do not allow of any circulation of air through the waste pipe system, and this often-times may prove a serious matter, inasmuch as the water lying in the traps under favorable conditions will absorb air, and if the trap happens to be at a considerable elevation above the sewer, it is fair to assume that as there is a slightly greater pressure there due to the weight of the atmosphere most of the absorption will take place on the sewer side of the trap, so that a certain amount of the foul gas so absorbed may be transmitted through the water to the air in the house.

It is therefore most desirable that where the waste pipe connecting any fixture is of considerable length a break-syphon that will not only act in the capacity as such, but in addition provide the necessary ventilation, should be used.

PLUMBERS' CASE IN COURT.

THE following master and union plumbers and steamfitters were arraigned before Magistrate Denison recently on the conspiracy charge preferred by John B. Reeves, and were remanded until the 31st: William Bush, Lewis Le Grow, Robert W. Harrison, W. H. Meredith, William J. Mason, William J. Storey, Charles H. Beavis, Charles J. Connor, K. J. Allison, F. Armstrong, F. Lawlor, Patrick Hayes.

Mr. A. F. Lobb appeared for the masters, and Mr. W. T. J. Lee for the union men. Mr. Lee asked for a remand, and it was agreed to have the preliminary hearing on Tuesday next. A jury will try the case.

The declaration sworn out by Mr. Reeves alleges "that they did conspire, agree and arrange to restrain and injure and unreasonably to enhance the price of plumbers' supplies and fittings, and that they unduly tried to prevent and lessen competition in the production, purchase and sale of those fittings and supplies, which is contrary to the peace and to the evil example of all others."

The Crashley case, tried last Spring, and adjourned to the Fall assizes, is also expected to come up on Monday or Tuesday.

AN ENJOYABLE GATHERING.

A REPRESENTATIVE of Hardware and Metal was fortunate in securing an invitation to attend the annual dinner given by the base ball club of the Master Plumbers' Association, in Toronto, last Saturday afternoon. The event was made a joint gathering of the Master Plumbers' Association and members of the local (46) Journeymen Plumbers and Steamfitters. Base ball and foot ball games were participated in during the afternoon, and a social evening was spent after dinner was partaken of. Songs, recitations, speeches and stories were all on the programme, but the most pleasant feature was probably the presentation of gold headed umbrellas to Manager John Wright and Umpire Copping, by the members of the Master Plumbers' Association Base Ball Team. Messrs. Kenneth Allison and John Fullerton made the presentation addresses and extolled the good qualities of Messrs. Wright and Copping, to both of whom were alike due the success of the season's outings. On behalf of the Journeymen's Ball Team Business Agent Storey, of local union 46, also presented the members of the Master Plumbers' Team with silver headed umbrellas, as a souvenir of the victory of the bosses over their employes in the base ball game participated in at the annual picnic of the union as St. Catharines, in August.

During the evening Messrs. Scott, Street and Brown entertained the audience a number of times with excellent songs, while Master Glenn, the son of Ex-President Dan Glenn, of the Journeymen's Union captivated the present by his beautiful singing. Addresses were also delivered by several members of both organizations, Secretary W. H. Meredith, of the Master Plumbers' Association speaking on behalf of that body, and Business Agent Storey representing the union in the reply to the address of Mr. Meredith. Mr. Meredith drew attention to the mutual interest existing between the members of the two organizations. "The master plumbers of to-day were the journeymen of yesterday, and the journeymen of to-day are the bosses of to-morrow," said Mr. Meredith. Mr. Storey referred to the good relations which had existed between the two organizations for several years, and said that although a small cloud darkened the horizon at present it would soon be dissipated. The great value of the present agreement was that both bosses and journeymen were assured that the evils of strikes and trade disturbances would be avoided so long as the two bodies worked together for the good of the trade. Ex-President Dan Glenn, of the journeymen's union, said that as he was not a member of either organization he could speak his mind freely. The two organizations should face the present difficulties bravely and fight

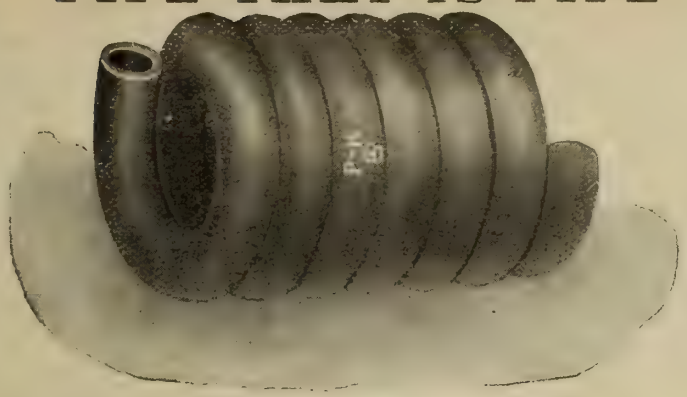
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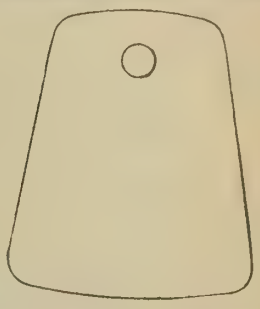
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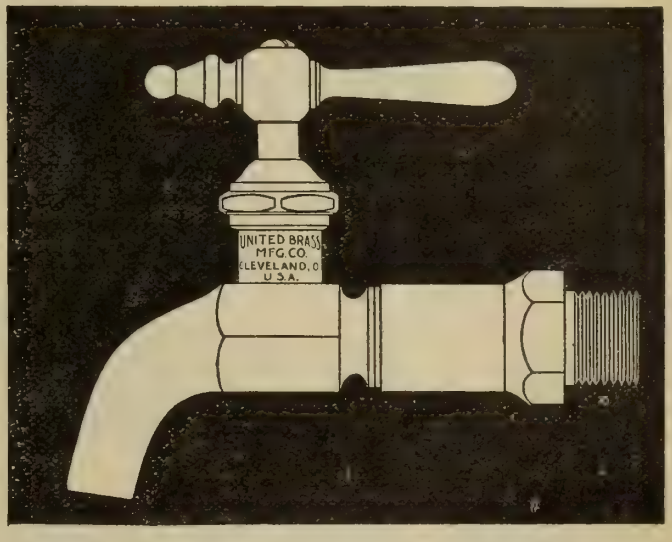
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those who were the cause of the trade troubles to the last ditch. The plumbers and steamfitters had no reason to fear the law, but to insure success the two organizations should stand together, as a house divided against itself must surely fall.

ELECTRICAL NOTES.

An electric lighting plant is to be established at Canning, N.S.

The Cone Gas Machine Co. has erected a large factory at Galt, and will commence business shortly.

The Brantford Electric Co. purpose installing the famous Adams-Bagnall arc lamp throughout the city. This is the same lamp as is used in the city of Montreal, and casts no shadow.

All the large works engaged in electrical industries in Germany have announced to their customers that, owing to increased wages and cost of raw materials, a general advance of 10 per has been made in their products, including motors, machines, apparatus, fittings, etc.

The Dominion Coal Co. have decided to substitute electricity in place of steam in their various Cape Breton mines. This power will be used for hoisting, hauling, and other purposes, and the plant will, it is understood, be a large one. Tenders are already being asked and installation will be gradually proceeded with until electricity is in general use.

The Winnipeg Electric Railway Co. having completed a modern, up-to-date gas plant, is now announcing a substantial reduction in the price of both light and fuel gas, as follows: Lighting gas, $1.50 per 1,000 cubic feet, with a discount of 10 per cent. on payment within ten days from date of bill. Fuel gas, $1.50 per 1,000 cubic feet, with a discount of 20 per cent. This will mean $1.35 net for lighting and $1.20 for fuel gas to the consumer. The old rate for both lighting and fuel gas was $2 per 1,000 cubic feet, with a discount of 15 per cent. for lighting gas and the following monthly discounts for fuel gas: Up to 2,000 feet, 20 per cent.; up to 4,000 feet, 25 per cent.; over 4,000 feet, 30 per cent.

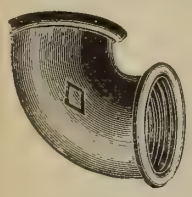
The Hamilton Brass Mfg. Co. are suing A. J. Small, Toronto, for $299.50 for work and goods supplied for use in the Grand Opera House, Toronto.

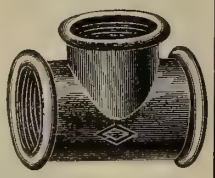
The Provincial Board of Health is meeting in Toronto this week. Subjects before the board include the establishment of uniform regulations governing health resorts in Ontario and better sewerage systems throughout the Province.

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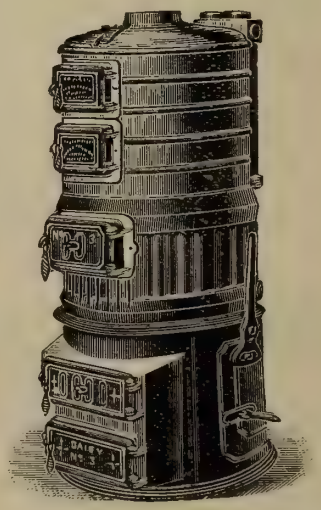
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and take advantage of it—
The blame is your own entirely.

Here again we state, as plainly as possible:—

You exhibit a line of NATURO CLOSETS
in your showroom and explain their good
features to your customers—
That's all you have to do.
We do extensive advertising
Refer all inquiries to you
Furnish descriptive literature.



The NATURO Closet

does the rest, bringing you a large volume of business.

The NATURO Company

C. H. Muckenhirn, President.

Salem, N.J.

MUELLER COMPRESSION WORK

SPECIAL GRADE BIBB



C-235

Bibbs that have the different styles made by patching to one pattern for the various changes do not always have the strength of metal placed to the best advantage.

Mueller Bibbs have individual patterns for all styles, so that the calculation of the strength neccessary for different parts is fully followed in the designing of the pattern.

Mueller Compression Work is made in three grades, Standard, Extra and Special, in plain or hose patterns and all styles of pipe connection. The bibb illustrated is the special grade, plain pattern and S.O.T. style.

All bibbs bear the Mueller trade mark and are *unconditionally guaranteed*

We also make fuller work, ground key work and plumbers' tools. Catalogs upon application.

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea,

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, October 27, 1905.

THE only feature of interest this week is the advance in iron pipe. As was foreshadowed in our report of last week the old prices have been withdrawn and new discounts issued by the local mills. The jobbers will promptly follow suit. In addition to this advance in price it is said to be very difficult to get iron pipe at all, there being a decided shortage in some sizes.

In fittings there is a very brisk demand which exceeds the supply. Local foundries are exceedingly busy and their sales are so large that they are now behind in their orders.

Lead pipe remains at the same quotation as for some weeks past in spite of continued firmness in the primary markets.

Range Boilers—Conditions remain as before reported. Our prices are: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Prices are unchanged, but decidedly stronger than last week, owing to the continued firmness of pig lead. We are quoting: Discounts 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe—The expected advance has occurred and we are this week revising our discounts. Quotations are: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.; 1-2 inch, 72 per cent.; 3-4 inch, and upwards, 74 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Iron Pipe and Fittings— Some of the local foundries are being taxed to their utmost capacity to fill orders and are said to be weeks behind in their bookings. Our prices are: Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Soil Pipe and Fittings—There has been no change in price but the buoyant tone continues and prospects are for higher quotations. Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—Conditions are unchanged, the high prices commanded by tin and lead having no effect upon solder as yet. We are still quoting: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, October 27, 1905.

NO falling off in business is reported, the demand for all classes of goods continuing very active. The general total of business done is far ahead of a year ago and the activity was expected to decline before this time. The jobbing houses are still working overtime and the only kicks coming are the ones relating to the difficulty of getting goods out in time to please purchasers. The demand for enameled ware has been enormous recently and the Canadian producers have fallen back some in the delivery of goods.

Despite the advance in iron pipe in Montreal, the market in Toronto continues open and disorganized. Conditions, however, appear to be firmer this week and there is a closer adherence to listed figures than a week ago. The open market has not encouraged any abnormal buying as while sales for heating contracts and farmers' windmills are large, steamfitters are not desirous of carrying dead stock over the winter months. Fittings are being sold actively.

Prices continue as reported last week.

Lead Pipe—An advance is certain, but one of the large producers is holding the market down, refusing to make an advance at this time. We quote: Lead 7c; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Demand is active with producers keeping well up to their orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe and Fittings—Prices are being held firmer than a week ago. The open market still exists and a slightly larger trade than usual is being done. We quote as follows: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers—An average business is being done. The discount continues at 15 per cent.

Galvanized Iron Range Boilers—Building is well advanced and many boilers are being installed. Trade continues brisk. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—While an advance is reported in Montreal an open market still continues in Toronto. Less cutting is reported, however, and business being done is but little over the average. Discounts of from three to five per cent. have been given off list figures, and a very large trade has been done at the lower prices. We quote as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9.00; 2 1-2 inch, $15.75; 3 inch, $30.50; galvanized 1-4 inch $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Lead and tin are very strong and the prices we quote are very strong. We quote: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware — An enormous demand for Canadian ware is reported, so much in fact that the producers are fully a fortnight behind in their shipments. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50; special, $15.50; 3 inch rim, first quality, $18; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality, $19; special, $17; 3 inch rim, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.00.

ICELESS COLD STORAGE.

When ice storage is not feasible an unrefrigerated house, built on the same lines but with only one room, answers the purpose nearly as well. If this house is built into a side hill it is easier to regulate the temperature. One or more air spaces in the walls are essential. The temperature of this house is controlled entirely by ventilation. In Summer and Fall the windows or venti-

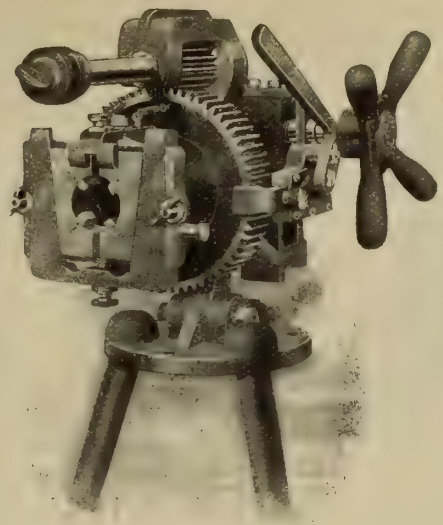
RAMSAY'S ALUMINUM PAINT

The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

Ramsay's Aluminum is right Aluminum.

A. RAMSAY & SON COMPANY

Est. 1842 MONTREAL PAINT MAKERS



½" — 2"

"Solid Adjustable" Die Machine

Ask for Catalog J.

More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

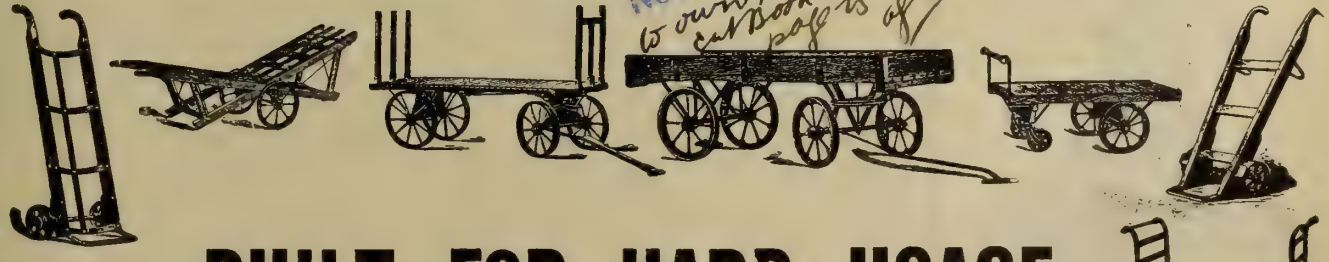
Simplicity and Durability.

The Borden Company

16 Sheppard St., TORONTO, CAN.

TRUCKS

FOR RAILWAY MILL WAREHOUSE and FACTORY USE



BUILT FOR HARD USAGE



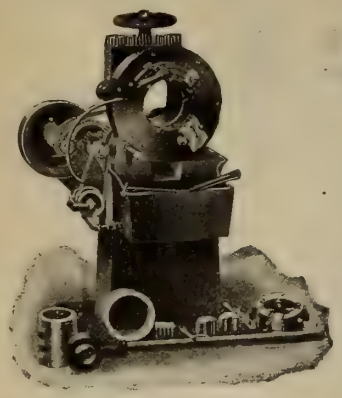
Special Trucks Made to Order. Send for Truck Catalogue.

The Canadian Fairbanks Company, Limited

MONTREAL TORONTO WINNIPEG VANCOUVER

RETURNED NOV 15 1905 to owner with book 43 pages off

MERRELL COMBINED HAND AND POWER MACHINES



These machines are our portable hand machines, mounted on base and driven by compound gears with cone pulley, and are so arranged that either hand or power can be used at will, or the machine can be readily taken from its base and used as a portable hand machine. The chasers are set by graduation to any size desired, are released while the machine is in motion, opened to permit of pipe being cut off, and closed instantly and positively, one set being used to thread several sizes of pipe. They can be sharpened by grinding and are readily replaced by chasers cutting any style or pitch of thread, either right or left. Four sizes—Nos. 5½, 6½, 9½, 11½.

Would you like our Catalog ?

THE CANADIAN FAIRBANKS CO.
Sole Agents for Canada Limited
MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's "Copper-Alloy" Disc
GLOBE VALVES

are superior to any other disc valves on the market for high steam.
This is a very superior valve, at a moderate price.

The KERR ENGINE CO.,
Manufacturers Limited
WALKERVILLE - ONTARIO

lating flue are opened during the night, when the air is coolest, and are closed very early in the morning. In Northern States a temperature of about 50 degrees may be maintained at this season in this way. The cold air may enter through windows, wooden flues or tile flues, the latter two being placed near the floor and extending through the wall and several feet outside. The house should, of course, be frost-proof. —The Garden Magazine for October.

TESTING HOT WATER APPARATUS.

WHAT plan should be adopted when testing a domestic hot water supply apparatus, with the view of passing it for payment, to ensure its being correct in detail and efficiency? One brief but quite good answer to this question is to be found in the direction to ascertain whether it will give a hot bath of 30 gallons at 100 deg. before breakfast. It is certain that if the pre-breakfast warm bath can be had it is exceedingly unlikely that the apparatus will fail at any other time. Such a test implies that 30 gallons of water must be raised some 35 deg. to 40 deg. in forty minutes, and a boiler and its tank and pipes that will work together to effect this will certainly meet the general requirements later in the day. Indeed, it is probable that the apparatus will more than meet the demand unless the damper is carefully regulated. The early morning bath may therefore be considered as an index to efficiency in practically every case. Of course, if it were a large house with two bath rooms the apparatus would be proportionately large, and would give two baths of water—i.e., 60 gallons—in the time named. The critical detail of a test, however, usually lies in the fact that it does not take place when the house is occupied and the boiler in regular use. If it is a new house a very liberal allowance must be made as to time, and even if it is only a new boiler some margin is still necessary, because when first lighting up the boiler-setting is green and cold, the water is cold, and all the places and parts occupied or in contact with the pipes, etc., are cold also. When an apparatus is in regular use the water, when the cook lights the fire, may be 65 deg. or 70 deg., the brickwork is dry and slightly warm from overnight, the draught is good, and every part conduces to good results. Therefore, in testing a new apparatus, it is not at all unreasonable to allow double time—say, one and a quarter or one and a half hours—for a bath of water, say 30 gallons, at from 96 deg. to 100 deg., and there ought not to be any attempt to economize fuel during this time, as a servant is allowed to have an open damper the first forty-five minutes in the morning if a bath is required. As to the mechanical details of a job, if these make for the general efficiency of the whole, there cannot be anything very far wrong. Such points as the quality of the cylinder and tank, the weight of the pipes, and the workmanship need watching, but in passing work of this kind experienced eyes quickly detect details in these matters which are not quite right, and nothing short of experience and wide knowledge of the work can insure proficiency in this respect.—The Ironmonger.

SANITATION ABROAD.

NOT many years ago the majority of the people abroad were obliged to visit a bathing establishment when desirous of taking a bath. The luxury of a bathroom at home was only to be enjoyed by those living in high-priced houses or apartments, and even then the methods and fixtures in use were often anything but sanitary. People living in small places were put to the greatest inconvenience, and where no public bathing establishment was to be found, they were obliged to perform their ablutions in the now obsolete wooden tub.

Often a bath tub was destined to occupy a corner in a dark room, otherwise useless for dwelling purposes. In the last decade, however, conditions have improved and the use of modern sanitary appliances, owing to the construction of waterworks and the laying of sewerage in places before unknown, has greatly increased. Unsanitary fixtures of all kinds are doomed to disappear; modern devices are taking the field, bringing with them health and happiness. Fixtures familiar to us at home are now to be found in general use in all civilized countries.

American goods are more and more in demand, even in countries such as Great Britain, Germany and France, where the home production is by no means unimportant. In fact it can be safely said that American ideas and appliances are in the lead, and that there is a promising future for the sale of high-grade sanitary goods of American origin abroad.

PLUMBING GOSSIP.

Tenders are being advertised for the installation of a plumbing and heating system in the town hall, Perth, Ont.

* * *

An anooymous correspondent from Ottawa informs Hardware and Metal that the Master Plumbers' Association has decided to dissolve, the action being the direct outcome of repeated attempts to introduce features of protection. The report has not yet been verified, however, and if it turns out to be true, it is only a question of time before another organization will spring into existence, as the trade in Ottawa, as in other large cities in Canada, have learned the lesson that it is better to do business on an organized and systematic basis rather than in a cut-throat fashion.

* * *

This issue of Hardware and Metal is printed before the Provincial conference of the Master Plumbers' Association in Ontario has completed its labors. A full report will be given next week, our monthly plumbing number. At the present time there is every indication that the gathering will be the largest in the history of the association, as far as the semi-annual conventions are concerned. Since the annual gathering on Good Friday a new association has been organized at Niagara with seven members, and delegates representing this association, as well as from Napanee, Port Arthur, and other towns which have never sent representatives to the convention, will be in attendance.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

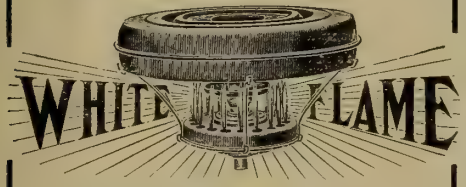
Fall and Winter Sellers

Time for Trade to

ORDER NOW

to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58; Sept. 30, page 72, or send for Catalogue.

WALTER GROSE, MONTREAL — Sales Agent for the Dominion

BE THERE WITH THE SUGGESTION

You've heard about "the early bird." Don't wait till somebody else has arranged to instal the heating system in your neighbor's new building before soliciting a chance to figure on it. Get out for it as soon as you know a new building is suggested. Go with the determination to instal an

Oxford Heating System

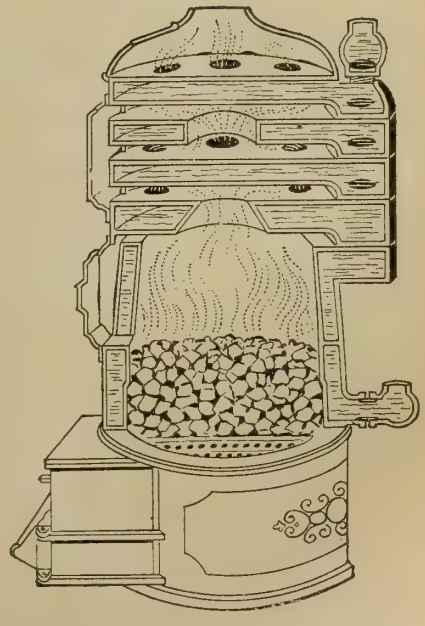
and you have a proposition so strong and with so much behind it that you should have little trouble in closing the order.

Send us the size and number of rooms and we will assist you in preparing estimate.

The Oxford ("B" series) Boiler has unquestionably more good points to recommend it than anything ever offered in the Heating line.

Oxford Radiators are perfect, and used with Oxford Boilers make an entirely satisfactory system.

Send for the Gurney Oxford Book of Hot Water and Steam Heating Apparatus.



We also manufacture cast iron ranges, steel plate ranges, gas stoves, ranges and heaters, hotel ranges, and all kinds of cooking and heating apparatus, plumbers' supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

127

Others are good—maybe; these are good, sure

There you have it—the reason for the success of our

"BLACK DIAMOND"

BUILDING PAPER
READY ROOFING
SHEATHING



WRAPPING PAPER
TARRED FELTS

Our "Cyclone" and "Joliette" brands of SHEATHING are unsurpassed anywhere.

Let us send you prices.

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Oct. 27, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50
"Dominion Crown Best"—Double Coated, Tissued.	Per box.
I C	5 50
I X	6 50
I X X	7 50
Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	
" 14x60, " }	7 00
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 87½	1 95
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality best warranted		0 18
"T" " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel		0 10
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard		0 08
Crucible Steel Co.—		0 09
" Rex high speed ste		0 65
" Self-hardening		0 45
Crucible Special		0 50
" Silver steel		0 17
" Black Diamond		0 13
		0 10
Sanderson's Crucible steel		0 11
" Superior "	0 08	0 09
	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 75
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 75
26 "	3 75	4 00
28 "	4 00	4 25

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "	....	5 60
"	5-16 "	....	4 45
"	⅜ "	....	3 85
"	7-16 "	....	3 70
"	½ "	....	3 55
"	9-16 "	....	3 45
"	⅝ "	....	3 35
"	¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned } 47½ per cent. off list.
Spun }

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 25
Part casks	7 50

LEAD.

Imported Pig, per 100 lb.	4 10
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft. lengths, lists at 8c.

ANTIMONY.

Cookson's.....per lb. 14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00		16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet 2½ in.		16 75	14 75
5 " 2½ "		17 50	15 50
5½ " 2½ "		19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in. 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 0 and 10 per cent.

No. 1 compression bath cock.....net	1 75
No. 4 " " "	1 75
No. 7 Fuller's "	2 10
No. 4½, " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 55 per cent	
" " iron " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

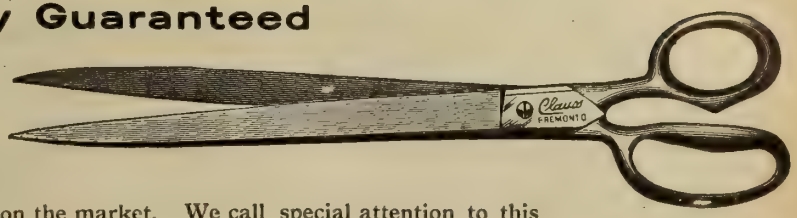
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24 00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand

Fully Guaranteed

Paper Hangers' Shears



Hand forged from finest steel and welded on our composition metal, hardened in water and tempered by natural gas. This shear is made purposely for paper hangers' use, and is more durable than other of its kind on the market. We call special attention to this Shear. Japan handles and finely finished blades. Ask for discounts.

Clauss Shear Co., 169 Spadina Ave., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, case, from to 1 gal.		assorted $2.50.
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 3" per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.		
Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	
Canadian pitcher spout	1 40	

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
"	" "	4 00
"	" "	5 25
"	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in.	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5	"
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Size United Inches.	Window. Box Price. Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 00
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, panes list less 33⅓. Terms 90 days net, 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	9 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian,	per lb.	0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1,	per doz	4 40
" " 2,	"	4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in.,	per lb.	0 06½
" " 5-in.,	"	0 06½
" " 6-in.,	"	0 06
" " 8-in.,	"	0 05½
" " 10-in.,	"	0 05½

Light T and strap, discount 65 and 5 per cent
Screw hook and hinge—

6 to 10 in	per 100 lb.	....	4 50
12 in. up	"	....	3 25
Spring, No 20,	per gro. pairs	....	10 80

Spring, Woodyatt pattern, per gro. No. 5, $17.50; No 10, $18; No 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	....	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	.... 0 60

KNOBS.

Door, japanned and N.P., per doz.		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to $5 00
Star, 12 to 16-in cut	2 75 to 3 05
Daisy, all sizes	2 50

Woodyatt ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 40 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent
Russell & Erwin, steel rim ..per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	.... 6 75
Plumbers	"	.... 3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		10 00
Davidson oilers, discount 40 per cent.		
Zinc and tin, discount 50, 50 and 10 per cent.		
Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

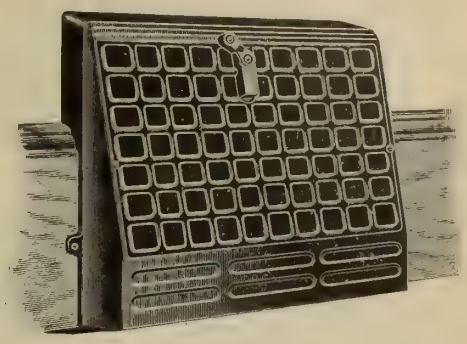
½ pint in tins	per gross	7 80
" "	"	9 60

PLANES

Wood bench, Canadian discount 40 per cent
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers



H. & C. No. 100

HART & COOLEY CO.,
NEW BRITAIN, Conn., U.S.A.

PUNCHES.

Saddlers' .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord. 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century.....$6	25
" " No. 1 Maple Leaf..... 5	25
" " Happy Medjum..... 4	25
" " Watch Spring..... 4	25
" common frame..... 4	00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	...	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1¼-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	9 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ½ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 80	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz..... 3 00 15 00
Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	2 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

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Brantford Cordage Co, Brantford Ont.
Consumers' Cordage Co., Montreal.
Hamilton Cotton Co., Hamilton.

Cork Screws.
Erie Specialty Co., Erie, Pa.

Customs Brokers.
Turnbull & Henderson, Vancouver, B.C.

Cutlery—Razors, Scissors, etc.
Birkett, Thos., & Son Co., Ottawa.
Butler, Geo., & Co., Sheffield, Eng.
Caverhill, Learmont & Co., Montreal.
Clauss Shear Co., Toronto
Dorken Bros. & Co., Montreal.
Heinisch's, R., Sons Co., Newark, N.J.
Silberstein, A. L., New York.
Smith, Geo. E., Halifax, N.S.
Smith & Hemenway Co., New York.
Walter, E. F., & Co., Montreal.
Wiebusch & Hilger, New York.

Door Hangers.
Safety Door Hanger Co., Hamilton, Ont.

Electric Fixtures.
Canadian Aluminum Works, Montreal.
Mechanics' Supply Co., Quebec.
Morrison James, Mfg. Co., Toronto.
Munderloh & Co., Montreal.
Sayer Electric Co., Montreal.

Fence Machines.
London Fence Machine Co., London.

Files and Rasps.
Barnett Co., G. & H., Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.
Grose, Walter, Montreal.

Financial Institutions
Bradstreet Co.
British America Assurance Co., Toronto.
Confederation Life Ass., Toronto.
Metropolitan Bank, Toronto.
Western Assurance Co., Toronto.

Fire Brick, Furnace and Stove Cement, etc.
Francis-Frost Co., Toronto.
Scarf Co., Brantford, Ont.
Sterne, G. F., & Son, Brantford.

Firearms and Ammunition
Caverhill, Learmont & Co., Montreal
Claybrough & Johnstone, Birmingham, Eng.
Colts Patent Firearms Co., Hartford, Con.
Hamilton Rifle Co., Plymouth, Mich.
Harrington & Richardson Arms Co., Worcester, Mass.
Hobbs Hardware Co., London, Ont.
Johnson's, Iver, Arms and Cycle Works, Fitchburg, Mass.
Walter, E. F., & Co., Montreal.

Food Choppers
Caverhill, Learmont & Co., Montreal.
Enterprise Mfg. Co., Philadelphia, Pa.
Lamplough, F. W., & Co., Montreal.
Smith & Hemenway Co., New York.

Galvanizing.
Montreal Rolling Mills Co., Montreal.
Ontario Wind Engine and Pump Co. Toronto.

Gas Lamps.
Rochester Lamp Co., Toronto.

Glaziers' Diamonds.
Sharratt & Newth, London, Eng.
Shaw, A., & Son, London, Eng.

Glue.
Grove Chemical Co., Lancashire, Eng.

Hardware Specialties.
Erie Specialty Co., Erie, Pa.
Gurney, Tilden Co., Hamilton, Ont.
Mast, J. M., Mfg. Co., Lititz, Pa.
Smith & Hemenway Co., New York.

Hollow Ware.
Welsh Tinplate and Metal Stamping Co., Llanelly, Wales.

Horseshoe Pads.
Canadian Rubber Co. of Montreal.

Horseshoes and Nails.
Canada Horse Nail Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Peck Rolling Mills Co., Montreal.

Hot Water Boilers.
Cluff, R. J., & Co., Toronto.
Gurney Foundry Co., Toronto.

Ice Cream Freezers.
North Bros. Mfg. Co., Philadelphia, Pa.

Ice Cutting Tools.
Erie Specialty Co., Erie, Pa.
North Bros. Mfg. Co., Philadelphia, Pa.

Injectors—Automatic.
Morrison, Jas., Brass Mfg. Co., Toronto.
Penberthy Injector Co., Windsor, Ont.

Iron Pipe.
Montreal Rolling Mills Co., Montreal
Page-Hersey Iron and Tube Co., Guelph.

Iron Pumps.
McDougall, R., Co., Galt, Ont.

Ladders—Extension.
Waggoner Ladder Co., London, Ont.

Lanterns.
Kemp Mfg. Co., Toronto.
Ontario Lantern Co., Hamilton, Ont.
Wright, E. T., & Co., Hamilton.

Lawn Mowers.
Birkett, Thos., & Son Co., Ottawa.
Maxwell, David, & Sons, St, Marys, Ont.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.

Ledgers—Loose Leaf.
Crain, Rolla L., Co., Ottawa.

Locks, Knobs, Escutcheons, etc.
Gurney, Tilden Co., Hamilton.

Machinery Supplies.
Armstrong Bros. Tool Co., Chicago, Ill.
Canada Foundry Co., Toronto.
Canadian Fairbanks Co., Montreal and Toronto.
Jardine, A. B., & Co., Hespeler, Ont.
Jenkins Bros., New York.
Kerr Engine Co., Walkerville, Ont.
Montreal Rolling Mills Co, Montreal.
Morrow MachineScrew Co., Ingersoll, Ont.
Penberthy Injector Co., Windsor.

Mantles, Grates and Tiles.
Batty Stove and Hardware Co., Toronto.

Manufacturers' Agents and Brokers.
Gibb, Alexander, Montreal.
Jenking, A. C., & Co., Montreal.
Rogers, Herbert & Co., London, Eng.
Pearce, Frank & Co., Liverpool, Eng.
Thorne, R. E., Montreal and Toronto.
Turnbull & Henderson, Vancouver, B.C.

Metals.
Booth Copper Co., Toronto.
Canada Iron Furnace Co., Midland, Ont.
Canada Metal Co., Toronto
Caverhill, Learmont & Co., Montreal.
David, R. Sullivan, Montreal.
Deseronto Iron Co., Deseronto, Ont.
Emerson & Fisher, St. John, N.B.
Frothingham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson., W., Pontardawe, Wales.
Henderson, J. A., Montreal.
Ironside, Son & Co., London, Eng.
Jackson, C. F., & Co., Vancouver, B.C.
Johnston, Rd., Clapham & Morris, Manchester, Eng.
Kemp Mfg Co., Toronto
Leslie, A. C., & Co., Montreal.
Lewis, Samuel, & Co., Dudley, Eng.
London Rolling Mills Co., London, Ont.
Lysaght, John, Bristol, Eng.
Montreal Rolling Mills Co., Montreal.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
Portland Rolling Mills St. John, N.B.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Stairs, Son & Morrow, Halifax, N.S.
Summers, John, & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

Metal Lath.
Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

Metal Polish, Emery Cloth, etc.
Solarine Company, Chicago.
Oakey, John, & Sons, London, Eng.

Mop Wringers and Buckets.
Eagle Cooperage Works, Circleville, O.

Milk Cans and Trimmings.
Davidson, Thos., Mfg. Co., Montreal.
Kemp Mfg. Co., Toronto.
McClary Mfg. Co., London, Ont.
Wright, E. T., & Co., Hamilton, Ont.

Nails and Spikes.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

Paints, Oils, Varnishes and Glass.
Berry Bros., Detroit and Walkerville.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works Windsor, Ont.
St. George, H. E., London, Ont.
Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

Perforated Sheet Metals.
Greening, B., Wire Co., Hamilton.

Plumbers' Tools and Supplies.
Borden Co., Warren, Ohio.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co., Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co., Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Stairs, Son & Morrow, Halifax, N.S.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Toronto Foundry Co., Toronto
20th Century Mfg. Co, New York.
United Brass Mfg. Co., Cleveland, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Imperial Cement Co., Owen Sound.
Thompson, B. & S. H. & Co., Montreal.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Caverhill, Learmont & Co., Montreal.
Lewis Bros., Montreal.
Shurly & Dietrich Galt Ont.
Spear & Jackson, Sheffield, Eng.

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co. Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.
Weeton, G., Mfg. Co., Toronto.

Skates, Etc.
Starr Mfg. Co., Dartmouth, N.S.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co., Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
James & Reid, Perth, Ont.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
McLean, Holt & Co., St. John, N.B.
Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Perfection Safety Furnace Pipe Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Stewart, Jas., Mfg. Co, Woodstock, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Coating.
Alabastine Co., Paris, Ont.

Wall Paper.
Stauntons Limited, Toronto.

Washing Machines, etc
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Caverhill, Learmont & Co., Montreal.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Munro Wire Works, Winnipeg.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.

A PERMANENT and Handsome Roof.



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Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

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Do not accept other makes as substitutes for RED DEVIL tools. Insist upon having them.



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Canadian Office : Coristine Bldg., Montreal.

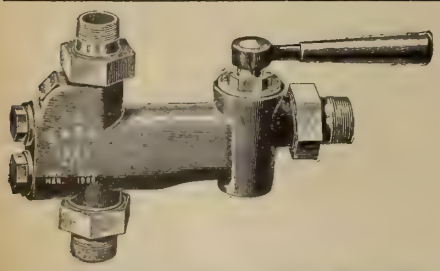
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A Double Tube Machine at Single Tube Price.
Sure Action. Few Parts

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STANDARD OAK
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AS A COOKING RANGE.

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Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

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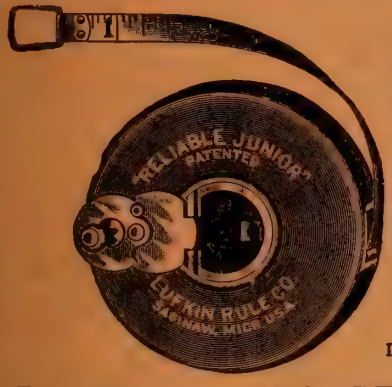
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For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.

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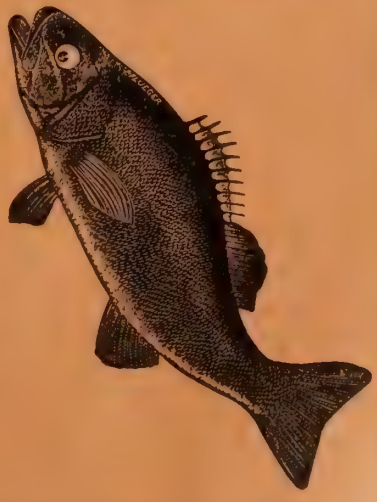
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are an indispensable necessity in all first-class dairies, as they provide not only for an attractive appearance, but also for the actual security and welfare of the animals.

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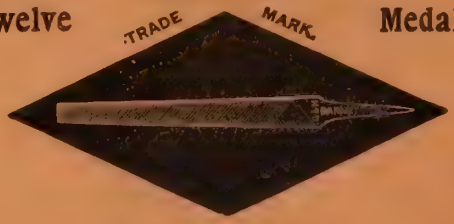


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WAREHOUSES & FACTORIES
AT
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A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL, TORONTO, WINNIPEG, NOVEMBER 4, 1905 NO. 44

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MORE POPULAR THAN EVER

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All Castings are Machine-made, and therefore of one size and uniform.

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See Classified List of Advertisements on Page 79.

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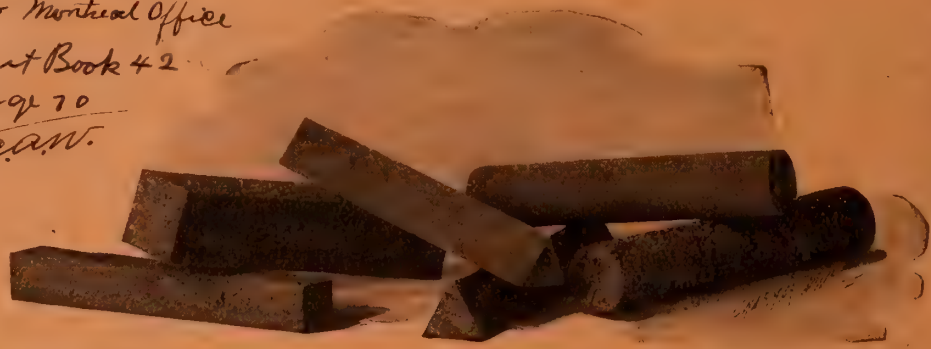
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QUARTZ
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No Honing! No Grinding!

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Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

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in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

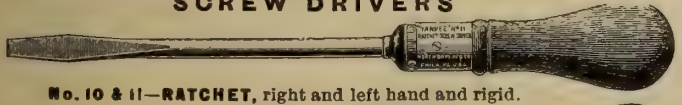
THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

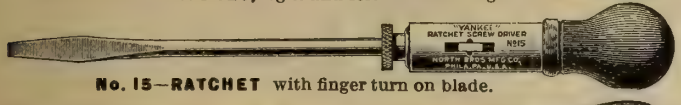
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SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



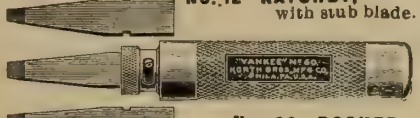
No. 30—SPIRAL RATCHET -right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.



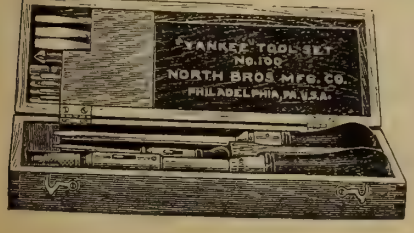
No. 12—RATCHET, with stub blade.



No. 60—POCKET SCREW DRIVER.

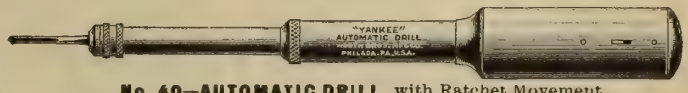


Countersink, for spiral ratchet screw driver.



The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

DRILLS



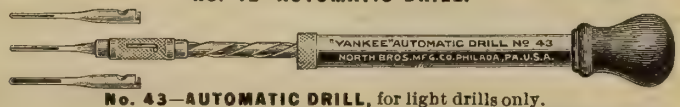
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

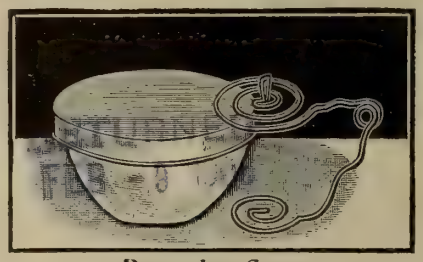
The "Duchess" Enameled Pudding Steamer

The only Rational Method of Cooking a Pudding

No Burning and no Disappointments when this Steamer is used. Results in Satisfaction to both Dealer and Customer.



With Cover Complete



Removing Cover



A Perfectly Cooked Pudding

Consists of **White Enameled Pudding Bowl** with seamless retinned cover held by Spring Wire Clasp. When in use the Steamer should be put in a saucepan with close-fitting cover. Do not cover the Steamer with water, all that is necessary is a little in the bottom of the saucepan to generate steam.

Made in Five Sizes

Dimensions of Bowl,	No.	12	14	16	18	20
	Inches	4⅞x2¼	5¼x2½	6½x3	7½x3¼	8x4

An article needed in every home. ***Write for prices.***

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

Antimony Lead Copper Zinc Tin

LARGE STOCKS ***CLOSE PRICES***

M. & L. Samuel, Benjamin & Co.

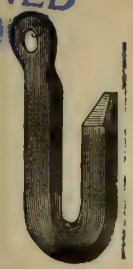
503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

RETURNED NOV 6 1905

Why are YOU in business

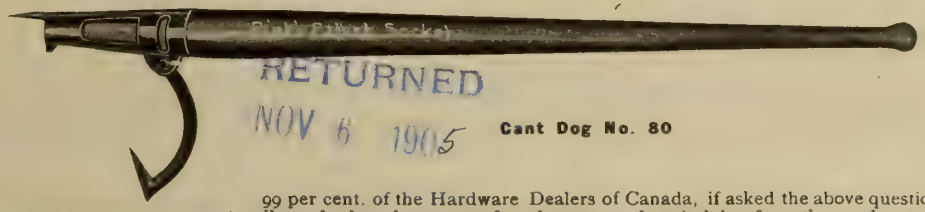
For Pleasure, or Money



Grab Hook No. 2
For ⅜ and ½-inch chain



Slip Hook No. 1
For ⅜ and ½-inch chain



Cant Dog No. 80

99 per cent. of the Hardware Dealers of Canada, if asked the above question, would naturally reply that they were after the money, but, judging from the stock some of them keep, you would find it hard to believe them.

In many stores the stock has lain on the shelves for months. Why? Because it is not first-class, and there is no demand for it. If the goods were up-to-date and saleable, they wouldn't have the chance to lie there and collect dust, but would be continually moving.

Even though you are the only Hardware Merchant in your town, don't think for a minute that people will buy your old-time stock, when "Modern Mail Order Methods" make it about as easy to send to the nearest city for what they want, as to drive down to your store.

The only possible way to hold your trade, as well as increase it, is by stocking high-class, up-to-date goods; you might as well start now by looking over the little assortment of lumbering tools we have illustrated for you.

You are bound to wake up sooner or later to the fact that the other fellow is getting the business, and every day you go along in the old rut only makes it harder for you in the end.

Get the reputation for "Good Goods" and you will find pleasure as well as money in your business.

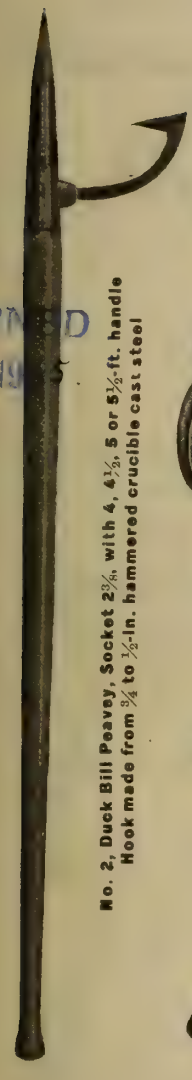
"Pink's Goods" are "Good Goods." They have stood the test for thirty-seven years.

No. 80 represents a new "Cant Dog." The very latest out. Note the socket. It is light and durable. It also has a spur at the bottom of the socket, which is just what is wanted for loading and guiding logs when they are going up the skids. If your handle should break, you will find it easier to fit to a new one, than any other made.

We can fill your mail order for these Cant Dogs, or anything else in the Lumbering Line, same day as received.

Remember to say "Pink's" when ordering.

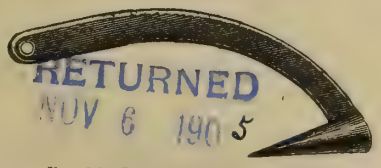
WRITE FOR PRICES



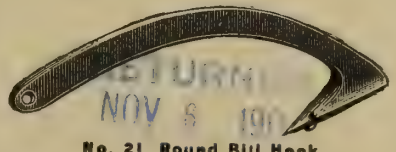
No. 2, Duck Bill Peavey, Socket 2⅝, with 4, 4½, 5 or 5½-ft. handle
Hook made from ¾ to ½-in. hammered crucible cast steel



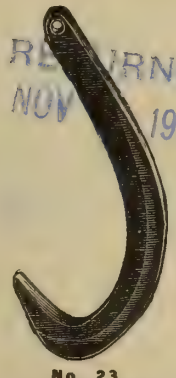
No. 706, Loading Block
Wrought steel shell, round hook, extra heavy sheave 5⅛ x 1⅝-in. with becket



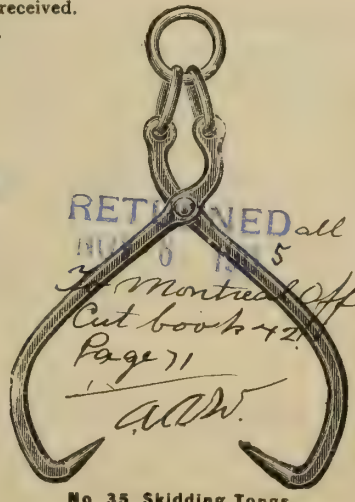
No. 22, Duck Bill Peavey Hook



No. 21, Round Bill Hook



No. 23
Chisel Bill Hook

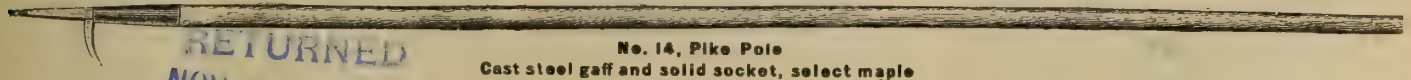


No. 35, Skidding Tongs
Hexagon, cast steel, opens 27 Ins.



No. 39, Peavey Handle { Feet / Diam. ins. }

Feet	5	5½	6
Diam. ins.	2¾	2⅞	2½



No. 14, Pike Pole
Cast steel gaff and solid socket, select maple

RETURNED NOV 6 1905

Ottawa
Toronto
Vancouver

LEWIS BROS. LTD.

Importers and Distributors

MONTREAL

Calgary
Winnipeg

'DO IT NOW' 'TIS NOTHING NEW, BUT DO IT; NOW IT'S UP TO YOU.

That **CUTLERY** stock of yours needs replenishing. We have what you require in **POCKET KNIVES, RAZORS, SCISSORS, CARVERS,** and **TABLE CUTLERY,** and would like to hear from you.

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

DOMINION WIRE MANUFACTURING CO. LIMITED
MONTREAL AND TORONTO

ANNEALED WIRES
FOR BALING

HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

FLAT HEAD
ROUND and OVAL HEAD **SCREWS** BRIGHT—BRASS
BRIGHT and BRASS

TINNED WIRE for Mattress, Broom, Bolting and Binding

STEEL WIRE HOOP

COPPER WIRE—ALL—BRASS WIRE

MADE IN CANADA

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork.



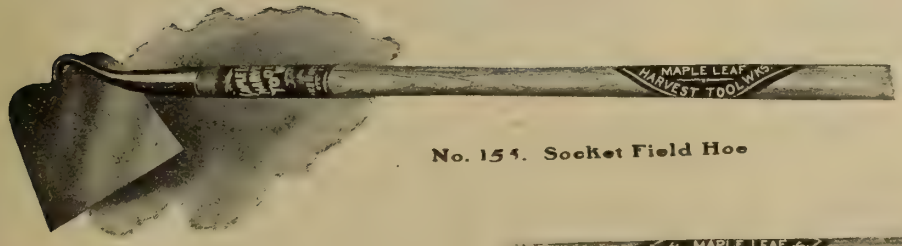
No. 138. Spading Fork.



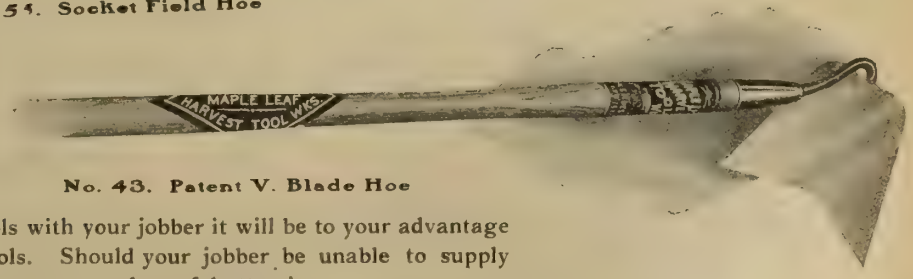
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 154. Socket Field Hoe



No. 43. Patent V. Blade Hoe

TO THE HARDWARE TRADE:–

When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.

CHURCH'S COLD WATER

ALABASTINE

The Old Reliable

It will not be a criticism on the good judgment of any dealer if **ALABASTINE** is stocked this Fall. Experience of the past warrants the statement that **IT IS JUST THE THING TO DO.** And why? Because his stock of tints at this season of the year is naturally broken, and if not complete ***sales will be lost.*** Then again, if put off until spring when the rush is on, there will likely be delay in getting goods, and consequently loss of business.

ORDER DIRECT OR FROM NEAREST JOBBER. SPRING DATING.

THE ALABASTINE CO., Limited, - - Paris, Ont.

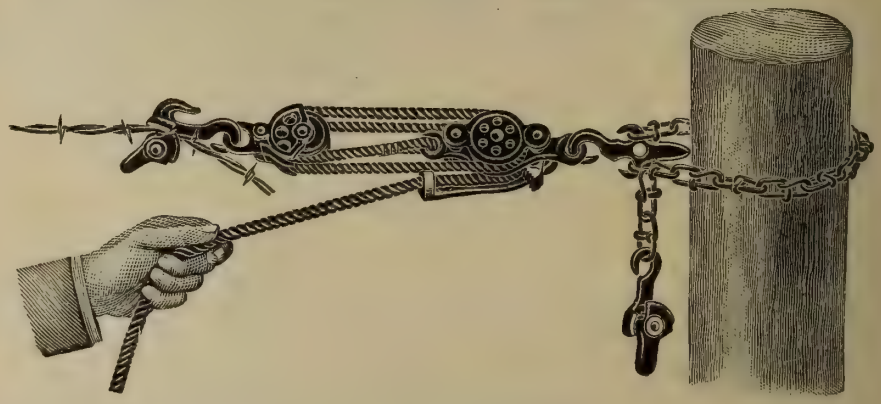
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



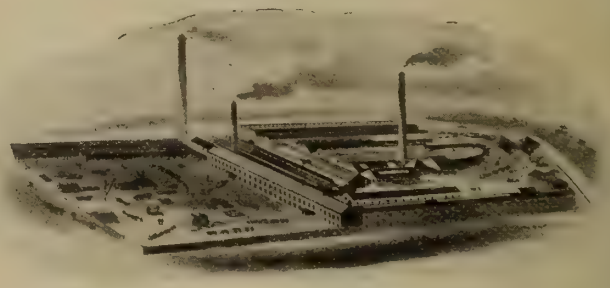
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.

TRADE MARK
WIND MILL
BEST BEST

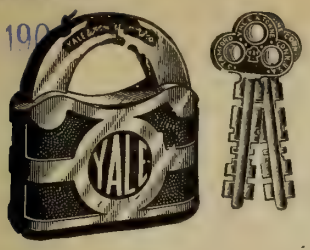
LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

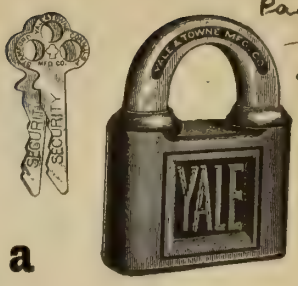
One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal



More Padlocks are Sold

in the fall of the year than at any other season.



This is the season you need a lock on the Chicken Coop Door.

Be sensible yourself and have a good line of padlocks to show your customers.

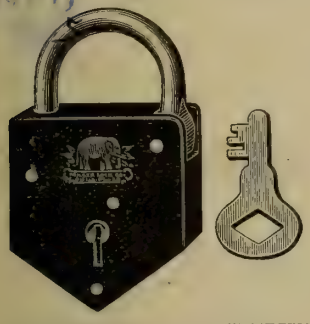
Those shown here are only a few of our large stock. Our travellers will show you others.

If you get our prices you will buy from us.

SKATES

Just issued, a skate booklet showing our line. It contains besides some bargains in "left overs" lines.

A POST CARD BRINGS A COPY



Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants,

FOUNDED 1809 MONTREAL, CANADA

F. & W.



John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
J.R. & S. ALL THE ROUND J.R. & S.
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



14540.—FRUIT DISH.

Manufacturers of all Kinds of

GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons and forks in the world.



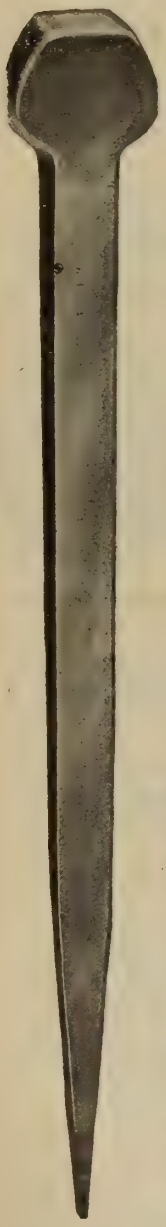
31197.—E.P.N.S. CAKE BASKET

Canadian Offices and Show Rooms

Coristine Building, St. Nicholas St. - MONTREAL

Alongside Board of Trade, J. R. S. McLernon, Manager

The "C" Brand



On a box of Horse Shoe Nails with our name, means to the purchaser that he shall receive the best, and "**made in Canada.**"

Forty years is a long period in manufacturing experience in the production of Horse Nails. You get the benefit of it all, when you buy the "**C**" brand.

The best material known or used by any maker in the world for making Horse Nails, is Swedish charcoal steel nail rods. We use this exclusively.

The "**C**" brand nails will stand more hard work and outlast any "cold process" nail made in the world—bar none.

Don't compare prices, compare quality. The best costs the most to produce, and always sells for the best price.

No "Friday bargains" on the "**C**" brand. One quality—and one price for all.

Remember, that the recollection of the quality will remain long after the price has been forgotten.

Your orders and preference for the "**C**" brand respectfully solicited.

CANADA HORSE NAIL COMPANY

Established 1865. MONTREAL



SALES LESSON IV.

Enquirer is now quite interested. Begin to clinch the sale. Tell him there are more "Dillon" virtues yet. The **Dillon Hinge-Stay Fence** has no locks or other contrivances to cause trouble in frosty or excessively hot weather (Point No. 3). The "Dillon" is made scientifically, so need never be tightened nor loosened. Hence "no repairing" "Contract"-in-the-winter fences, "Sag"-in-the-summer fences—these are not the

Dillon Hinge-Stay Fence

Make this point clear to enquirer: **The "Dillon" is the neatest, strongest, and most durable fence to be had.**

THE OWEN SOUND WIRE FENCE CO., Limited

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) **Montreal and Winnipeg**

GREENING

WIRE ROPE

All kinds and sizes and for All Purposes.

STANDARD AND LANG'S PATENT LAY

ROPE FITTINGS. ROPE GREASE.

PRICES RIGHT. PROMPT SHIPMENTS.

THE B. GREENING WIRE CO.

LIMITED

HAMILTON, ONT. MONTREAL QUE.

RETURNED NOV 6 1905 5

COMMUNITY SILVER



AVALON BOUILLON SPOON

The design has a dignity and lasting beauty in marked contrast to the over-ornamentation of other plated ware.

The ware has all the style and appearance of the best Sterling. It is more than triple plated and is guaranteed for 25 years.



AVALON TEA SPOON

all RETURNED NOV 5 1905
To Montreal Office
Cut Back #2
Page 73



AVALON GRAVY LADLE



AVALON BERRY SPOON

THE AVALON DESIGN

IS A DISTINCT ADVANCE IN THE MANUFACTURE OF PLATED WARE.

THE ORNAMENTATION IS RICH AND DEEP.

IT IS ADVERTISED IN ALL THE LADIES' JOURNALS.

YOU WILL DERIVE FULL BENEFIT OF THIS ADVERTISING CAMPAIGN BY KEEPING **COMMUNITY SILVER** IN STOCK.



AVALON PIE KNIFE

A FULL LINE OF

AVALON and FLOWER DE LUCE PATTERNS

IN STOCK

Caverhill Learmont & Co

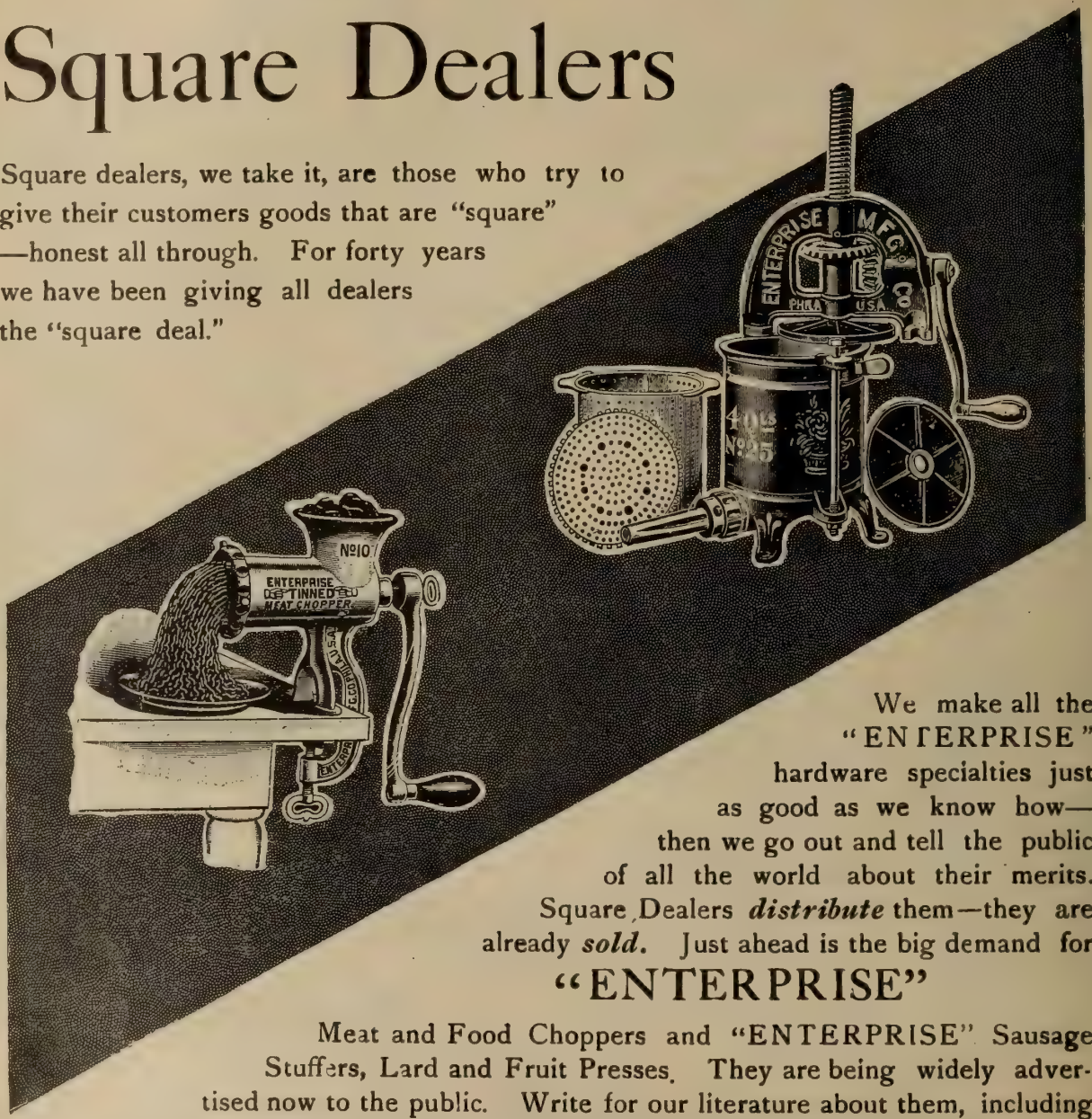
MONTREAL and WINNIPEG

A SQUARE DEAL

FOR

Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square" —honest all through. For forty years we have been giving all dealers the "square deal."



We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public of all the world about their merits. Square Dealers *distribute* them—they are already *sold.* Just ahead is the big demand for

"ENTERPRISE"

Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new Booklet: "The Cook, Her Critic and—." We will send you a supply of these on request.

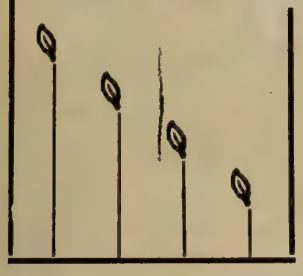
The Enterprise Manufacturing Co. of Pa.

Philadelphia, U.S.A.

New York Office, 10 Warren St.

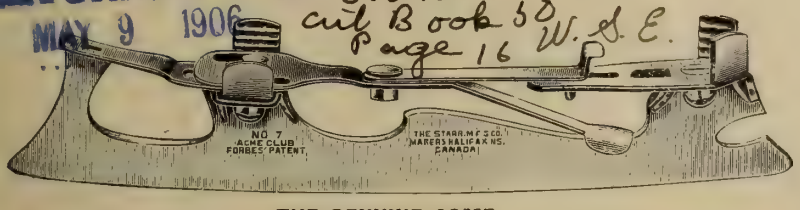
San Francisco Office 105 Front St.

SKATES



If you have handled our Skates in the past we appeal to your experience as the ground for handling them this season. If you have not handled them, the general experience of the trade should be ample warrant for making a trial now. For nearly 40 years our Skates have been on the market, and their leadership during all that period is attested by the fact that wherever exhibited at International Exhibitions they have taken the highest awards.

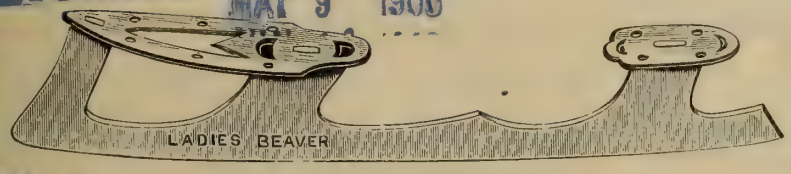
RETURNED MAY 9 1906 to owner cut Book 50 Page 16 W. S. E.



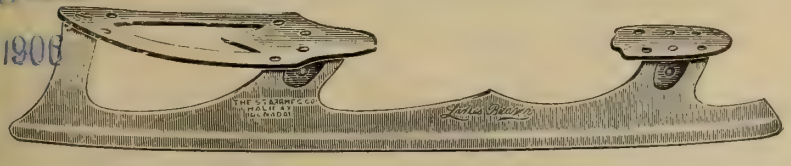
THE GENUINE ACME

The reason why you have never been able to find a self-fastening skate that would please your customers better than the **Genuine Acme** is that the **Acme** has the simplest and best fastenings. This Skate is made in all sizes and grades to fit every shoe and every purse.

RETURNED MAY 9 1906



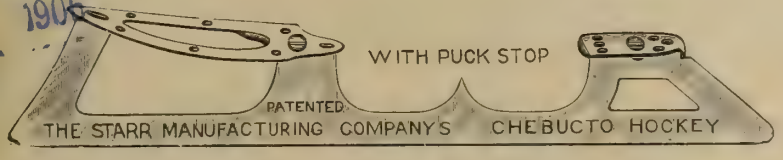
LADIES' BEAVER (Plain Runner)



LADIES' BEAVER (Flanged Runner)

The Ladies' Beaver attaches direct to the boot and is the favorite for rink use, being extremely light in weight and unexcelled for its beauty of finish and design. It is a Skate you can recommend with confidence—as, indeed, is the case with all our Skates. For people who like a wider bearing surface on the ice than is possessed by the ordinary runner, there is the **flanged runner.** This Skate is made both in ladies' and gentlemen's sizes, and the latter are known as the **GENTS' BEAVER.**

RETURNED MAY 9 1906



THE CHEBUCTO HOCKEY

This Skate was always a good one, but it has been redesigned this year, and we have no hesitation in claiming for it that it offers the best value of any Skate on the market. It is made only in one quality, with welded and tempered runners, and tops of English cast steel rolled by the makers especially for our use.

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Dartmouth, N.S., Canada

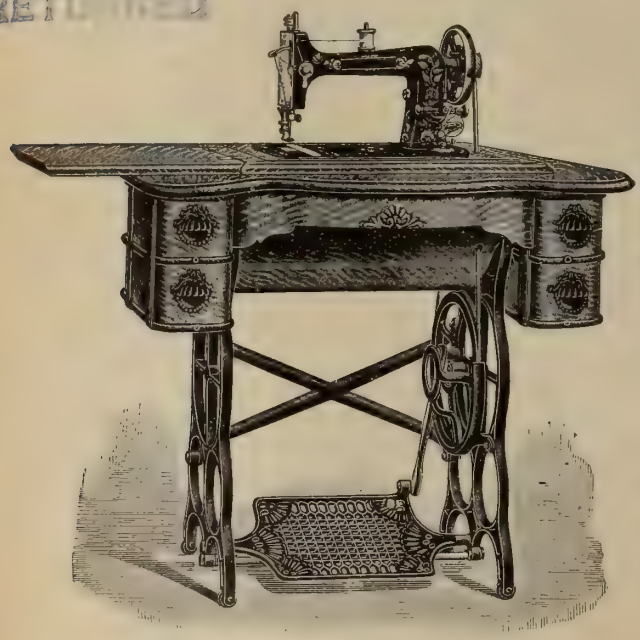
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With and Without Automatic Lift

THE ALEXANDRA THE VICTORIA

THE ALEXANDRA is a perfect High Arm Sewing Machine, made of the finest materials by skilled workmen and containing all the latest and best features in construction. It is a marvel of simplicity, the acme of durability, the *lightest running* machine made, and is unexcelled for perfection of work. **THE ALEXANDRA** has many features. The take-up or thread controller is *absolutely positive,* being actuated by a rotating cam, giving *perfect control* of the thread, so that each stitch is pulled with *exactly the same tension. No other shuttle machine made at the present time possesses this improvement.* The machine is *self-threading throughout*, except the eye of the needle. The needle is self-setting and *cannot* be set set wrong. It is the *only machine* made with the driving pulley to the outside of the hand wheel. **THE ALEXANDRA AUTOMATIC LIFT** is the most desirable and the only perfect Automatic Drop Head Sewing Machine ever offered. It is the only one on the market having Positive Action, Double Locking. No Springs, No Vibration, Perfect Durability, Dust Proof Stationary Head Case, Ready Adjustment, No belting up of Balance Wheel.



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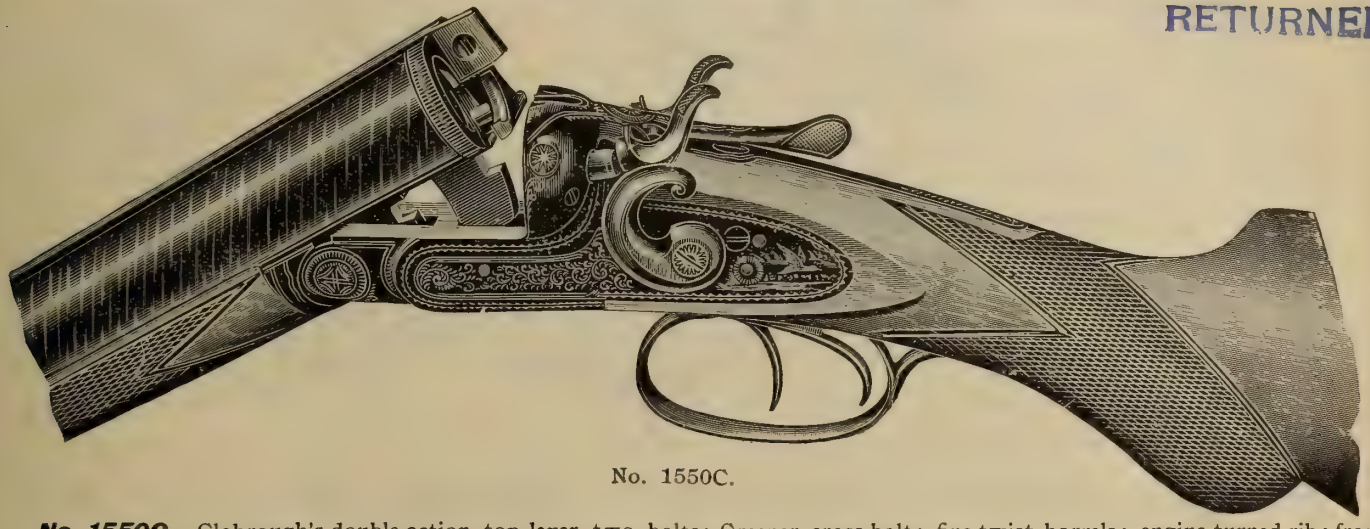
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In **SHOT GUNS** the list includes, besides the three mentioned above : ***Pieper, Janssen, Iver Johnson, Stevens, Browning Automatic, Winchester Repeating*** and ***Marlin Repeating.***

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No. 1550C.

No. 1550C.—Clabrough's double action, top lever, two bolts; Greener cross bolt; fine twist barrels; engine-turned rib; front action bar; steel freed locks with round hammers; D. & E. fore-end; nicely engraved and checkered; fine goods, well finished and fitted; fit and handle equally as well as many other higher priced goods; barrels choked for close, hard shooting; 12 gauge; 30 inch; weight 7 to 7¼ lbs.

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We can fill orders promptly. Send yours on.

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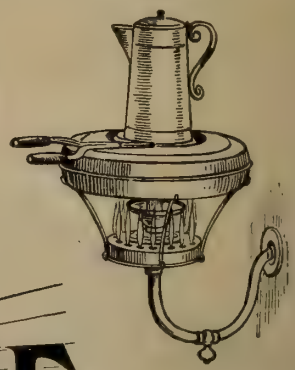
London, Ontario

HEAT and LIGHT

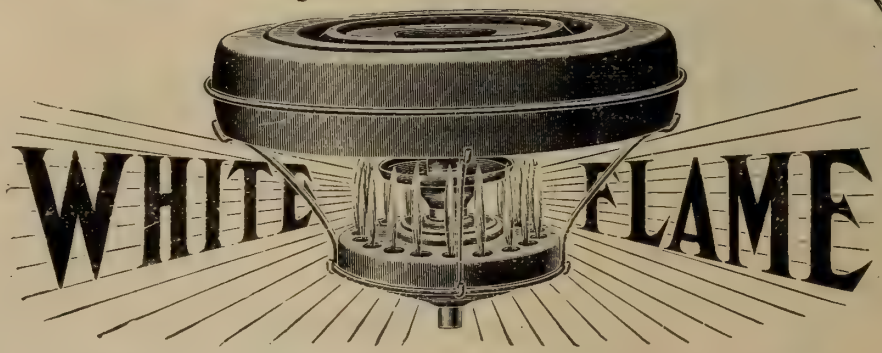
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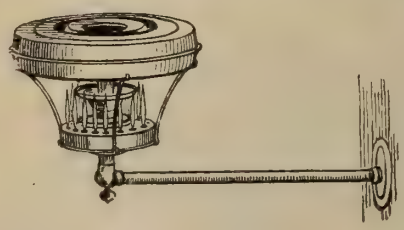


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The 20th Century White Flame
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BE SURE OF YOUR DINNER

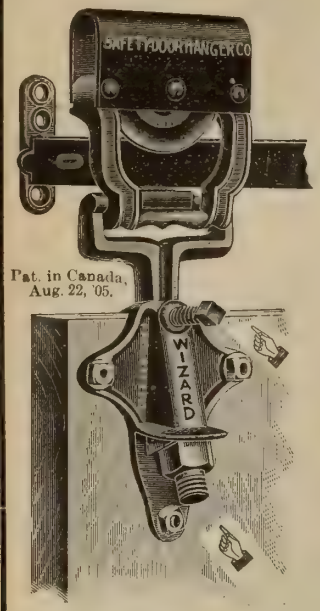
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The Wizard has both LATERAL and Vertical adjustments — features possessed by no other Flexible Hanger. These distinct advantages will please your old customers, and they, in turn, will send you new ones.

JUST TO BE CONVINCED, give your Jobber a trial order for

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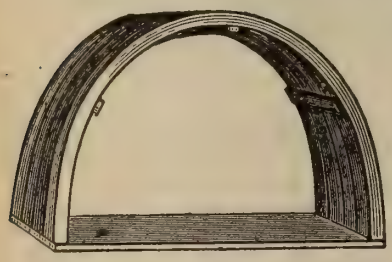
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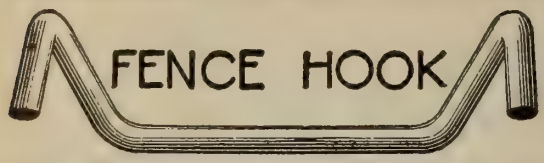
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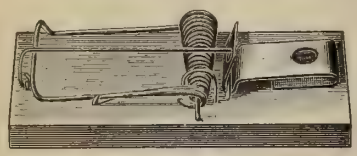
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Give that man a **UNION PLANE** when he asks you for a

GOOD PLANE

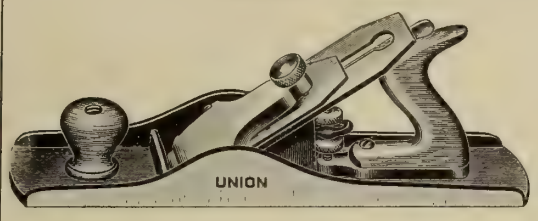
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The one with the Locking Lever adjustment and Solid Frog

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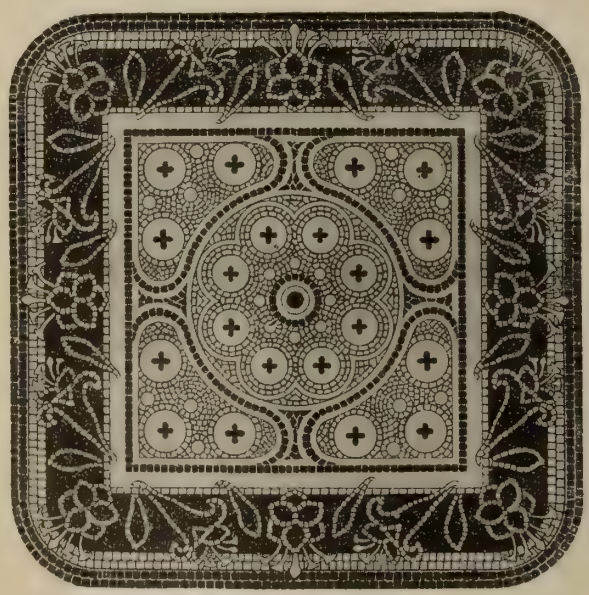
We would be glad to put our proposition fully before you.

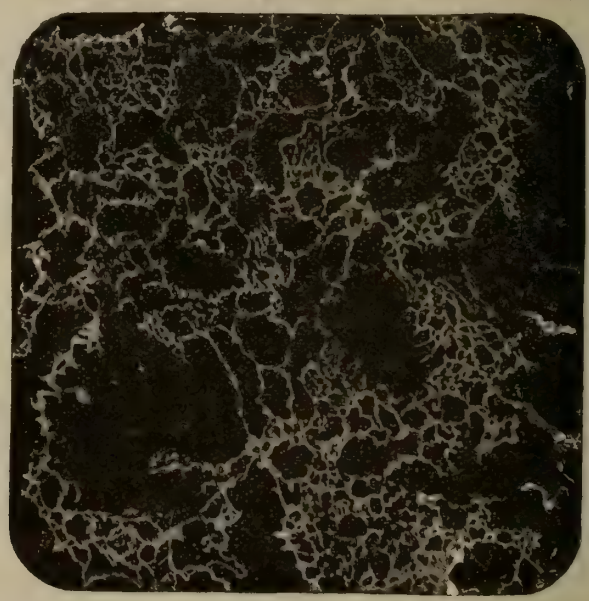
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KEMP'S ELITE AND ONYX STOVE BOARDS

Will please your customers and bear you a good profit. Elite boards are made both wood and paper-lined ; 12 sizes. Onyx wood-lined ; 12 sizes. Prompt shipment.

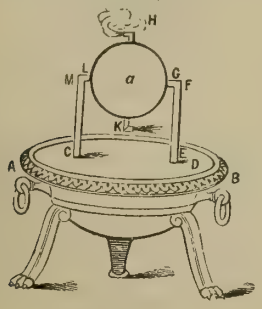
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McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

THE HARNESSING OF STEAM

PROFESSOR THURSTON, in his "History of the Growth of the Steam-engine," formulates the axiom that "Great inventions are never, and great discoveries seldom, the work of any one mind." This is true of every branch of knowledge, and the development of the steam-engine has not been an exception. The process has been one

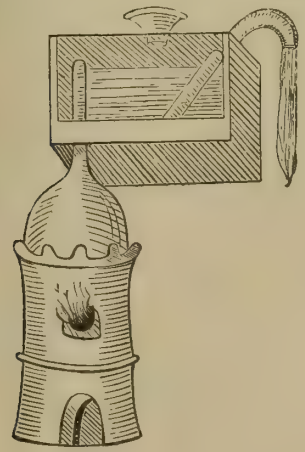


Herd's Engine, 200 B.C.

of gradual evolution more than invention, each step forward making the succeeding one easier, until the centuries produced a man who could take the suggestions contained in the crude methods which preceded him, and by vivifying them with the force of his own genius, produce a mechanism which in all essential principles stands unaltered up to the present time.

Hero, 200 B. C.

The earliest record of steam, or heat, engines is found in a manuscript written by Hero, a learned mathematician of Alexandria, Egypt, about 200 B.C., entitled, "Spiritalia seu Pneumatica." It is uncertain how many of the various in-

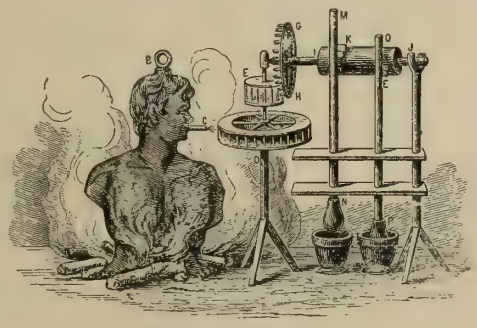

Porta's Apparatus, A.D. 1601.

genious appliances described were devised by Hero himself, as he states in the introduction his intention to describe existing machines and to add his own. It may be, therefore, that the steam toy known as "Hero's engine" antedated the manuscript on pneumatics by many years.

The operation of this little machine, called the "Aeolipile," is readily understood. The closed vessel, AB, was filled with water, and upon a fire being quilt underneath, steam was generated, which passed into the hollow globe, A, through the pipe, MC. This steam escaping through the bent pipes, H and K, which faced tangentially in opposite directions, the globe was revolved by the reaction of the current.

This contrivance appears to have been used to a limited extent as late as the seventeenth century for small powers. Bishop Wilkins, writing in "Mathematical Magie," issued in 1648, describes Aeolipile as familiar and useful apparatus. "They are," he says, "frequently used in the exciting and contracting of heat in the melting of glasses or metals. They may also be contrived to be used for sundry other pleasant uses."

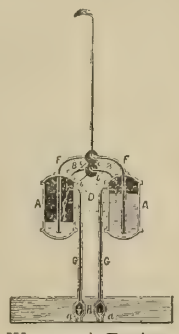
Hero also described several steam boilers of an elemental nature, the pressure being utilized to blow a horn, or make a bird sing, which seems to give

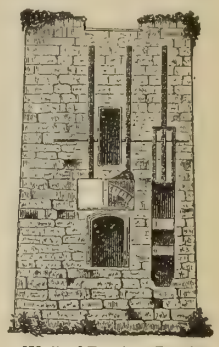

Branca's Steam Engine, A.D. 1629.

the modern steam whistle an ancient, respectable pedigree.

From 200 B.C. to the sixteenth century practically nothing is found in any manuscript bearing upon the subject of steam. About 1550 Hieronymus Cardan, a physician, mathematician and mechanic, called attention to the expansive power of steam, and the vacuum which could be produced by condensation. In 1569 Jacob Besson, a French professor of natural philosophy, published a treatise on the generation of steam and its properties. In 1571 Matthesius, in a sermon, described a steam power contrivance, and spoke of the power of a small quantity of confined vapor. About this time Leonardo da Vinci, engineer and painter, wrote a description of a steam gun, made of copper, which threw a ball weighing about 60 pounds. The steam was generated by permitting water in a closed vessel to fall on heated surfaces, and by the sudden expansion to eject the ball. In 1606 Giovanni della Porta published a treatise on pneumatics, in which he illustrated an appliance similar to Hero's fountain, but with steam instead of air as the displacing medium. He also pointed out that the condensation of steam might be used to produce a vacuum and suck up water from a lower level. His various suggestions were, a century later, applied by Savery to the first commercially successful steam pumping appliance.

In 1629 Giovanni Branca, of Loretto, Italy, designed the first steam turbine,

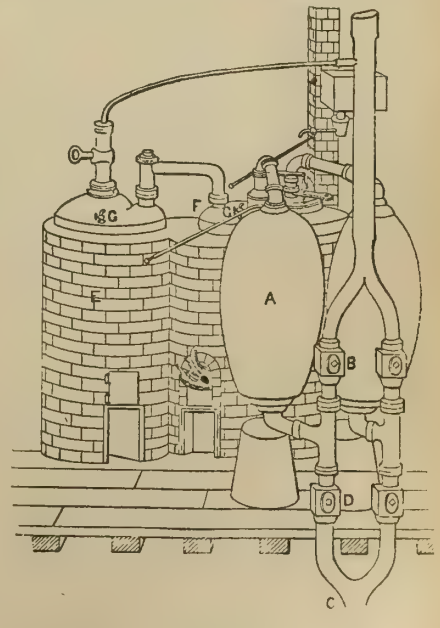

Worcester's Engine, A.D. 1665.


Wall of Raglan Castle.

which was made like a water wheel, and driven by the impact of a jet of steam on its vanes.

The idea contained in this apparatus has since been successfully applied by modern engineers.

In 1663 the Marquis of Worcester published a description of his various applications of steam to useful purposes, under the singular name of, "A Century of the Names and Scantlings of Inventions by me already practised." There are no drawings in the book, and the de-



Savery's Pumping Engine, A.D. 1698.

scriptions are so obscure that it is difficult to determine the exact form of the various apparatus. It would appear, however, that to the Marquis belongs the honor of proposing, or accomplishing, the raising of water, on a compar-

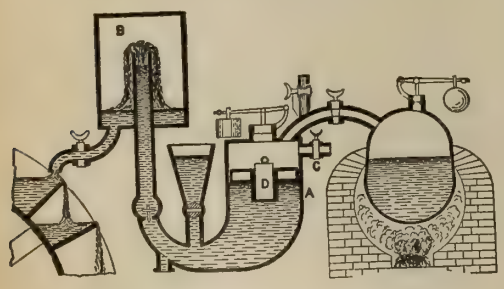
atively large scale, by the agency of steam. One of his accounts is entitled, "A Fire Water-work," and is couched in quaint language.

"An admirable and most forcible way to drive up water by fire, not by drawing or sucking it upwards, for that must be as the philosopher calleth it, 'Intra sphaeram activitatis,' which is but at such a distance. But this way hath no bounder, if the vessels be strong enough, for I have taken a piece of a whole cannon, whereof the end was burst, and filled it three-quarters full of water, stopping and screwing up the broken end; as also the 'Touch-hole'; and making a constant fire under it, within 24 hours it burst and made a great crack. So that having a way to make my vessels, so that they are strengthened by the force within them, and the one to fill after the other, I have seen the water run like a constant fountain-stream forty feet high, one vessel of water rarified by fire driveth up forty of cold water. And a man that tends the work is but to turn two cocks, that one vessel of water being consumed, another begins to force and refill with cold water, and so successively, the fire being tended and kept constant, which the self-same person may likewise abundantly perform in the interim between the necessity of turning the said cocks."

The apparatus was actually used to elevate water for practical purposes at Vauxhall, near London, the materials being furnished by William Lambert, a brass founder. The biographer of the inventor suggests, after examining the walls of Raglan Castle, where the appliance was installed, the foregoing sketch as in accord with the description and evidence.

Worcester's Engine.

The two vessels, AA, were connected by the steam pipes, BB, to a boiler in the rear. the discharge pipe, E, is connected to the two vessels by the pipes, FF. GG are suction pipes with foot



Papin's Modification of Savery's Engine, A.D. 1705.

valves. Steam was admitted to the vessels, AA, alternately, and then condensing atmospheric pressure forced water through the suction pipes to fill them. While one was filling, the steam was forcing the water from the other out of the discharge pipe. One vessel being emptied the attendant cut off the supply of steam, and turned the current into the other, while the condensation of steam in the first one permitted it to fill again.

The Worcester machine anticipated the invention of Thomas Savery, 1698 to 1702, although the latter so far improved upon the details that the Savery "Fire-engines," as they were called, were used to quite an extent for raising water from mines, supplying houses, and towns, and even to drive water wheels.

Savery's Pumping Engine, 1698.

A serious difficulty, which prevented the more general use of the Savery engines in mines, was that the height to which water could be forced was limited by the pressure which the crude appliances of that early day would bear. It is surprising to find that pressures as high as 120 to 150 pounds per square inch were employed without even a safety valve. It was found no easy matter to deal with high-pressure steam, and Savery complained that it melted his common solder and forced him "to be at the pains and charge to have all his joints soldered with spelter." The machine was afterwards improved by the addition of a ball and lever safety valve, which was invented by Denis Papin in 1680, who also designed a modification of the Savery engine in 1705.

In this appliance water was admitted through the funnel. D was a floating piston to prevent sudden condensation from the steam coming in contact with the cold water. After the piston was driven down, the cock, C, was opened and the steam escaped. It was a non-condensing, single acting, steam pump, with the water and steam cylinders in one.

Papin invented the fire-box boiler, and also proposed to burn fuel on a grate within a furnace arranged with a down draught, the air entering above the grate, passing down through the fire, and from the ash-pit to a side flue in the chimney. He claimed that combustion was perfect, the formation of smoke entirely prevented, and the saving of fuel very great, all of which has a strangely familiar sound.

(To be continued.)

OTTAWA COMMERCIAL TRAVELERS' CLUB.

OTTAWA has always been a great Mecca for commercial travelers at the week-end. Many salesmen who work the Ottawa Valley, the Lake Superior district, and Eastern Ontario, make their home in the capital, and many others covering the same territory make it a point to take advantage of Ottawa's fine hotel accommodation over Sunday. Altogether, it is said that some three hundred "drummers" make their headquarters there.

For some years it has been felt that some means would have to be provided to permit the "Knights of the Grip" to get together, spend their off time pleasantly and profitably, and enjoy each other's association.

It was to fill the bill in that connection that the Ottawa Commercial Travelers' Club was conceived, and finally organized last week. Indications would point to a most successful existence for the new club, as the membership already reaches two hundred, and is rapidly growing.

The promoters of this enterprise have had in view not only their own well-being, but also the interests of the firms which they represent. One of the features of the club is a clause in the constitution which provides that the interests of the members should be guarded against legislation sought by individuals, or enacted by Governments, which might encroach upon their rights.

The long-felt want of some common meeting place is filled by the establishment of rooms for recreation and reading. It is also proposed to hold entertainments of various kinds, from time to time. The first of the series will be held at the Russell Theatre, in January, 1906.



Mr. J. H. Meikle

The club is very cosily located in rooms over the Bank of Nova Scotia, and it is proposed to make the accommodation more spacious after the first of the year, by taking in the remainder of the flat. The quarters will be fixed up attractively and the boys will have no occasion to "wander from their ain fireside."

At the head of the club are young men of push and enterprise, while the rank and file of the membership are imbued with the same spirit. This paper congratulates the Ottawa travelers on their energy, and wishes their venture every success.

The officers of the Ottawa Commercial Travelers' Club are as follows:

Honorary President — Major H. A. Bate, of H. N. Bate & Sons, wholesale grocers.

President—J. H. Meikle, representing Caverhill, Learmont & Co., wholesale hardware, Montreal.

First Vice-President—Albert Allard, of Prevost & Allard, wholesale grocers, Ottawa.

Second Vice-President — John Blyth, representing J. M. Garland, wholesale dry goods, Ottawa.

Treasurer—Sam Myers, representing the American Tobacco Co., Montreal.

Secretary—John A. Kealy representing John Labatt, brewer, London.

Committee—S. E. de la Ronde, Jr., of the F. J. Castle Co.; A. Eugene Landrian, wholesale tobaccos; Peter Gauthier, of James Robertson, wholesale boots and shoes, Montreal; Jno. F. Hawley, of the F. J. Castle Co.; W. C. McCarty, solicitor.

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Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Shadows of Coming Events.

A VERY neat pictorial post card was issued by the Moffat Stove Co., of Weston, Ont., for circulation amongst their customers prior to Thanksgiving Day. The card is arranged to fold, on the back being a picture of a fat turkey near the axe and block which most turkeys meet at this season of the year. On the inside a few well arranged paragraphs wish the recipients of the postal a pleasant Thanksgiving, and remind them that the Canada National Range is the finest on earth, and if their Thanksgiving turkey is cooked on it their Thanksgiving dinner will be a pleasant one.

A Hallowe'en Message.

The Borden Co., Warren, Ohio, and Toronto, have sent out a most attractive folder arranged in the form of a pumpkin, with eyes, nose and mouth cut out and having a red background. On the inside are illustrations of the Solid Adjustable Die Machine and Hand Stocks, together with some interesting poetry and prose, elaborating upon advantages of the Borden Co.'s goods. Readers of Hardware and Metal who have not received a copy of the pumpkin should write asking for one, and also for one of the catalogues recently issued by this company, the book being a neatly arranged 32 page and cover affair, well illustrated and containing a mass of interesting information regarding die stocks and machines of the well known solid-adjustable type.

Electrical Switches.

Section four of the supply catalogue of the Canadian General Electric Co., Toronto, has recently been issued, dealing with snap, flush and knife switches. The book contains about 80 pages, and is arranged for filing on the loose leaf system. Several hundred illustrations are given, together with full descriptions, prices, etc. Dealers in electrical goods should send for a copy of this catalogue, mentioning the name of this paper in their communication.

Electrical Supplies.

The Geo. Worthington Co., Cleveland, Ohio, have forwarded one of their latest catalogues of electrical fixtures and supplies, the book comprising nearly two hundred pages, and being illustrated by several hundred cuts of the various lines of supplies manufactured and sold by this company. Hardware dealers who are planing to carry electrical supplies as a side line should secure a copy of this catalogue, the company offering to send one to any dealer who mentions this paper.

A Picture Hanger.

The United Brass Mfg. Co., Cleveland, Ohio, have issued a new picture hanger, which they offer to send to any master plumber in Canada who mentions Hardware and Metal. Each plumber who receives a copy can pass judgment upon the merits of the production. Some won't like it, while others will.

Push Two Paint Specialties that Sell Well Everywhere

The progressive, energetic dealer will find a good paying field all around him for the sale of ***Sherwin-Williams Buggy Paint*** and ***Sherwin-Williams Enamel Leather Dressing.*** Every one who owns a vehicle, every livery stable and repair shop will like and use them after a trial. *We have a special plan* for pushing these goods to your profit, which we would like to explain to you in detail.

Sherwin-Williams Buggy Paint is a color in varnish which gives a desirable gloss finish. It is especially made for refinishing carriages, buggies, boats, sleighs, etc., and make them as bright as new.

Sherwin-Williams Enamel Leather Dressing is for refinishing buggy tops, curtains, etc. It keeps them from cracking and preserves their usefulness and good looks for the longest time.

Write our nearest offices today for a proposition that will be of profit to you.

THE SHERWIN-WILLIAMS CO.

PAINT AND VARNISH MAKERS

Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St. E., Winnipeg.

1503

Taps and Dies.

Butterfield & Co., Rock Island, Que., have forwarded Hardware and Metal a catalogue illustrating the stock and dies, solid die plates and new screw plates manufactured by them, the company also making taps and dies for all uses and tools for engineers and steamfitters' use. The cover of the book is quite substantial, and the sixty-four pages between the two covers contain a great deal of useful information for steamfitters. Readers who send for a copy of the book should mention Hardware and Metal.

How to Stop the Leaks.

Haines, Jones & Cadbury, Philadelphia, Pa., have issued a most attractive folder advertising their brass work, the central piece of the folder being an excellent reproduction of a photograph showing a plumber endeavoring to stop a leak on a wash basin fixture, which he has just installed. The company makes several lines of ground key, compression and fuller work. Their highest grade goes under the name of "Hajoca."

Skates.

A neat and seasonable twenty-page booklet on skates is being mailed to the trade by Frothingham & Workman, Limited, Montreal. All the different skates handled by this firm are described and illustrated, while reference is also made to other hardware articles sold by them. Send for a copy of the booklet and statement of discounts, mentioning Hardware and Metal.

Waterworks Catalogue.

The Jas. Morrison Brass Mfg. Co., Toronto, have issued a comprehensive catalogue of 48 pages and cover, illustrating the various types of malleable cast iron fittings, corporation service brass work, steam and gas fitters' tools, and bath room furnishings, manufactured by this company, the catalogue being compiled with a view to bring together such articles only as are used by water works in the laying of services in cities, towns and villages. The book is very well arranged, and is certain to be found very handy by any one installing water services. Readers of Hardware and Metal can secure a copy by mentioning this paper in their letter of inquiry.

Business Changes

Ontario.

William Wyatt & Son, stoves and tinware, London, are selling out.

M. G. Pettapiece, tinsmith, Manotick, is advertising his business for sale.

Coxall & Co., hardware and grocers, Colborne, have assigned to Richard Tew.

R. E. Walker, hardware merchant, Caledonia, has sold out to Clysdale & French.

Thomas Burnett, agricultural implements, Milverton, has sold out to H. Tucker.

W. Dallus Judus, machinist and bicycles, Barrie, has assigned to Thomas Beecroft.

Wilfrid Plante, paints, etc., Ottawa, assigned, meeting of the creditors 30th of November.

Wm. Scott & Son, hardware, tinware and stoves, Forest, are selling out to Scott & Cook.

McGill & McGill, agricultural implements, Paisley, have dissolved. James McGill has retired.

Purdom-Gillespie Hardware Co., London and Dorchester, have sold their Dorchester branch to Robert Farquhar.

The H. S. Smythe Co., hardware and specialties, Toronto, have sold out their specialty department to Mrs. Minnie F. Halls.

Quebec.

M. German & Co., plumbers, Montreal, registered.

Lemieux & Viens, blacksmiths, Edwidge, registered.

Viens & Savard, blacksmiths, Edwidge, registered.

H. H. Desautels, tinsmith, St. Hyacinthe, compromised.

The assets of J. H. Blais, tinware, Napierville, have been sold.

Vaillancourt & Harcy, lumbers and roofers, Montreal, registered.

The assets of J. H. Lacroix, hardware merchant, Shawinigan Falls, have been sold.

The assets of J. H. Daunais, grocer and hardware merchant, Montcalm, have been sold.

The stock of M. Philbin, hardware, etc., Montreal, has been damaged by water; was insured.

Western Canada.

Samuel Madill, blacksmith, Minnedosa, lost by fire.

Wakelin & Griffin, tinsmiths, Winnipeg, have dissolved.

John Trauneczek, hardware merchant, Francis, has been burnt out.

The stock, etc., of Northwest Machinery & Iron Co., Winnipeg, advertised for sale.

C. P. Lewis, agricultural implements, Alexander, has been succeeded by C. Christie.

W. R. Johnston, grocer and hardware merchant, Winnipeg, has assigned to C. H. Newton.

Northey & Campbell, agricultural implements, Holland, have been succeeded by W. J. Batters.

Greer & Grandy, agricultural implements, Oxbow, have been succeeded by Robertson & Grandy.

IT IS SAFE



LOOK HERE for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

New York Office: 99 Chambers St.

As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them, anyway—it costs you nothing. If you will ask for it, we will gladly send you our bright little booklet, "Shots," together with our hand-some catalogue.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

1063. A London firm manufacturing sizes, enamels and other specialties of interest to the paint trade, also glues and gelatine, wishes to get into touch with Canadian importers.

1064. A Midlands company manufacturing fire brick and fire clay goods is prepared to appoint a suitable Canadian resident agent for the sale of their goods in Canada.

1066. A Dundee house manufacturing jute yarns for rope making, jute cloth in the loom state and jute goods generally wishes to be placed in communication with Canadian buyers.

1069. A Yorkshire company manufacturing trolleys, trucks, hand carts and similar lines would like to find a sale for these goods in Canada.

1071. Inquiry is made respecting the opening in Canada for the sale of water meters by a firm manufacturing these goods.

1073. A London firm manufacturing glues, varnishes, sizes, paint removers, etc., desires to be placed in touch with Canadian houses handling such goods.

UNJUST FREIGHT CHARGES.

IN Hardware and Metal of October 21 we discussed the matter of special charges on freight shipments, in many cases charges being made which retailers do not understand and consequently feel that they are being imposed upon. In this connection Hardware and Metal has received the following letter from Purvis Brothers, Sudbury, and offers the use of its columns to other retailers or jobbers who can throw any light upon the matter under discussion. Messrs. Purvis Brothers write:

Editor Hardware and Metal: I desire to call your attention and through you the attention of the hardware trade generally, to what has been for years a gross imposition on the retail trade. I have reference to the charge made on every shipment from the cities of London, Hamilton, Toronto, Ottawa, Montreal, etc., for cartage. These amounts vary according to the size of the shipments and usually run about two cents per hundred pounds on small shipments and on larger lots about one and one-half cents. On September 9th our firm loaded in Montreal car 36808, weight 44,000 lbs., freight $132, cartage $6.60, advance 50 cents. What this latter item is we are at a loss to know. We are perfectly satisfied at our manufacturing and wholesale friends charging us for boxing and packing (the charges, by the way, are often very excessive) but we think it is a rank injustice that we should be asked to pay their cartage. I may say that we have to pay the manufacturers and jobbers packing and cartage and then we retail to our customers and have to supply boxing and packing free of charge and also pay cartage on all goods going out. It is quite evident that the retail trade for years have quietly submitted to an imposition and I feel convinced that in these days of business conventions this matter will be taken up by one of them and I look for the matter to be carried further in your journal by abler pens than mine.

I am, gentlemen, one of the long sufferers,

JAMES PURVIS,
Of Purvis Bros., Sudbury.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

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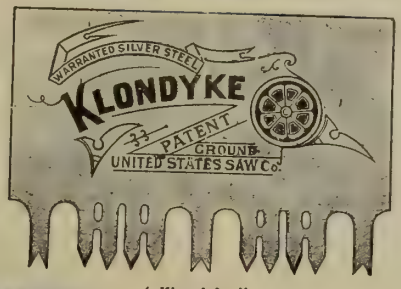


Narrow Saw—Lance and Racer
Best Silver Steel

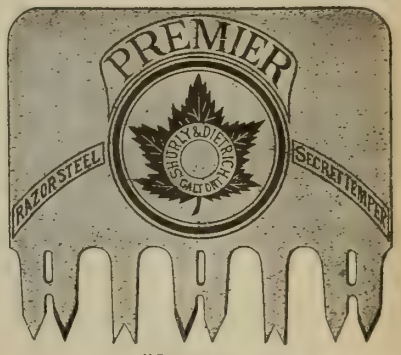
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"Lance Tooth"
No. 3 Silver Steel



"Klondyke"
Best Silver Steel



"Premier"
No. 5 Razor Steel

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"The Victor"
Special Steel

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The Lance
No. 1. Extra Refined Razor Steel

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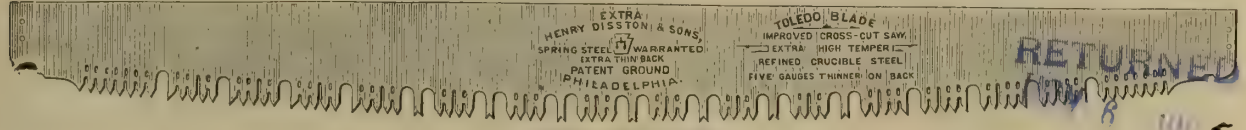


Maple Leaf Set
Solid Steel

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The Racer
No. 0. Extra Refined Razor Steel



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Disston Toledo Blade
Lance Tool Crucible Steel

For Fuller Lines See Our Catalogue

H. S. HOWLAND, SONS & CO., LIMITED Toronto

GRAHAM NAILS ARE THE BEST.

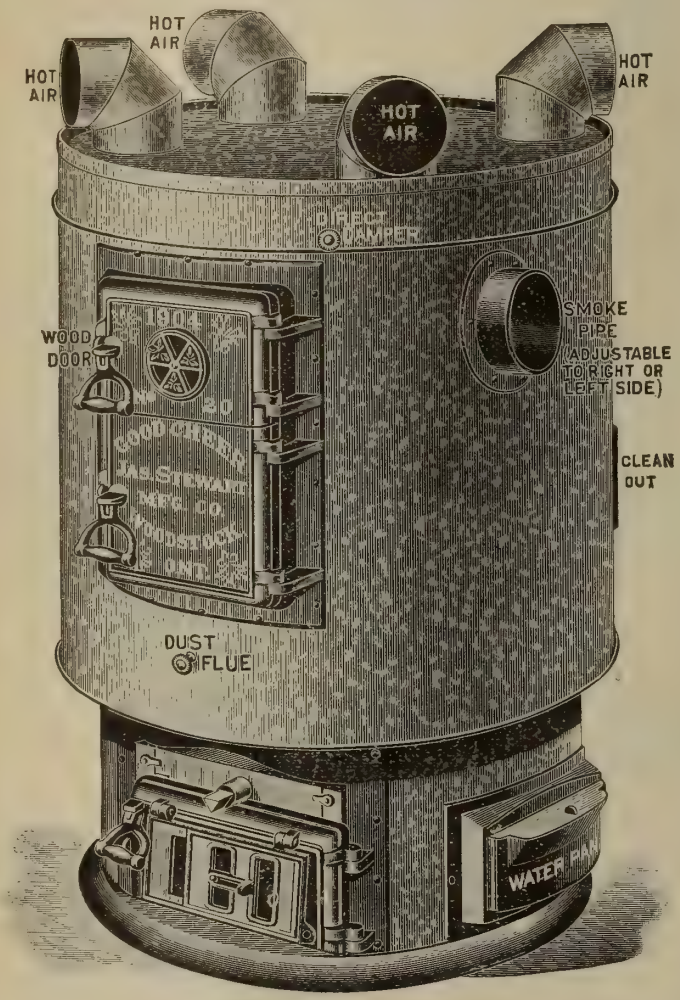
We ship promptly

Factory: Dufferin Street, Toronto.

Our prices are right

THE "GOOD CHEER" FURNACE

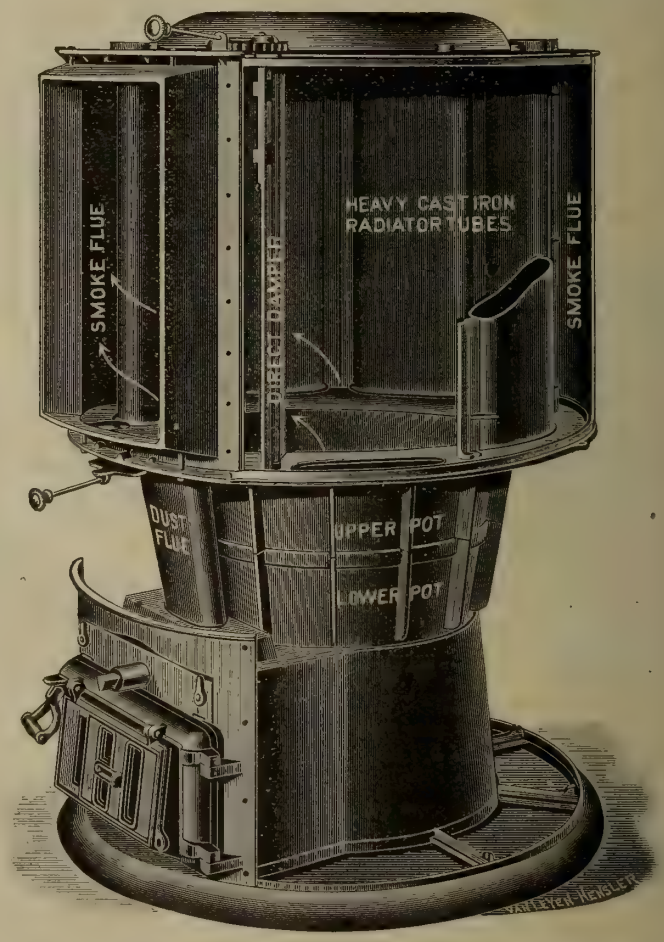
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A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.



Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

STOVES AND TINWARE

MICA IN CANADA.

A REPORT from the pen of Fritz Cirkel, M.E., Montreal, has just been issued by Eugene Haanel, superintendent of the Mines Branch of the Department of the Interior, and is announced as the first of a series on the economic minerals of Canada.

The report deals with two varieties of mica—muscovite and phlogopite. The occurrence of the former is limited to a few locations in Canada, and mining of this mineral has been attended with many difficulties, owing to the great dispersion of the deposits, their sporadic and sometimes erratic occurrence, and their inaccessible location. The phlogopite, or amber mica, industry, however, is in a flourishing condition, the output for the last year having a value of close to $200,000. This mineral was mined some 15 years ago in connection with phosphate in the Lievre and Templeton country, but at that time it was not valuable, and, therefore, was thrown away. To-day many of these old phosphate mines are in operation for the sake of the mica, the phosphate on account of its low value at present being mined as a by-product. Phlogopite mica is exclusively mined in Canada and its flourishing condition is due to the large demand for electrical machinery. Large companies like the General Electric and the Westinghouse are operating extensive cutting establishments in Ottawa, which are supplied with mica from their mines in the Ottawa county and from Sydenham. The next important producer of mica is India, but it appears that the Canadian article is preferred.

The report is a book of 130 pages, and deals with the physical and chemical properties, geographical distribution, uses and production of the mineral.

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COOKING STOVES IN SOUTH AFRICA.

ALMOST all the cooking stoves sold in South Africa are of the self-contained type, which require no building into stone or brick work, and which are known as portable ranges, or if the best known style only is intended, as American stoves, says the correspondent of a daily paper. America inaugurated the type, hence the accepted designation. There was a reason why America should lead. Houses of timber and shingle, such as are common in the United States, could not have the usual Scotch or Yorkshire range, which is recessed into the wall. An independent range which could stand on the floor away from any wall was the only kind of stove possible in such habitations.

Thus America became proficient in the manufacture of such articles and introduced them into South Africa, where they found a ready acceptance. Their ability to stand clear of the walls was not the only reason of this acceptance, perhaps not even the chief reason. The fact that a farmer, miner or prospector could buy one along with 6 feet of sheet iron stove pipe in any hardware or general store, take it home in his ox wagon and erect it himself in half an hour constituted a convenience in a country where, in some parts, bricklayers and builders may not be easily found, and when found not easily paid.

The Way to Imitation.

The American stove which caught on in South Africa is that known as the "Pearl." Success bred the desire for emulation and showed the way to imitation. British makers, or, rather, Scotch makers—for practically all the British stoves imported into South Africa emanate from the Scottish iron foundries—copied the "Pearl" and "Dover" and other specially named stoves, usually, but not always, naming them differently, and the trade was divided.

The sizes sold range from 24 to 48 inches for ordinary household use. The oven is desired to be as large as possible, consistent with the width of the stove, and the grate ought to be arranged to burn either wood or coal. Such stoves are sold both with and without attached hot water boilers. Great Britain and America divide the trade between them about equally. Sweden entered as a third party and disputed possession of the market. In Cape Colony and north as far as Kimberley Swedish stoves became popular and are so still, but their acceptance did not extend to the other colonies.

The Swedish stove is different in principle from the American stove properly so-called. It usually wants a small brick foundation, although it may be had without. The superior water heating properties it possesses are its card to favor. But what a Scotchman can do once he can do twice, the second time usually better than the first. Thus Scotch stove makers copied Swedish stoves and these were soon in the field. The Scottish manufacturer had this advantage over his Swedish competitor, that whereas the Scandinavian had one style of stove to sell only, the Falkirk man had a variety af patterns, all of which were in demand. Thus shipments from the Clyde could be larger than from Stockholm and freight charges less expensive.

Made of Cast Iron.

All the stoves mentioned are of cast iron. Neither their construction, their heating properties nor their portability can be challenged; but their weak point is their liability to breakage during transport. The breakage of much cast iron goods for South Africa is heavy, and the breakage of stoves is exceptionally heavy, the despair of many importers. The loading and unloading of a ship is not always a gentle operation, and black stevedores and wagon drivers do not always wear kid gloves.

This is why French attempts to capture a share of the South African stove trade met with an immediate success. The "Economique" stove, as the particular French make finding favor in South Africa is called, had more to recommend it than the steel body. It is not cheap. But in this, as in every other department, South Africa's first concern is quality. Cheapness must go by the board when improvement in quality is offered. In the French stove the main features of the American style of portable range are followed, but not slavishly. The doors of the ovens open downward, forming shelves, and being of wrought iron they are so strong that a man may stand on one.

It is about four years since the "Economique" stove found its way to South Africa, and Scotch makers were a long time in being persuaded that their interest lay in meeting French competition as they had met the Swedish and American. But at last one Scotch manufacturer has bestirred himself, and a Scotch-French stove is now procurable, as is a Scotch-Swedish or a Scotch-American.

Present Position of Trade.

Such, in the main, is a brief history of the present position of the South African stove trade. It will develop along the lines of the recently introduced steel body stove. The loss and worry attending the shipment of cast iron stoves are too real and too heavy to make another course possible. A need of the South African market at present is an independent range of the American or French type with a hot water supply system, the whole to be as compact and transportable as its functions will allow. An attempt has been made to supply this requirement by America, and a few American stoves with easily connected up hot water cisterns have been placed in Johannesburg. There is room for the exploitation of this field by manufacturers able to design good heating apparatus and embody the features mentioned.

—

CHIMNEYS AT FAULT.

A HEATING expert who has had over thirty-two years' experience in the stove business, and has examined from four to five thousand complaints in that time, announces that, without recalling one exception, he has always found the source of complaint to be the chimney. According to this gentleman, mortar and brick obstruct the draft of the chimney, and occasionally a bird's nest causes the same difficulty. At other times, he has found that the mortar between the bricks of the chimney has been washed out by rain or snow or the expansion and contraction of the bricks have caused openings which permitted of a counterdraft from the side. This gentleman declares that it is just as reasonable to say that a stove does not draw as it is to say that water would not run out of a pail when tipped.

—

The D. Moore Company has bought a large plot of land near its present foundry in Hamilton, and the contracts have been let for a large four-story addition with a basement.

MANUFACTURE OF IRON AND TIN PLATE

THE history of the world is a story of a continuous iron age. Western Asia, the birthplace of the human race, knew iron in its first dawning of the record of time. Egypt, whose national existence dates from the second generation after Noah, the most ancient civilization of the world, at an early period was acquainted with the use of iron. A piece of pure iron was found under the obelisk removed from Alexandria to New York in 1880. This obelisk was erected some 1,600 years before the beginning of the present Christian era. In the interior of Africa, where nuggets and boulders of high grade iron ore are lying around loose, the Hottentots still adhere to the ancient methods and are making iron in clay ovens, using a layer of charcoal and a layer of iron nuggets and producing a blast by a number of bellows or air pumps. The product of this furnace is a lump of iron which is further reworked by heating and hammering.



Interior of Hunter & Ross' Store, Abernethy, Sask.

Previous to the last century improvements in the methods of producing iron progressed but slowly, while in the early ages excellent qualities of iron and steel were produced and various methods employed. Pieces of wrought iron were heated over a fire like an enlarged blacksmith's fire and hammered, reheated and hammered until the desirable thickness was attained. Then came the Tilt hammer, driven by water power to ease the hard manual labor of the smith.

The process of rolling sheets was invented in England in the early part of the eighteenth century. This was a marked step in the advance, in that it produced plates of uniform thickness and more pliable, also at a reduced cost. Since that time many labor saving devices in auxiliary machinery for detail work have been invented, but the fundamental principle in rolling black plates has remained practically the same.

Black Sheet Iron.

From iron ore, billets or bars are made sheet iron, six, eight or ten inches by one-quarter or more in thickness, according to the gauge of the sheet desired. These are cut into lengths twelve inches wide or over, according to the width of the sheet desired, the length of the bar representing the width of the sheet. These billets are put into an oven or furnace and thoroughly heated, and then put through rolls and rolled to the desired length. In the lighter gauges these sheets are doubled and then reheated and rolled, then redoubled, reheated and rerolled until from four to eight sheets are produced from one billet. After the rolling is complete, the sheets are allowed to cool and are then ready to be trimmed to the desired size. These sheets are then put into what is called an annealing oven, put under intense heat produced mostly by natural gas for a period of twenty-four hours and sometimes more. After the annealing, if they desire to make a fine cold rolled steel, the sheets are put through cold rolls, which smooths and hardens the surface and is called one, two or three pass cold rolled steel, indicated by the number of times the sheet has passed through the rolls.

Black cold rolled sheets are used in making the galvanized iron. These are immersed in a solution of sulphuric acid, then in a bath of clean water, then in a solution of weak muriatic acid. After coming from these solutions the sheets are ready for the galvanizing tank and are run down through a molten metal of zinc and come up through rolls arranged so as to clean off the surplus coating, and as the sheets come out of the galvanizing tank they are delivered on to a table with rollers which carry them to the end of the factory, where they are taken off ready to bundle. The coating on galvanized iron consists almost entirely of zinc, and the mottled surface of the galvanized iron is caused by the air striking the sheet and cooling the same as it comes out of the galvanized tank.

Wood's patent planished iron, or what is known as the American Russia, is made from purely a charcoal puddled iron, and after this is rolled into sheets and passed through the annealing oven it goes through a hammered process, under steam hammers which give it a flakey, hard and polished appearance. Part of the process in the manufacture of this iron is kept a secret.

Coating Iron With Tin.

Black sheets for tinning purposes are rolled after much the same process as sheet iron. Tin plate or tinned sheets are known as charcoal bright plates and ternes, or roofing plates. The process of coating iron with tin was invented in Germany about four hundred years ago. The people of that country kept the process a secret for over a century, but after a long and diligent search English manufacturers, near the end of the seventeenth century, discovered the secret. In England, soon after this discovery was made, the process of rolling iron sheets was invented, the tin plate industry growing rapidly, and for nearly two centuries England maintained its supremacy in the industry, until about ten years ago, when our country became a strong rival and is now energetically contending for the first.

Pure tin being comparatively costly, as a mere rust protector, a cheaper substitute was sought and found in the alloy of tin and lead. It is said this alloy was first used by the French, who called the plates coated therewith Terne.

After the black sheets have been pickled, annealed and cold rolled they are cleaned in a weak acid soldtion, then thoroughly washed in clean water, after which nothing is brought in contact with the sheets but pure palm oil and pure block tin, which produces our charcoal bright plates. The ternes or roofing plates are produced in the same way but with a mixture of pure lead and pure block tin. Until the establishment of the tin industry of the United States on its present footing the chief sources of the world's supply for two hundred years had been England and Wales.

Twelve years ago the United States manufactured about three million pounds of tin and terne plates a year, and imported 750,000,000 pounds from Great Britain. Last year the product of the United States reached a thousand million pounds, greater by several millions than Great Britain's total output, and not only supplied practically the entire home market, but contributed substantially to the country's trade in exports. The American Sheet & Tin Plate Co., which is the largest producer of sheet and tin plate in the United States and the world, produced last year from its mills one million base boxes of tin and terne plate or five hundred thousand tons. Its output in black and galvanized sheets was also about five hundred thousand tons, or a total of one million tons. The company produced about 80 per cent. of the tin plate manufactured in the United States and about 50 or 60 per cent. of the black and galvanized sheets produced in this country.

The wonderfully accurate methods characterizing the work as it is now performed by men and machinery in the great iron and steel works suggests an inventive climax, but thousands of scientifically educated men and hundreds of thousands of practical iron and steel workers employed by the various corporations are still evolving advanced conditions, seeking to invent new or to improve old systems and methods, to the end that progress shall not be arrested and that the standard of quality shall continue to advance. — Sebastian Hazenburg in the American Artizan.

NEATLY ARRANGED STORE.

WESTERN merchants are noted for their enterprise and desire to make their stores as attractive as circumstances and the varied assortment of goods they carry permit. No exception to this rule is the store of Messrs. Hunt & Ross, Abernethy, Sask., as can be seen in the accompanying illustration. Travelers say the store has one of the neatest arranged interiors in the west, outside the larger cities and towns, and the statements are not altogether in the nature of flattery.

The centre-piece of the display is the large bath, showing that the proprietors are alive to one of the best side-lines the western hardware merchant can adopt—that of plumbing and steam-fitting—a trade which practically belongs to the western hardwareman. In addition to the systematic display of stoves, tin and graniteware on the one side, the counters, showcases and shelf boxes on the other, and the paints and tools in the centre and at the back, it will be seen that the firm carries in stock several good side-lines, such as hammocks, croquet sets, sewing machines, stock food, and alarm clocks, every one of which should meet with a large sale in the district the store is located in. The cleanly floor and the metal ceiling sets off what our readers will agree is a most commendable store arrangement.

DANGERS OF GAS STOVES.

THAT there are some dangers accompanying the use of gas stoves is, of course, pretty well known to the trade, says the Iron Age. That they are not inherent with the gas stoves themselves, but with their attachments, which are in the hands of purchasers, is equally well understood. While there is no widespread suspicion abroad which works to the detriment of the sale of gas stoves, it is none the less necessary that the dealer should be ever in touch with leading rulings on the subject and that he should so far as possible protect his customers against any of the alleged dangers. There has recently, for example, been laid down by two inspectors of a fire underwriters' association, as the result of an investigation of the dangers following the careless use of city gas, the conclusion that rubber tube connections are the cause of an altogether too large proportion of gas conflagrations and they have consequently forbidden the use of such tubing except in laboratories. It is stated that the best grade of rubber hose does not contain over 15 per cent. of Para rubber, that other grades contain but 3 to 7 per cent. and that poorer grades are made from cloth covered with pitch. They assert that flexible metal tubing also is not always reliable.

In the case of ordinary flexible tubing it is clear that when a leak in such tube is ignited the tube is quickly destroyed, with results not hard to conjecture. It should always be impressed on the customer that the fixture at the beginning of the tube is the one that should always be turned off rather than the fixture at the stove itself. The remarks of the authorities referred to on stove boards are equally interesting. They find that gas stoves mounted on wooden surfaces often char the boards and finally ignite the wood, and they say that asbestos or metal covering does not prevent the wood from charring. These findings apply as a whole to gas heating and cooking stoves and are not so applicable to water heaters, for the reason that these are generally installed by a mechanic and not by the householder.

ANCIENT GRECIAN HEATING.

ONE of the English building papers contains the following relative to domestic heating in ancient Greece :

Homer describes his princes undressing themselves in the palace to kill with their own hands the sheep, oxen and swine they were to eat at dinner, roasting the entrails and during the entertainment handing them to each other as delicacies. The repast being finished he shows them sitting for their pleasure on the piled skins of the animals they had slain and devoured and playing at games of chance, and one of them taking a pastern bone out of a basket in which it was lying and throwing it at the head of a beggar, but on missing its aim making a grease spot where it fell on the opposite wall. From this picture of the grossness of ancient manners it may be concluded that when the poet says Penelope's maids threw the glowing embers out of the braziers upon the floor and heaped fresh wood upon them, he did not mean to depict his immortal barbarians burning odoriferous fuel on purpose to sweeten what must have been a vitiated atmosphere. The fire that was quickly to blaze on the hearth had to diffuse the comforts of light as well as warmth, and the fragrant logs were known to abound with the resinous material of illumination. In the heroic age they had oil and tallow in abundance but were ignorant of the method of burning them in lamps, and the only use they appear to have made of wax was to put it in the ear to shut out sound.

Burning fuel was carried into the apartment where light was required, and sometimes placed on altars for the same purpose, and long thin pieces of lighted wood were carried in the hand when they moved from one place to another in the night. Coal, it has been thought, was known to the Greek naturalists. Theophrastus speaks of fossil substances found in Liguria and in Elis, in the way to Olympia, and used by smiths, that when broken for use are earthy, and that kindled and burned like wood coal.

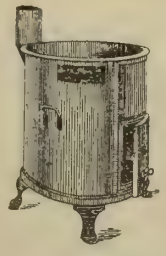
The general fuel was green wood, and where that was unattainable other vegetables and even excrementitious substances were used on the hearth for combustibles. On days of ceremony it was also customary to burn fragrant substances. When Alexander the Great was at an entertainment, given in the Winter by one of his friends, "a brazier was brought into the apartment to warm it. The day being cold, and the king, observing the small quantity of fuel that had been provided, jeeringly desired his host," says Plutarch, "to bring more wood or incense." The supply of the precious firing appeared to the king too scanty for producing the required warmth, and if it arose from his host being niggardly of the costly fuel he hinted that some of the common sort would be acceptable.



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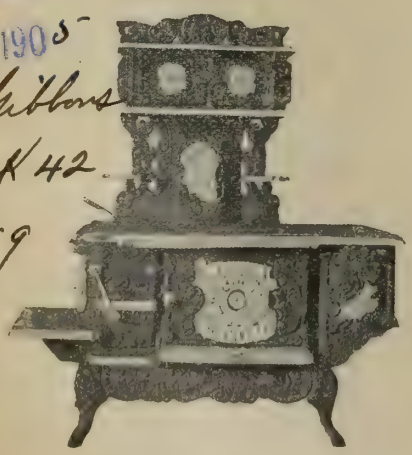
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J. J. Gibbons
Book 42
page 69



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Peninsular stoves and ranges are nothing if not good workers.

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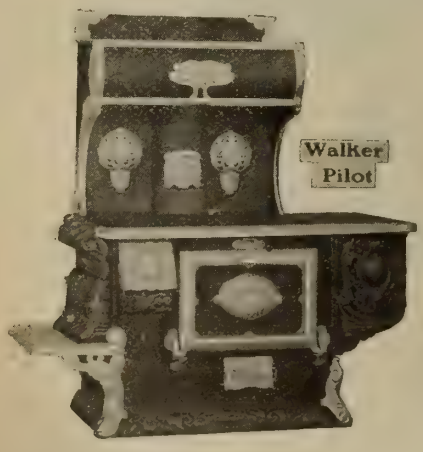
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You know that it has **Our Patent Double Lock Fold** to ensure durability in the bottom wires; you know it has **Our Metal Cover** to prevent dust flying about; you know **Our Patent Wire Bale** is designed for hooking over a fence so as to relieve the pressure on the arms of the operator. If your customers knew all this they would get the "right" sifter. Who is going to tell them—the other Hardwareman?

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led us to make other things which appeal to the women in the home and are handled by the same jobbers and retailers. The trade, we think, recognizes that they can count on us to help move anything we make.

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Simplest freezer made. Patented dasher does the work. Better than ever this year. The product of our new factory—better facilities. This, and strong advertising make it the freezer the women ask for.

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An excellent freezer, double scrapers fastened same way as in Peerless Iceland. All sizes.





Dana Mop Wringer

Wrings the mop dry in five seconds—does it without wetting the hands and without danger of upsetting the bucket and wetting the feet. You stand in a natural position—both feet rest firmly on the floor. The latest, the simplest, the best Mop Wringer on the Market.

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For the window. No ice bill. A refrigerator that takes up no floor space and is run without ice eight months in the year.

Ask your jobber.

THE DANA MFG. CO.

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Tri-Use Cooker



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Every dealer should stock a few of these Cookers. They sell wherever introduced.

No well-appointed kitchen is complete without one, and after once using it a woman will not do without it.

Can be used in various ways, viz., as a double boiler for cooking cereals of all kinds, as a steamer for vegetables, puddings, stale buns, bread or cake, or as two separate saucepans, etc.

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PLUMBERS' CASE IN COURT.

BAD legal advice appears to have brought the Toronto Master Plumbers and Steamfitters' Association into a peck of trouble, a number of their most active members being charged with conspiracy before the police court, the adjourned case coming up for trial next Monday. With the master plumbers are several members of the Journeymen Plumbers' Union, they also being charged with the same offence, the complainant being J. B. Reeves, an ex-member of the Master Plumbers' Association. While it would be out of place to discuss the case until the evidence is given in open court, the trade generally are interested in the facts given out by the crown attorney.

* * *

On Monday last, Crown Attorney Curry, armed with a search warrant, visited the offices of the association and after an investigation seized certain books, papers and record cards which he will use as evidence in court. Mr. Curry stated that "at the time tenders were being received for the Isolation Hospital information goes to show that fraud was committed. The association declared this job an open contract. The master plumbers placed their tenders before the association before they sent them to the corporation. The amounts of these tenders were added, and an average obtained. The plumber whose figures were nearest the average was given the contract. Five per cent. was added to the amount of the contract for the association, besides enough to give every person who had put in a tender about $20 apiece, to be paid when the money was received from the city. Then a number of contracts were submitted to the corporation, but none were allowed to tender within 10 per cent. of the amount of the chosen plumber's figure. In this manner the city was shuffled out of about $250. As far as I have heard up to the present time, the Master Plumbers' Association and the Journeymen Plumbers' Union are about ready to hold up their hands," concluded Mr. Curry. "I think the master plumbers will be willing to sign an agreement to disband in addition to signing bonds not to form a similar association in the future."

In the police court on Tuesday Mr. Curry announced his willingness to go ahead with the prosecution, but the case was remanded for a week in order to allow the Crashley case to be disposed of the meantime.

* * *

Until a week ago the members of the Association did not look upon the proposed investigation as a serious matter, but a change has taken place and some are even predicting that it will be necessary to disband the association and call in an official to act as liquidator. The sensational articles in the daily papers have weakened the confidence of the public and some believe that the present organization cannot regain public favor.

* * *

The majority of the association members are saying little, but awaiting the decision of the court. They know they have done nothing to deserve the condemnation of the public nor to fear the imposition of heavy fines or terms of imprisonment and they feel certain that the case will work itself out for the good of the trade. If there has been any wrong-doing the guilty ones should suffer and if it is shown that the by-laws of the association (which is a chartered company) need amending the rank and file of the membership can be trusted to make the necessary changes. But to disband the association and agree to remain unorganized there is not the slightest intention. If the present association must be disbanded a new one will spring into existence as the plumbers and steamfitters are too intelligent a body of men to remain unorganized in these days of organization.

* * *

The evils which are said to exist in the plumbing trade are not a result of the organization of the association. Before the trade organized, men agreed amongst themselves as to who should get certain jobs. The association has done much to regulate and improve trade conditions. It has cut down the average profit of 33 per cent. to 25 per cent. and it has made it possible for young firms to establish themselves without cutting each other's throats in order to get contracts. It has made it possible for the master plumber to pay better wages and to meet his notes as well as allowing him to do better work and instal a higher class of materials. The association has aided in the enforcement of sanitary laws and by adopting examinations for apprentices and entering into an agreement with the journeymen has stopped the doing of jobs by botch plumbers, the old system allowing the journeymen to do jobs in overtime, very often with his employer's materials. The association has brought order out of chaos and if the present organization does not live another body will be formed to take its place.

* * *

Why should the master plumber or steamfitter be called upon to work for days making up estimates for a large contract without remuneration? The lawyer or the architect will not prepare a brief or a plan for nothing. The master plumber must be remunerated in some way if the architect invites him to tender for a job and after figuring several days he finds he is only one of a number who have done likewise. In several large American cities the master plumber charges for his time in making estimates. In Toronto the "I.O.U." system has been used to a limited extent. It may be advisable for the trade to adopt the American system, but it can only do so through organization.

* * *

As Hardware and Metal has said before sensational newspapers are making a mountain out of a molehill. There are certain points in which the workings of the association must be changed in order to do justice to the smaller firms as well as the general public. Action should have been taken inside the organization, but it matters little how it is done so long

as the proper action is taken. It is not in the interests, however, of association members or non-members to continue pulling each other's hair. It may be hot stuff for the sensational newspapers, but it will mean cold dollars for the combatants in the legal fight and the commercial reports may contain several death notices if the controversy continues.

* * *

The supply houses are interested in the Crashley case but as they are now selling openly to anyone engaged in plumbing work, they have no cause to fear the outcome. It will be a surprise if the case is not dismissed without going to trial.

THE PRICE-CUTTING EVIL.

WITHIN the past month an open market has been declared on lawn mowers and iron pipe in the hardware and plumbing markets, the former still being on the slaughter block. It is not our intention to discuss the reasons why price-cutting has been resorted to, but rather the effect of the open competition.

Lawn mower manufacturers having failed to come to an agreement upon prices for 1906, travelers are underbidding each other in an endeavor to secure the retailer's trade. On the surface it would appear that the manufacturers were enjoying a battle at their own expense and the retailers were busy preparing to reap a harvest by booking orders for next season's goods at much below the regular prices. But things are not always as they seem. When next Summer comes around the effect will be seen in the price-cutting amongst retailers. Some will have bought large stocks at low prices and will feel themselves justified in slashing prices in this line in order to draw trade on others. Those dealers who have not bought so shrewdly will have to meet this competition at a loss to themselves and strife and ill-feeling will have been engendered. In some cases price-cutting in other lines will be resorted to, the result being financial loss to the merchant, whose prosperity or adversity is reflected back upon the jobber and wholesaler. In the case of iron pipe there does not seem to be the same opportunity for price-cutting as the master steam-fitters are organized into an association and they use the iron pipe themselves, while the hardware merchant buys lawn mowers to sell over his counter for other people to use. And in most cases where merchants buy goods cheap they sell them cheap and derive no benefit from the bargain.

From every standpoint the value of business organizations would seem to be apparent. The manufacturers of lawn mowers have not found their organization effective enough and have failed to agree on prices which would allow themselves a fair profit. They cut prices and in the absence of a strong retailers' association the whole trade is likely to feel the bad effects of the price-cutting war. Had Ontario, Quebec and the Maritime Provinces as effective a retail organization as the hardware retailers in Manitoba and the Western Provinces have, the evil could be checked and the manufacturers and jobbers could suffer alone. But without organization the retailers are at the mercy of their most reckless price-cutter.

Although there is little evidence of it amongst hardware dealers in Ontario and Eastern Canada it is dawning with greater force on the business men of the civilized world that business rivalry does not call for personal enmity and that it is better to co-operate together than to compete in a cut-throat fashion. It is becoming more clearly understood that business success does not come from hating the other fellow who is in the same line of business, but from a broad and liberal view of affairs by which men may be the warmest friends while in the same business, each profiting by the other's experience.

The coming Winter should not pass by without something being done to bring into existence a stronger and more effective organization of retail hardware merchants than exists at present in Eastern Canada. The hardware section of the Retail Merchants' Association has not proved itself to be strong enough to organize the trade as it should be organized. Is it not time for a Retail Hardware Dealers' Association to deal with the price-cutting and credit system evils ?

THE TRADING STAMP EVIL.

THE new law relating to the giving and receiving of trading stamps has come into force with the present month, and is of vital interest to every retail merchant throughout the Dominion.

The issuing of these stamps had become a menace to the multitude of small traders in certain towns, and it is with an immense degree of satisfaction that the death of the system will be heralded.

The law is a very strong one, and brings all offenders easily under the Criminal Code, as well as greatly enlarging the classification of schemes coming under the head of "Trading Stamps," and it is incumbent upon every retailer to watch with vigilance any attempt to evade the law in his locality.

Already there are signs that the corporations which were recently prominent in this line of business are endeavoring to devise means to evade the provisions of the new law, and there is no doubt that these institutions will "die hard," but it was clearly expressed at the passing of the Act that if any part of it needed strengthening or amending it would receive consideration at the next session of Parliament.

We cannot press too strongly on all sections of retailers to awake to the opportunity and do all in their power to purify retail business methods, and look askance on any attempt to revive this old evil under any new garb.

LITTLE MONEY IN CEMENT.

ABOUT five years ago the agents of American cement machinery supply houses invaded Canada, and with the assistance of promoters endeavored to organize many cement manufacturing companies, as far as possible inducing subscriptions of local capital from men located in districts where works could be established. Glowing stories were told of enormous profits to be made in cement, but Hardware and Metal, in response to many requests for information from merchants, warned its readers that, while reasonable profits might be looked for, the promoters' promises should be taken with the proverbial grain of salt. It was pointed out that there were a sufficient number of companies then in existence to supply the demand, and the natural growth of the market would be met by the expansion of the existing plants.

The warning was timely, and many of our readers kept their money out of cement. Time has shown the wisdom of the advice given, as some companies organized have never earned, or never will earn, a dividend of one per cent. on the investment. In the purchasing of plant and machinery much grafting was done, and in some cases it is safe to say the works could be duplicated for fifty per cent. of the original investment.

Prices of cement have decreased from 25 to 50 per cent. in the last few years, owing to the competition of the American manufacturers, whose large output and nearness to coal supply enables them to produce much cheaper than can be done in Canada, where a duty must be paid on each ton of coal consumed. The increasing competition of the various plants in Ontario has also much to do with the drop in prices. The present season has been the most profitable in the history of the trade, and while it is too early for the operating companies to estimate their year's business, it is

safe to say that very few have made enough to pay dividends.

The costly experimenting, sometimes for years, before cement of the proper standard can be produced, makes investment in cement manufacturing enterprises a risky undertaking. The large number of plants already in existence, and the probable establishment of another one in the eastern part of Ontario by capitalists interested in the industry in the United States, would make it appear that there would be no possibility of a shortage during the next few years. Cement is coming into use in dozens of now processes, but the existing plants, protected by the dumping clause, are likely to have to compete actively for business amongst themselves for the trade of the Dominion for the next decade.

WESTERN ASSOCIATION PROGRESS

SECRETARY McROBIE writes Hardware and Metal from Medicine Hat stating that the organization of hardwaremen in the newly constituted Provinces is proceeding as satisfactorily as in Manitoba. Although the work in Manitoba was not yet completed, Mr. McRobie some little time ago directed his energies to the work in Saskatchewan and Alberta in response to urgent Macedonian calls for help. In September he organized the trade on the Arcola line of the C.P.R. and also did some effective work in the neighborhood of Regina and at other points on the main line. Early in October, in company with W. A. Coulson, the secretary of the Retail Merchants' Association, he visited all the towns on the Kirkella branch and the hardwaremen readily fell in line with the movement. The main line from Wolseley to Elkhorn has also been covered by Mr. McRobie with good results and he is now at work in Alberta.

From small beginnings the Western Hardware Association has in the sixteen months of its existence gained a large membership and in all parts of the west hardware dealers bear testimony to benefits derived from membership. The association is making a determined effort to deal effectively with the long credit evil, and in many parts of the west members closed their books on Wednesday, November 1st, with the intention of allowing no credit until April 1st. In their efforts to stamp out this long standing evil the association members have our best wishes for success.

The Jenckes Machinery Co. are supplying a Corliss engine and two steel boilers to Mr. Tobin, M.P., who is rebuilding his saw mill at Brompton, Que., and is also establishing a planing mill at the same point.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 4.

AMONGST the salesmen calling upon the plumbing and heating trades throughout Ontario there are few who are better and more favorably known than the gentleman whose portrait is reproduced with this sketch, Mr. William Linton, of Toronto, who sells the popular Canadian enamel ware made by the Standard Ideal Sanitary Company, Port Hope.

Mr. Linton is 41 years of age and has had an experience of over 20 years in the hardware, heating and plumbing trades, being originally an apprentice to the hardware business, serving four years with one of the best hardware stores in England. Coming to Canada



Wm. Linton, Toronto,

Representing A. D. McArthur & Co., Selling the Standard Ideal Sanitary Company's Enamelled Ware.

Mr. Linton became head salesman in the stoves and hardware store of John Milne & Company, on Yonge street, Toronto, selling Burrow, Stewart & Milne stoves, remaining with this firm for eight years until the store was burned out in the great Simpson fire. After this he went into partnership with Mr. Coutie of the same firm, taking the salvage stock and doing business in the same line for six years at 1 Queen street east and then dissolving partnership with Mr. Coutie.

At this time Mr. Linton entered into a contract with A. D. McArthur & Co., Colborne street, Toronto, to represent the Ideal Company, Detroit, on the road, and after Mr. Bush, manager of the latter company, established the Standard Ideal Sanitary Company at Port Hope, the Detroit line was dropped and he has since been engaged in selling Standard Ideal goods in all parts of Ontario. Illustrative of the increasing popularity of the Canadian ware it is known that although the plant of the company at Port Hope was doubled in size last Winter the output has been readily disposed of, the factory having, in fact, been oversold. It is the intention of the company to again double the size of the plant during the coming Winter.

Mr. Linton is at present particularly interested in the sale of the products of the Star Iron Company, Montreal, more especially in the Star boiler, for which he is now agent for Ontario, meeting with considerable success in his efforts. Mr. Linton is an enthusiastic sportsman having personally organized the East Toronto Athletic Club, of which he is president. During the first couple of years spent in Canada he played cricket with the champion East Toronto team, helping the club to win the championship. Latterly he has played ball with the supply men occasionally, being also a yachtsman and keeping a sailing skiff and bunch of hounds for amusement in Summer and during the hunting season.

IMPORTANT LEGAL DECISION.

A DECISION was recently given by Judge Klein, which will be of interest to shippers of oil who sell at a price "freight prepaid."

A Toronto wholesale paint and oil firm sold a barrel of linseed oil to their customer in the west, and it was shipped in good order, but arrived at destination leaking. The consignee refused to accept or pay for the oil, insisting that the shippers should deliver him the full number of gallons invoiced. The firm who sold the goods contended that they delivered the barrel to the railway company full and in good order, and that if there was leakage it was the fault of rough handling by the carriers, and that the claim for shortage was a matter for the purchaser and the railway company to settle between themselves. The barrel of oil was, in the meantime, lying in the railway freight shed at destination and the contents leaking out. Finally the case was tried in court, and the judge decided that the consignee should pay the full amount of invoice and all costs incurred in the action.

The Alberta Portland Cement Co. is asking a bonus and the nuisance ground for a site in connection with their representations to the Calgary council. The company's initial expenditure will be $300,000, to be increased to $500,000.

PERSONAL MENTION

Quebec.

A. Arel, contractor, of Beauharnois, was in Montreal this week.

L. P. Beaulne, hardware merchant, of Hawkesbury, Ont., visited Montreal this week.

A. Trudeau, general merchant, of Windsor Mills, Que., visited Montreal recently.

Mr. Curry, of the Rhodes-Curry Car Company, Amherst, N.S., was in Montreal last week.

W. H. Evans, of the Canada Paint Co., Montreal, spent a few days this week in Toronto.

Wm. Hymen, of Gaspe, was among the out-of-town buyers in Montreal during the past few days.

Jos. J. Bouchard has recently been appointed manager of the Star Iron Foundry, Montreal.

W. S. McVicar, of Harrington, was a caller at some of the Montreal warehouses during the week.

A. R. Gosselin, general merchant, of St. Alexander, paid a visit to Montreal wholesale houses this week.

A. E. Bregent, dealer in sporting goods, Montreal, was married recently to Miss Gravel of the same city.

W. C. Strader, general merchant, of North Williamsburg, Ont., paid a business visit to Montreal this week.

J. W. Harris, of the J. W. Harris Contracting Company Montreal, was absent in Quebec for a few days this week.

A. McDonald, tinsmith and stove dealer, of Huntingdon, Que., visited Montreal this week on business with the jobbers.

Henry Steele, of Hatfield & Co., steel merchants, Glasgow, stopped in Montreal last week on his way back to the Old Country.

L. Archambault, merchant and manufacturer of butter and cheese, Grandines, visited Montreal on business during the past few days.

W. C. Webster, of W. C. Webster & Son, wholesale and retail hardware merchants, Coaticook, Que., was in Montreal a few days ago.

James R. Wilson, managing director of Thos. Robertson & Co., Limited, Montreal, returned from the Old Country on the Bavarian last week.

J. S. M. Dougall, president of the Dominion Commercial Travelers' Association, and head of the firm McCaskill, Dougall & Co., varnish manufacturers, Montreal, is at present paying a visit to Winnipeg.

P. E. Bouillier, formerly manager of the Star Iron Foundry, Montreal, has joined Mr. Lesperance of the same city in forming the firm Bouillier & Lesperance, contractors, with headquarters on St. Catherine street.

Amiot, Lecours & Lariviere, hardware merchants, St. Lawrence street, Montreal, are showing a beautiful and cleverly constructed window display this week. Only staple hardware articles are used in the window, which is gotten up to represent a suspension bridge.

Guinette & Frere, hardware merchants, St. Catherine street, Montreal, have assigned, and their affairs are now in the hands of Mr. Lamarche, curator. It is understood that nearly all the local wholesale houses are interested, though none for very big amounts.

A. H. Nelson Kennedy, hardware merchant, of Buckingham, Que., has been showing some fine windows of late, making special displays of sporting goods and ammunition. Hardware and Metal expects to reproduce some of Mr. Kennedy's windows in the near future.

During the Sherwin-Williams Company's convention in Montreal this week many of the local retailers have been showing a full line of S.-W. goods in their windows, together with the ubiquitous "Cover the Earth" sign. Particularly fine displays were those made by L. J. A. Surveyor and Henry Morgan & Co. (Colonial House).

Bellhouse, Dillon & Co., cement jobbers, Montreal, have been condemned to pay $5,602 to the J. H. Ashdown Hardware Co., Winnipeg. The defendants had agreed to fill a contract made by the plaintiffs with the city of Winnipeg for Portland cement, agreeing to furnish certain grades, and to pay for the bags returned. The cement failed to stand the tests imposed by the city engineer of Winnipeg, and the defendants failed to pay for the bags returned, so that Mr. Justice Dunlop condemned them to pay the amount above named on both these counts.

Ontario.

R. Blain, M.P., hardware merchant, Brampton, was a visitor in Toronto this week.

Andrew Mann, of the Canada Brass & Supply Company, London, was a visitor in Toronto on Thursday.

Alex. McMichael, manager of the Toronto branch of the James Robertson Company, is on a business trip to Winnipeg.

J. W. Benson, Toronto manager of the Sherwin-Williams Paint Company, is in Montreal attending the convention of S.W.P. salesmen.

E. W. Topping, representing the Safety Door Hanger Company, Hamilton, was a caller at Hardware and Metal's Toronto office on Wednesday.

Stauntons Limited, wall paper manufacturers, Toronto, will erect immediately a $40,000 building, an addition to their present plant on Yonge street.

Alex. Slater, formerly manager of the Sherwin-Williams Paint Company's Toronto branch, but now the company's representative at San Francisco, was a visitor in Toronto this week.

M. E. Murray, Toronto representative of the Borden Company, Warren, Ohio, visited Montreal last week and appointed George Robertson, of that city, to represent the company in Quebec Province.

The Aikenhead Hardware Company, Toronto, has purchased at a price in the neighborhood of $60,000, the building at No. 17 Temperance street, known as the Dunlop Tire building, and will move into the new place in the near future.

The Taylor-Forbes Company expect to get settled in their new offices and warehouse on King street west (opposite the Mercer Reformatory) during the coming week. A large stock of Sovereign radiators will be carried in the warehouse.

Messrs. H. & S. Smythe, hardware merchants, College street, Toronto, are taking over the store adjoining their present quarters and will branch out into a large house furnishing business on departmental store lines. They have disposed of their branch store on College street near Bathurst.

F. A. Coons, manager of the hardware department of A. Sweet & Co., Winchester, Ont., has just returned from a trip to Winnipeg, Moose Jaw, and other western points. Mr. Coons, who is an enthusiastic sportsman, found some excellent shooting during the trip, and altogether the impressions he formed have made him another convert to the western fever.

Maritime Provinces.

James Ross, president of the Dominion Coal Company, has arrived home after an absence of some weeks in Europe. While away he made an inspection of the leading collieries in Great Britain, Germany and other European countries, and obtained much information. Mr. Ross states that excellent progress is being made at Sydney, and the company's annual statement will be a good one, and he ridicules the report that English interests are securing control of the company.

Western Canada.

Fred Quinn, of Ross Bros., Limited, Edmonton, has been enjoying a vacation at his home in Vancouver. It is said the Vancouver boys sat up nights to hear Mr. Quinn tell his Scotch story, now famous throughout the west.

C. D. Waldon, manager of the Pease-Waldon Co., Limited, of Winnipeg, returned recently from an extended business trip as far west as the coast. Mr. Waldon left a trail of Pease Economy furnaces in the territory he covered.

NEW PREMISES IN MONTREAL.

John Round & Son, Limited, of Sheffield, England, famous the world over for their "Tudor Works," and at Hatton Garden, London, have decided to still further pursue their aggression for business in Canada by opening commodious warerooms in Montreal, at the Coristine Building. They will carry an immense stock of all the lines manufactured by their celebrated goldsmiths and silversmiths, comprising gold, silver, electro plate on nickel, and Britannia metal goods, also silver and plated cutlery, steel cutlery, oak and inlaid goods with silver and plated mounts. The firm have a reputation extending over half a century, and they need no introduction to the trade in Canada.

Their managing representative, Mr. J. R. S. McLernon, is a capable and experienced business man, and has had experience in the Canadian trade with one of the largest Canadian manufacturing jewelers and goldsmiths. Mr. McLernon will make his headquarters in Montreal, and special attention will be paid to the vigorous advertising campaign carried on in this paper.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 74.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Yankee Tools have been advanced.

Canada Plates—New lists are out with prices higher.

Ingot Tin is now quoted 36½c. to 37c.

Pig Lead is very firm at $3.90 to $4.00 per hundred pounds.

Pig Iron has been advanced in several grades.

Merchant Steel shows some advances.

Black Sheets are quoted higher than last week.

Bar Iron has advanced to $1.97½.

Old Zinc is now 3¾c.

Old Rubbers are firmer, and are quoted at 7c. to 7¼c.

TORONTO.

Linseed Oil Crushers have advanced their quotations another cent, but the list prices remain unchanged.

Iron Pipe Manufacturers have advanced prices five per cent., but the open market on pipe and fittings continues.

The Stanley Rule and Level Company have advanced their prices on planes.

North Bros. have advanced their quotations on Yankee tools.

Disston's Saws have been advanced in price.

Old Material—No. 1 wrought iron, old rubber, and mixed rags are all quoted higher.

WINNIPEG.

Turpentine has advanced 8c. per gallon.

Horseshoes have been advanced; iron, 10c. and steel, 15c.

Files—Discount on Arcade files are now 75 instead of 70% and 10%.

Loaded Shells—Eley's & Kynoch's soft and chilled have advanced $1.50.

Galvanized Sheets have been advanced 15c.

Tinplates XXI have advanced 50c.

Bar Iron has advanced 10c.

Sleigh-Shoe Steel has advanced 10c.

Spring " " " " 25c.

Sheet Zinc has advanced 75c.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 3, 1905.

THE first fall of snow which occured this week, even though very light has scared many of the country retailers into hurrying up their orders for late Fall and Christmas goods. The result has been seen in a largely increased turn-over in all the local jobbing houses. General hardware lines are selling very fast, but there is a special run on cow chains, blankets, halters and similar goods. Rifles also are still going out very fast.

The only price changes of any moment are those in iron, which are reported in the metal markets, and in Yankee tools, which have been advanced by all the jobbers. Yankee screw driver No. 30 is now selling at $16.80.

The sale of skates has materially strengthened during the week, owing, of course, to the break up of the river. The bulk of these skate orders, as well as those for bells, are coming in much later this year than last, as in some sections retail dealers carried over large stocks from last winter.

Nails are very much stronger this week and there are persistent rumors that the present list will shortly be withdrawn. On the strength of this feeling these goods are going out in a large volume.

Axes—Business is increasing right along and is in a most satisfactory condition. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Prices are unchanged and are still quoted as follows: Axe handles No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Trade is very brisk. Nearly all standard makes being sold rapidly. Our quotations are as follows: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—Jobbers have not yet changed their prices which are still as we have been quoting them for some time past. Cold blast, $4.50; No. 0, Safety, $5.00.

Rivets and Burrs—These goods are enjoying a good run in common with all the staple hardware lines. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—No new conditions are evident in the market at present. Prices are unchanged, being still quoted: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—Trade is very steady, particularly the brisk demand being manifest as the result of the feeling that prices will shortly be amended. Our quotations are as follows: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—A good turn over is reported by the wholesale merchants, who are still quoting $2.10 to $2.20 per keg, f.o.b. Montreal.

Cut Nails—Conditions remain as before, with quotations at $2.20 per keg, f.o.b. Montreal.

Horse Shoes—This is among the best selling lines in the whole hardware trade at present. Our prices still are: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Ammunition is still being shipped in big quantities and rifles are in fair demand. We quote: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Business continues in its normal condition. The local manufacturers and jobbers of building paper are extremely busy shipping orders all over the country. There is no change in prices, which may be seen by consulting our current market quotations.

Cordage—There is nothing new to report in this line. Everything remaining quite active at unchanged prices.

Cement and Firebrick—The approaching close of navigation is giving quite an impetus to trade in this line, as country dealers are anxious to stock up before the winter rates come into force. There is altogether a satisfactory demand for all kinds of cement and firebrick. We quote as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags; $2.05 in barrels in round lots.

Coil Chain—We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—Business is practically over for the season in this line and sales have been somewhat unsatisfactory, the

demand being small in comparison with other seasons. Our prices are as follows: Little Star, $4.85; Hudson, $5.00; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Country dealers who were stocked up at the close of last season are now forwarding their orders in good volume. Large shipments are reported from all the local houses. We still quote: From 25c. to $2.50, according to quality.

Sleigh Bells—This is another line in which the normal activity has been somewhat delayed by the fact that retail dealers in many sections carried over stock from last season. Enquiries, however, are now coming in rapidly and a satisfactory volume of business is being done. We quote prices as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—Many dealers who have never before handled this line are now experimenting with it and the orders which are being received by the Montreal jobbers indicate that last season's record turn over may be excelled this year Prices vary from $15 to $35 per dozen pairs, according to quality.

—

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, November 3, 1905.

INCREASES have been made by several manufacturers who have decided to discontinue price cutting, the lines we have to report advances on being Disston's saws, North Bros.' Yankee Tools and the Stanley Rule and Level Co. planes.

Brisk demand is reported by jobbers, Brisk trade is reported by jobbers, shipments of booked orders for sleigh bells, blankets, girths, halters, cow chains, etc., being very heavy. Building materials are still being called for actively, while axes and handles are having a heavy sale.

While some rifles are still going out the demand is not so great and sorting orders for shotguns, etc., are more in evidence. Skates are a coming line, but it is too soon for much sorting to be done. Cutlery and holiday goods, such as sleds, etc., are in active demand. The cut prices in lawn mowers is also encouraging the booking of large orders for this line.

Axes and Handles—A large trade is being done, the volume increasing steadily.

Cutlery and Silverware—Most dealers have placed their orders for their holiday goods, but many sorting orders are being given and shipments are large.

Sporting Goods—Demand for rifles is decreasing, but shotguns and ammunition are still being called for.

Lawn Mowers—The price cutting prevalent has given an impetus to the placing of orders and all dealers report booked orders very large.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Demand for cow chain is very active. Our quotations are: 1-4 inch $6.50, 5-6 inch $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Trade continues active, manufacturers being rushed to make shipments of goods ordered. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire— Business is quiet at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

What a Little Ad. Will Do.

The selling of your business is an important matter if you have a stock of $10,000; one cent on the dollar means one hundred dollars.

By spending a few cents in Hardware and Metal you may secure a buyer who is willing to pay three or four cents more on the dollar than anyone with whom you are in touch.

Want ads. cost 2c. per word for first insertion, 1c. per word for subsequent insertions.

Barb and Coiled Spring Wire—Trade is dull with quotations the same.

Wire Nails—Demand continues active at unchanged prices.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths are ordering in large quantities and dealers have no complaints to make.

Horseshoes—Prices continue unchanged with the outlook for business excellent. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Blankets—A large trade is being done in halters, girths, horse blankets and similar goods.

Skates and Sleigh Bells— Merchants are ordering well, particularly for sleigh bells.

Screws—Demand is strong and the market is very firm.

Rivets and Burrs—The possibility of higher prices is giving an impetus to trade. Prices remain as before.

Bolts and Nuts—The high prices of iron has made prices very strong, but no advance has been made as yet.

Cordage—Sorting orders are being received. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—The season's demands have been very heavy and there is little of a surplus on the market. As the bulk of the business is done, however, there is talk of a fall in prices on the higher priced brands. For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2; American Portland, $1.90 to $2. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—Business is picking up and prices continue as before. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Business is active, the heavy building being done calling for a large quantity of goods. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool—The local market is gradually settling down to a better basis as foreshadowed in our last report. We are enabled to revise our quotations from one to two points on all hides. This revision is considered to give a better position to the local market as it is now possible to do business on a more equal footing. The American markets have shown considerable strength since our last report and quotations have advanced on the Chicago market from one to two points, a feature which is no small factor, bettering the Canadian market generally as the decline on this market supported by the advance on the U. S. markets removes the possibility of the importation of hides to this side. The feeling generally is that the domestic market will assume a much more healthy character, and with the incoming of the Fall stocks the dealers will be able to fully satisfy all demands at remunerative prices. We quote:

Hides, inspected, No. 1 per lb.	....	0 11½
" " " 2 "	....	0 10½
Country hides, flat, per lb.	0 10	0 10½
Calf skins, No. 1, selected	....	0 13
" " No. 2	....	0 11
Lamb skins, best city slaughter	....	1 05
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS. MONTREAL.

Deseronto Iron Co.

LIMITED

DESERONTO, ONT.

Manufacturers of

CHARCOAL PIG IRON

BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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BRAND.

Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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THE "VANDA" BRAND

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It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

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Wholesale Merchants

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Direct Importers of:

Metals of every description, Wire Rope, Portland Cement, Firebricks, Ore Sacks, Grain Bags, etc, etc

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, November 3, 1905.

PERHAPS no other week for some time has seen so many price changes in the metal markets as that which has just passed. The activity generally is phenomenal in spite of the extraordinary prices demanded.

Canada Plates have advanced sharply during the week as have also black sheets.

Tin is decidedly firm and we are giving another change in price, in this issue. Recent advices from New York indicate quite a shortage there, which is another circumstance tending to intensify the firmness of this metal.

Pig lead has gone higher again and is considered very cheap at a five cent. advance over last week's prices. The middle of the week saw a slight easing up in the demand for lead, but conditions at time of writing would seem to indicate even higher prices in the near future.

Antimony is some easier again this week but Canadian stocks are so light that it has made no difference in the price as yet.

The lighter weights in galvanized sheets have again advanced to importers. Galvanized iron generally is very firm. Ingot zinc has again gone up on the foreign markets and there seems to be no stop to its advance.

Canada Plates—Further advances are being quoted this week, current prices being: 52's, $2.50; 60's, $2.55; 75's, $2.60; full polished, $3.60; galvanized 52's, $4.00; 60's, $4.25.

Copper—Conditions remain as before. There is still a shortage which makes it difficult to get large quantities. We are quoting: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—As predicted last week prices have again been advanced. There is a decided shortage in New York, and the natural consequence is that prices locally are held very firm even at the increased figures. We now quote 36 1-2c. to 37c. per pound.

Pig Lead—The upward movement continues and another high water mark was reached this week, when prices were again withdrawn. This metal is considered cheap at from $3.90 to $4.00 per hundred pounds.

Boiler Tubes—We quote: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Many grades have been advanced again this week. It is impossible to obtain Ayresome, so we have temporarily withdrawn this grade from our price list. Our quotations are:

"Disc," No. 1	$16.50	delivered Montreal.
"Dom.," No. 1	17.50	" "
Usual difference in price for lower grades.		
Ferrona No. 1	$18.00	delivered Montreal.
" No. 2	17.50	" "
" No. 3	16 50	" "
" No. 4	16.00	" "
Londonderry	$18.75 to $19.25	" "

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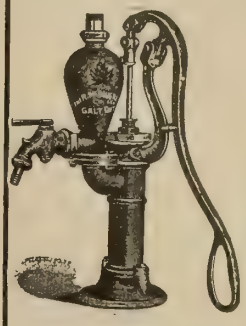
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SINGLE OR DOUBLE REELED
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Large assortment in stock.

Close Prices for Import.

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ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited

GALT, ONTARIO.

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NEW GLASGOW, N.S

Manufacturers of

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OPEN HEARTH STEEL

Glengarnock	18.25	delivered	Montreal.
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	21.40	"	"
" (special)	20.40	"	"
Summerlee	20 00 to 20.50	"	"
Clarence No. 1	19.50	"	"
" No. 3	19.00	"	"
No. 1, Cleveland	19.00	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—The firmness evident in the iron and steel market generally is reflected in merchant steel as well as in other lines. We are quoting several advances this week: Sleigh shoes, $2.02 1-2, tire, $2.17 1-2; spring, $2.75; toecalk, $2.72 1-2; machinery iron finish, $2.12 1-2; reeled machinery steel, $2.75; mild, $2.02 1-2 and upwards; rivet, $2.02 1-2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron— The lighter sheets have again been the subject of an advance to the importers, and the prices as given below are the very best obtainable at the present time. Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.45; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—We are again quoting advances, which are being held firmly, as follows: 28 gauge, $2.25; 26 gauge, $2.20; 22-24 gauge, $2.15; 19-20 gauge, $2.15; 8-10 gauge, 2.30.

Antimony—There has been a slight easing up in the market this week, but not so much as to change prices. It is even yet impossible to buy any large quantities. We still quote 14 1-4 to 14 1-2c. for Cookson's.

Tin Plates—Jobbers are holding the old prices firm, but it is safe to say that they could not replenish stocks at the present time for the same price as they are now selling at. We quote: Cokes, $3.75; Charcoal, $4.

Terne Plates—Our prices are, $6.75.

Ingot Zinc—Prices on foreign markets have again gone up, and everything would seem to indicate a continued activity on this market. We are still quoting: 6 3-4 to 7c.

Sheet Zinc—As is to be expected the market is very firm, the following prices ruling: in casks, 7 1-2c.; sheet, 7 3-4c.

Bar Iron—Another advance has taken place this week. We are now quoting $1.92 1-2 base, f.o.b., Montreal.

Scrap Metal—The rubber situation is about the same as it was last week, but we are quoting a slight advance over last week's prices. Iron remains as before. Cast iron is still in good demand, but the local market for wrought scrap is sluggish. Old lead is considerably firmer this week, and it is very likely that the price will follow the advance in pig lead. Old zinc also is higher in tone, showing an advance of 1-4c. Copper wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 3-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7c. to 7 1-4c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, November 3, 1905.

GREAT strength in outside markets is reflected in the conditions locally. Exceptional activity is noted also, buying being very heavy at the very high prices demanded by dealers. Tin is especially strong, the active demand giving the metal added strength. Lead is also moving lively, and stocks have been depleted by the large orders placed. Copper is very firm and demand good. In the United States strenuous endeavors are being made to prevent a runaway market.

In old materials iron is increasingly active, and dealers are offering better prices. Old rubbers and rags are also being quoted higher.

Pig Iron—Strong prices are still the rule, advances being made in outside markets. Business is active. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 00
Londonderry, at furnace	16 50 to 17 00

Bar Iron—The market holds strong and still higher prices are likely. We quote $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—There is a strong demand with prices advancing.

Tin Plates— Demand is active with considerable strength shown in prices.

Galvanized Sheets—Further advances are being made in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Stocks are light, and despite the high prices demand is quite active. We quote: Pig lead, $4.10 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Trade is brisk and prices quoted are firm. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—There is a good demand at firm prices. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Increased activity is reported and prices are a trifle stronger.

Old Material—Iron is strengthening, and prices are a shade higher. Demand is brisk. Old rubbers and mixed rags are also stronger. Dealers' buying prices are as follows: Heavy copper and wire, 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 6 3-4c. to 7c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—Possibility of a strike in both the anthracite and soft coal fields is making business active. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, November 2, 1905.

CONTRACTING for material continues on a very liberal scale, for which a good proof is furnished by the fact that the United States Steel Corporation had on its books on October 31 over 6,300,000 tons of orders.

In pig iron, contrary to expectations, a fresh buying movement develops on the heels of the earlier activity. It is understood that the Steel Corporation has taken advantage of the options which it had on November and December iron and has bought about 20,000 tons of pig iron besides. It characterizes the situation that it proved impossible for a large interest to secure from 20,000 to 25,000 tons of metal at Lake Erie furnaces for shipment to Chicago before the close of navigation. There was no spot iron to be had.

In the Pittsburgh district about 30,000 tons of Bessemer and basic pig have been purchased by outside interests, for delivery during the first quarter, a period which the Steel Corporation has not yet considered.

The buying and optioning on the part of the steel interests have created quite a flurry among the malleable iron foundries, who have been rushing into the market east and west. One concern in the Chicago district has bought 9,000 tons of malleable Bessemer and 12,000 tons of charcoal iron. Two melters in Milwaukee have bought 20,000 tons of foundry iron between them, and a string of good sales, aggregating from 20,000 to 25,000 tons, is reported by New York sellers. So far as the southern situation is concerned, it is clear that buyers are getting better accustomed to the

idea of paying $14 for No. 2 foundry at Birmingham, at which the principal sellers are holding.

There has been a further movement in basic pig in the eastern markets. A leading interest in New England has contracted for 40,000 tons for delivery over a long period on a sliding scale, another plant has bought 12,000 tons for delivery during the first half of 1906 at $17.50, delivered, and a steel works connected with a structural mill has added 11,000 tons in two lots to a purchase last week of a 10,000-ton lot. There has been good buying, too, of gray forge.

The rail trade has been rather quiet during the last week. Outside of a lot of 12,500 tons for a coal road there have been only additions to former contracts. Some business for Mexico is pending.

In the structural trade it is of interest to note that next week probably both the new mill at Chicago and the new Clairton mill will be producing. A good part of the tonnage has been sold, however. The most interesting contract of the week is that for 12,000 tons for the new Ohio bridge at Ironton.

In the lighter lines the most noteworthy fact is that the demand for tin plate has continued to develop. It is intimated that prices may be soon up and that this may be done, too, in the case of sheets.

The cast iron pipe trade continues in a very healthy condition. New York is coming out with a very nice order. It calls for about 30,000 tons in addition to the 7,800 tons which are to be let on the 8th.

A pretty large contract for castings has just been awarded to Davis & Thomas for the Steinway tunnel. The exact quantity has not yet been determined, but it will not be less than 15,000 tons and may go very much above that quantity.

LONDON METAL MARKETS.

From Metal Market Report, October 26, 1905.

Pig Iron — Cleveland warrants are quoted at 52s. 7 1-2d, and Glasgow standard warrants at 51s. 10d, making prices as compared with last week 10 1-2d lower for Cleveland warrants and 6d lower for standard warrants.

Tin—Spot tin opened easy at £149 10s., futures at £148 10s., and after sales of 50 tons of spot and 220 tons of futures closed easy at £149 for spot and £148 7s. 6d for futures, making price as compared with last week 5s. higher on spot and 10s. higher on futures.

Copper—Spot copper opened steady at £71 10s., futures £70 10s, and after sales of 150 tons of spot and 250 tons of futures closed steady at £71 10s. for spot and £70 10s. for futures, making price as compared with last week 17s. 6d lower on spot and 12s. 6d lower on futures.

Lead—The market closed at £13 18s. 9d, making price as compared with last week 16s 3d lower.

Spelter—The market closed at £28 5s., making price as compared with last week 10s. lower.

"Metallic" Corrugated Iron is easier to put on than any other make because the sheets are pressed one at a time, not rolled and never vary in shape or accuracy.

This means much to buyers in regions remote from expert roofers and dependent on their own skill.

"Metallic" Corrugated Iron costs no more than the common kind—made either galvanized or painted, straight or curved.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.

OF CANADA, Limited

(Established Twenty Years)

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We also manufacture:
"Eastlake" Metallic Shingles
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"Metallic" Crestings and Finials
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Material of every description.

409

MINES AND METALS.

NEGOTIATIONS have been concluded for the lease of the Lake Superior Corporation's new copper plant at Sault Ste. Marie, Ont., to the Canadian Nickle Co., a new concern organized for the purpose of refining copper and nickle by electricity. The preliminary arrangements for the installation of the new process have been made, and within a few months it is expected the first plant in the world by which nickle will be refined by electricity will be in operation at the Canadian Soo.

* * *

It has often been suspected that the iron for which Bell Island is now famous has an outcropping on both sides of Conception Bay and this theory has been practically demonstrated within the past two weeks. Accidentally the discovery of a big deposit of splendid iron ore was made by the men near Clarke's Beach. They secured samples and staked out a claim. The samples were submitted to experts on Bell Island and pronounced to be richer than the ore mined there. The affair has been kept secret, but it looks as if on the mainland of the bay there will be a big iron mining boom next Summer.

* * *

A mining prospector who has returned from Bancroft, North Hastings, is optimistic over his discovery of what he believes to be a fine grade of lithographic stone, a material which has hitherto been found only in Germany. The prospector brought a number of specimens, and within a few days they will be sawn, polished and tested by a local lithographic concern. The stone is somewhat darker in color than the German stone, but is of close texture and free from crystal. Should the stone prove to have a commercial value there are 500,000 tons in sight. Other valuable mineral deposits have also been found in the vicinity of Bancroft, including corundum, iron, dark mica, and white marble.

German iron founders are seriously troubled over the competition of blast furnaces which are making castings direct from the furnace. It appears that technically an increasing number of blast furnaces are making a success of direct casting and are invading the markets of their customers for pig iron. The founders are talking of boycotting the guilty iron makers, and are discussing also the plan of getting together to build their own blast furnaces and retaliating.

* * *

The Cariboo Hydraulic Company's mine at Bullion, B.C., has been sold for about $1,000,000 to a New York syndicate.

* * *

It is said that representatives of American and German combinations are endeavoring to secure control of the zinc deposits in British Columbia.

* * *

The C.P.R. has influenced the smelting of Le Roi ores at Trail and this will probably force the smelter at Northport, Wash., to close down.

* * *

According to a recent Government report the Canadian mica fields are amongst the richest in the world. The best deposits so far discovered are those of the Saguenay district, situated at the lower St. Lawrence River below Quebec. Besides these there are deposits to the north of Ottawa, in the vicinity of Mattawa, at several places in Ontario, and recently discovered in British Columbia. There have been instances in the Ottawa valley, in the township of Wakefield, where crystals measuring from four to six inches across the basal planes have been found in small dikes, but they occur so sparingly that profitable mining cannot be pursued.

* * *

Large gatherings of miners have been held in various parts of Ontario to consider proposed changes to the Ontario mining laws. A Provincial convention will be held in Toronto this month.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Nov. 3, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

A NUMBER of changes will be noted this week in the prices quoted below and in every instance the change has been an advance. Business is usually brisk on a rising market and the present state of trade in the west affords no exception to the general rule. Heavy goods are in particularly brisk demand at the present time and they are being brought to Winnipeg and to the warehouses at the lake ports in large quantities before the close of navigation.

Collections are reported to have improved greatly in all parts of the west during the last month and the wholesale trade confidently expect the big crop to enable the trade to start the new year with a clean sheet.

Game Traps—There is a brisk demand now for game traps and prices are quoted as follows:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—The retail trade is suffering severely from cut throat department store competition. Wholesale prices hold steady and are still quoted as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Prices are steady since the changes a few weeks ago. We quote:

Barbed wire, 100 lb		$3 00
Plain galvanized	6 to 8	3 39
"	9	2 50 2,90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		3 00
Staples		3 50
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Iron shoes have been advanced 10c. and steel shoes 15c. Prices are now quoted as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	4 90
No. 2 and larger	4 65

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Immense quantities of wire nails are being hurried in before the close of navgation. The price has been steady since the decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ¾ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9 00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.co
" " Copper King, per doz	11.co

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits—Discounts on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Brush hooks are in some request at present. Prices are quoted as follows:

Brush hooks, heavy, per doz	$8.75
Glass " per doz	1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Roval Canadian, per doz	$30.00
B. B , per doz	34.75

Files—The discount on "Arcade" files is now 75 per cent. We quote as follows:

" Arcade "	75 p.c.
" Bla k Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c
" tarred	65c
Cyclone, plain	55c
" tarred	80c
Anchor, plain	55c
" tarred	65c
Pure fibre, plain	60c
" " tarred	80c

Ammunition, Etc.—Advances of $1.50 will be noted in prices quoted below on Eley's and Kynoch's shells. Sorting orders are still coming in. We quote:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-10 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Iron and Steel—Bar iron has advanced 10c. per cwt.; sleigh shoe steel has made the same advance and spring steel has been marked up 25 cents. We now quote as follows:

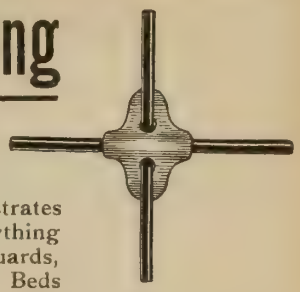
Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—As predicted in these

Railway and Farm Fencing



We are prepared to place Munro's Lock Wire Fence in the hands of Hardware Merchants.

No patent tools required to fasten lock. Cut illustrates another style of galvanized lock that is superior to anything on the market. Write us for prices on Window Guards, Counter Railing, Steel Ladders, all kinds of Spring Beds and Mattresses. Largest works in Canada West.

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING

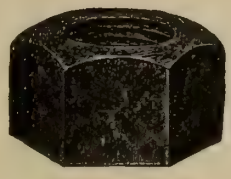
USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited
Manufacturers of
Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.
INGERSOLL, ONT.

Established 30 Years. Quality Tells.

We have seven factories producing daily 120,000 Files and Rasps, which are distributed throughout the four quarters of the Globe, and the excellent reputation which our Files maintain is the result of many years experience, and the expenditure of a large amount of money in designing the most elaborate machinery and tools for producing our INCREMENT CUT FILES, in all sizes and shapes, for all purposes.

We manufacture several Brands at our Dominion Works, all of which are warranted for their excellent cutting quality.

Sold by all prominent hardware and mill supply merchants.

NICHOLSON FILE COMPANY
Dominion Works, PORT HOPE, ONT.

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost must accompany all advertisements. In no case can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words	each insertion,	1 year	$30 00
"	"	6 months	17 00
"	"	3 months	10 00
50	"	1 year	17 00
"	"	6 months	10 00
25	"	1 year	10 00

FOR SALE.

ONE No 3 Warrington Steel Pile Driver, length, 8 feet; diameter of cylinder, 8 inches; normal stroke, 30 inches; weight of striking parts, 1,800 lbs.; total weight, 3 800 lbs; distance between jaws, 18 inches; width of jaws, 6¼ inches; fitted with patent end base; interchangeable; complete with all fittings and steam hose. This hammer has been used but two weeks by a private concern (to hustle work delayed by contractor) which has no further use for it. It is practically as good as new. Box 285, HARDWARE AND METAL, Toronto. [45]

VALUABLE Canadian patent for a very useful pocket tool; cost one cent to manufacture; retails for 10c.; half a million sold in the States. For particulars or interview address Perry, Box 397, Norwich, Conn. [45]

UNITED STATES manufacturers of burglar proof window lock and ventilator would like to sell Canadian patent to manufacturer of hardware specialties, or to establish an agency and sell to the hardware trade. The lock is automatic and has proved a good seller in the United States. Address all inquiries to Box 288, HARDWARE AND METAL, Toronto. [44]

HARDWARE, Stove and Tinware business. Stock about $3,000. Owner going west. Box 290, HARDWARE AND METAL, Toronto. [46]

AGENCIES WANTED.

MANUFACTURERS' AGENT desires correspondence with manufacturers of hardware specialties who want live intelligent representation in Western Canada. Address P.O. Box 702, Winnipeg, Man. [47]

TRAVELLER WANTED.

FOR German hardware and cutlery import house. Apply to F. W. Lamplough & Co., Montreal. [45]

SITUATION WANTED.

WANTED—By young man with 20 years' experience in hardware business, position as traveller or head salesman, between now and 1st January, 1906. Best of references. Address Box 291, HARDWARE AND METAL, Toronto. [45]

FOR SALE.

OLD ESTABLISHED HARDWARE BUSINESS in one of the best Manitoba towns; first-class wheat district; good stock and buildings; paying trade; suitable terms; a fine opportunity for anyone wishing to go into the business. For information apply to **The J. H. Ashdown Hardware Co., Limited**, Winnipeg, Man. [46]

columns for two weeks past, there has been a sharp advance in galvanized iron. Prices are now quoted as follows:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 15
22 and 24 gauge,	4 40
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 90
Queen's Head, 24 gauge	4 65
26 gauge	4 65
28 "	4 90

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—There has been a sharp advance and the price is now $8.50 for cask lots and $9.00 for broken lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum and Gasoline— Prices are still quoted as follows:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74-76	27c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine—A sensational advance of 8c. per gallon in turpentine is the feature of the market this week. We quote as follows:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote as last week.

16-oz. O.G., single, in 50 ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

Nova Scotia Trade News

Halifax, N.S., Nov. 1.

METAL markets are very unsteady at present. Prices continue to advance. Since last report another advance has been made in the price of bar iron, which is now quoted at $2.25 base from store. This makes the third advance by the mills in the last fortnight, the total increase being fifteen cents. The price of all metals is very firm. Though the price of black sheet iron has not changed within the past week, dealers expect that it will go up before very long. They are also looking for an increase in the price of tin. All metals are finding ready sale at the prices quoted. Dealers in tinware and stoves are using large quantities of metal this season, particularly sheet iron.

Dealers have have no complaint to make regarding trade. A good general business is being done right through. Substantial orders are coming in from the jobbers who are buying Fall goods. The lumbermen continue to place good orders, and the mining trade promises well, some good sales being made in several sections of the Province. Dealers here do not think the absorption of the Maritime Nail Works at St. John, N. B., by the Capewell Horse Shoe Nail Co., of Hartford, Conn., will change the aspect of the trade very much in the Maritime Provinces. It has been stated that the American company will make an effort to capture the trade of the Lower Provinces, but in what way they intend to do it remains to be seen. At the present time the Maritime Company does very little business in these Provinces. Prices now are about as low as ever they will be, wire nails being quoted at 30 cents less than cost, which fact is something out of the ordinary in the nail trade. Dealers report collections satisfactory.

Arrangements have practically been completed for the installation of a demonstrating plant in connection with the Sydney Cement Works, the object of which is to show the treatment of slag according to the Passo process. Dr. A. Golz and R. M. Bertram are in Sydney in connection with the experiment. Dr. Golz is a cement expert from Haiger, Germany, and Mr. Bertram is the managing director of the Canadian Passo Cement Co., of Toronto. At present the slag is granulated by means of water treatment, but the Passo method is by an air blast, which it is claimed produces better results. It is stated that after three years' experimenting, the German Government has adopted the slag cement made by the Passo process,

and has classed the product with Portland cement. Dr. Golz, who is to conduct the proposed demonstration, was a collaborator of Dr. Passan, the inventor of what is called in this country the Passo process of granulating slag.

—

British Columbia Trade News

Vancouver, Oct. 27, 1905.

QUESTIONS of transportation and freight rates, affecting very materially the future of the coast cities, and especially of Vancouver as a centre of jobbing trade, occupy the centre of the stage in the public attention at the present moment. The delegation sent east to confer with the Canadian Manufacturers' Association has not yet returned, but the result of the discussion with the council of the association has been telegraphed, and it is that the manufacturers' association sticks to its original recommendation respecting mixed car lots, and the restoration of "old rule No. 2" by the C.P.R.

The other matter of importance, and on which the whole business community is getting worked up, is the reduction in freight rates from the east to Edmonton, by which the coast wholesale merchants are shut out of the territory in which they have sought so long to gain a field of legitimate trade. The matter is being fully discussed, and strong representations have been made personally and by letter. The Board of Trade of Vancouver takes the ground that the interests of the C.P.R. lie not in handicapping the wholesale trade of Vancouver, but in fostering it. Further, that from its geographical position this city is right in claiming recognition as a terminal wholesale point. The co-operation of the Boards of Trade of Victoria and New Westminster is sought in pressing the matter.

* * *

Lumber prices were raised $1 per thousand all round, beginning with this week. This was a result of the visit to the coast of a number of the mill men from the interior of the Province, members of the Mountain Lumbermen's Association. The mountain mills are necessarily limited in their local trade, and have no chance to ship foreign, so that they are confined to the Manitoba and Northwest trade. Some time ago the coast mills cut the price of rough lumber into the middle west down to $1(per thousand and, of course, other reductions followed. Many of the mountain mills closed down, as they could not stand the competition and price-cutting. Now that an arrangement has been reached, these mills will be able to resume.

* * *

The new lumber tariff classification to be put in effect as a result of orders issued by the Railway Commission, and which was arrived at by compromise between the railway company and the lumbermen, is to go into effect on Nov. 1st. The mutual agreement was reached through the meeting which the Railway Commission suggested as an alternative to having them make an order. The new tariff, which is already published, gives a reduction on rough cedar from 50c. to 40c. per hundred lbs. to Manitoba points. The fir rate to Fort William is also to be 40c. in future, instead of 50c., as in the past. Mixed cars of fir, cedar and shingles are to be allowed at respective car rates, the minimum to be on fir basis.

* * *

The city of Vancouver faces the necessity of immediate sewer construction to an amount totalling $300,000, for which funds will have to be provided. In addition, the proposed improvement of the water system by extending the mains and installing a high-level service, will cost half a million. On this City Engineer Clements (late of Toronto city engineer's staff) is now preparing his report. Both works are needed, and will very likely be submitted to the vote of the ratepayers at the civic elections in January.

* * *

Bright dry weather has been favoring the work of re-paving the asphalt streets of the city, the contract for which is now being carried out. If the rainy season holds off for a few weeks longer the work will be finished and the streets put in excellent condition. It is some years since the first asphalt was laid, and it was not a success. The present work has been undertaken to get rid of the constant repair of the old surface, and an entirely new coat of asphalt has been laid.

* * *

The Blue Funnel steamer Jason, with over 1,000 tons of freight from Liverpool for this port and Victoria, reached the coast on the 23rd. Her cargo for here was mainly steel, iron, and similar manufactures. The Tydeus, the next steamer of the same line to arrive, has as much cargo for B. C. ports as the Jason. A little later on the Bellerophon, a monster new Blue Funnel steamer, is due to arrive from the Old Country. Large as some of the Holt steamers are, this new vessel is very much larger. She is one of four monster cargo steamers being added to the Holt line.

* * *

The sale of the great Cariboo Consolidated Mining Co.'s properties to a New York syndicate, headed by the Guggenheim's, is reported this week by Mr. J. B. Hobson, the general manager and engineer, by whose efforts, chiefly, such a large sum of money has been expended in developing the property. An enormous amount of work has been done, and a considerable quantity of gold recovered, but it cannot be said that the property has ever paid. As a matter of fact, the demonstration of the values in the rich alluvial deposits by the work already done brought the management up to the position that more money had to be spent to get a large enough permanent supply of water. This has been made possible by the sale, which is reported to be for a million dollars. A seventeen-mile canal will tap Cariboo Lake and bring abundance of water for hydraulic operations.

* * *

Latest reports from Atlin, at the hands of well posted men who have been in all summer, express great satisfaction with the results on McKee Creek, Spruce Creek and others in the Atlin camp. Machinery has been used more extensively and in some cases good results with a steam shovel have been achieved.

* * *

An interesting visitor to the coast this week was Major Joly de Lotbiniere, son of Lieut.-Governor Sir Henri Joly de Lotbiniere. Major Joly is one of the foremost English engineers and is intrusted by the Government of India with the perfecting of plans for a colossal irrigation and power scheme which is intended to convey water for irrigating a large section of arable lands in Kashmir, and to generate over 100,000 horsepower for manufacturing purposes.

While here Major Joly inspected the plant of the Vancouver Power Co., and he has also seen the other coast water powers from here to California. He has been engaged in seeing the machinery of various kinds adapted to the work he has undertaken and when he reaches England, whence he is proceeding now by way of Eastern Canada and the States, he will make his final reports. The machinery is to be purchased for very large electrical development and also for the water power plant entirely on the recommendation of Major Joly, who is making the present tour largely for the purpose of inspection.

* * *

Messrs. Maclure, of Matsqui, on the Fraser River, who have been developing a deposit of clay for making pressed brick, tile, etc., have been joined in the enterprise by Messrs. W. H. Armstrong and A. Morrison, two well-known local contractors who have had considerable experience in handling building material. The head office and stock warehouses will be in Vancouver, though the plant is situated at Matsqui, near Mission Junction, 40 miles up the Fraser River.

The clay is of such fine quality that anything which can be made of fire clay can be made from this deposit. Vitrified tile and brick, paving brick, pottery, sewer tile, as well as pressed brick will be manufactured. Heretofore the fire brick used in the Province, mainly at the coking ovens of various mines, has come from the Old Country by steamer and sailing ship. The pressed brick has come from the United States.

* * *

Another growing industry is that of the Vancouver Portland Cement Co., near Victoria. This plant has been running less than a year but such is the demand for the product that plans are now being gotten out by Mr. R. P. Butchart, the managing director, for an addition which will double the initial capacity. The cement is used in this city and is shipped up-country in large quantities. Mr. Butchart has about completed arrangements for establishing a similar plant at Kananaskis, west of Calgary, where deposits of suitable material have been located.

The completed plant will have the daily capacity of 1,200 barrels, by far the largest plant of the kind on the coast. The proposed plant near Calgary, in which a number of prominent Calgary people are interested, will cost $300,000. It will be known as the Alberta Portland Cement Co. Mr. R. P. Butchart, managing director, and the moving spirit in both projects, is well known in Eastern Canada, where he for a long time managed the Shallow Lake plant, which he still controls.

PAINT, OIL AND BRUSH TRADES

SHERWIN-WILLIAMS CO.'S ANNUAL CONVENTION

FOR the twenty-fifth time the salesmen and managers of the Sherwin-Williams Paint Co. were the guests of the firm this week for their annual convention. It has been customary to hold this convention at the company's head office, Cleveland, Ohio, but this year a departure was made and the splendid new plant at Montreal was the scene of the gathering.

On Sunday a special train brought the western representatives to Montreal and they were immediately taken to the Windsor Hotel, where a monster electric sign outlined the words: "25th Annual Convention, Sherwin-Williams Paint Co., largest paint and varnish makers in the World."

The convention was held in the spacious storage room of the works on Centre street and the boys were on hand good and early, having been taken out on a special car. And a jolly crowd they were. The time preceding the formal opening of the convention was enlivened by singing some clever parodies on such well known songs as "The Shade of the Old Apple Tree," and "The Good Old Summer Time," interspersed with yells from the various divisions. The most successful effort in this direction came from the far western representatives who created much merriment by suddenly shouting out:

"Pacific Division 'way out West,
The tail of the fish is always the best."

On the appearance of Mr. Sherwin, president of the company, Mr. Walter H. Cottingham, vice-president and general manager, and Mr. C. C. Ballantyne, manager of the Canadian Division, the boys rose to their feet and gave the gentlemen named a reception which amply attested their popularity.

Mr. W. H. Cottingham, general manager, took the chair, and called the meeting to order after which Mr. Davis, secretary of the committee was asked to call the roll. It was found that the representatives present altogether included about two hundred persons.

Mr. Cottingham then arose to give the opening address, referring to the convention as another milestone on the march because, being held in Montreal, it recalled his own early business career and man always looks back with greatest pleasure to his first hard struggles and the manner in which he overcame them. The present convention was noteworthy, first, because it was the twenty-fifth convention of the company; and second, because it marked the tenth anniversary of the beginning to manufacture Sherwin-Williams paints in Canada. Mr. Cottingham then proceeded to review the history of the firm's Canadian business from the establishment of the Walter H. Cottingham Co., in a very small way, eighteen years ago, to the amalgamation of that concern with the Sherwin-Williams Paint Co., and finally to the present splendid Canadian business, which is supplied by the Montreal plant—one of the most complete in the possession of the company. Mr. Cottingham exhibited to the convention the first "Day Book" of the Walter H. Cottingham Co. (an ordinary pass book) and created much amusement in explaining how he avoided the necessity of a ledger by simply blue-pencilling the accounts when paid. Much of the credit for this marvellous development was due to good advertising and the loyalty of the company's salesmen. The general manager closed his remarks with a few words of welcome to the "new men," of whom there were several present, and then called upon the president, Mr. Sherwin.

Mr. Sherwin, who was most enthusiastically received, began by paying a tribute to the Canadian representatives who had built up a business which required such a large and complete plant to produce the goods demanded. In fact, he was sure the Canadian people were proud of this plant. He was pleased to make the acquaintance of so many new representatives and he was forcibly reminded of the great change which had come about in salesmanship during the years he had been in business. Formerly the best talker and the one who could tell the newest and funniest stories (not always of a Sunday school variety, either) was the best salesman. But salesmanship has got down to a science and no man can now sell goods unless he knows them thoroughly. The object of the convention was to instruct "the boys" in this way and to give them a feeling of strength and assurance, which would be irresistible throughout the year to come.

(*Continued on page 52.*)

YOU CAN

depend upon every tin of Elastilite Varnish you sell doing its share in meriting the confidence of the buying public. That yours is a store to be depended upon for goods of first quality.

For outside or inside use.

Famous for finish.

Manufactured only by

The Imperial Varnish & Color Co.
Limited

TORONTO, ONTARIO, CANADA.

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey
and
VANCOUVER, B.C., care Durand Merchandise Company



TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors
Prepared Paints, Window
Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

Pleasemention HARDWARE AND METAL when writing.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS

CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.

If you could see the wearing qualities of

"Anchor and English Liquid Paints"

you would realize their superiority over all others.

The only liquid paints in which **BRANDRAM'S B.B. Genuine White Lead is used.**

BRANDRAM BROS & CO
BRANDRAM'S B.B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

If you have not sold them in the past

DECIDE NOW

to do so in the coming year.

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 3, 1905.

THERE is but little in the business of the past week to distinguish it from others and trade on the whole has been satisfactory.

Indications are that the upward movement of turpentine will be renewed before the end of the week, as a decided shortage in the southern crop was reported, thus making it difficult for local merchants to supply stocks at the price given.

Linseed oil is commanding rather unusual attention just now and the market is firming up. The English market is very strong and is advancing right along, so that if prices have not been advanced in Canada they will at all events be held much more firmly.

Absolutely no changes in prices have occurred during the week, steadiness being the feature of the trade.

Turpentine—Present indications point to another advance in prices which will possibly occur before the end of the week. In the meantime we quote: Single barrel, 98c. per gallon. Two barrels or over, 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—The great activity in English markets is having an effect upon prices in Canada. They are much firmer in consequence. Our prices are: Raw, one to four barrels, 45c. five to nine barrels, 44c.; boiled, one to four barrels, 48c.; five to nine barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—We quote: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—In spite of the advance in the primary markets this line is being held steady by Canadian manufacturers and jobbers. The explanation is that being stocked up until next spring the majority of them are not following the market, but are basing quotations on their own cost price. We quote the following prices: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc—(Ground in oil) — We give the following prices: 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—We give the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Prices are unchanged being still as follows: Genuine red lead in casks $4.50; in 100-lb. kegs $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac — This is unchanged. Prices generally quoted being: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—Our quotations are as follows: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—We are still quoting from $1.20 to $1.40 per gallon.

Castor Oil—Foreign producers have again advanced prices to importers, but we are authorized to quote from 7 1-2c. to 8 1-2c., according to lot.

Refined Petroleum—The condition of the market remains the same as at our last report and the rush of business continues. Prices have not been amended so far on the Canadian market and we still quote: American water white, 16 1-2c to 17c.; Canadian prime white, 14 1-2c.; 18 1-2c. ex warehouse.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, November 3, 1905.

CANADIAN crushers of linseed oil have advanced their prices to jobbers and as the market in England is gaining strength it is certain that an early advance will be made in our listed figures. Turpentine continues very strong and some are predicting another advance owing to firmer conditions in the south. There is very little turpentine on the local market so that the market is subject to change.

Paint business continues very satisfactory for this season, a great deal of white lead being on the move.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs.

CHAIR VARNISHES

These are made particularly for the use of manufacturers of Rattan Furniture and Chairs of all kinds. If your stock of varnishes is running down specify

CHAIR VARNISHES

in your next order. It will be a profitable investment. Put up in all quantities. Write for prices.

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.



COVERT MFG. CO.,
TROY, N.Y.
DERBY SNAP
With Plated Rust Proof and Guarded Springs
"The Latest and Best."
For Sale by all Jobbers at Manufacturers' Price

Subscribe to the
OIL AND COLOURMAN'S JOURNAL
for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**
Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.
SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

GENUINE
PRATTS ASTRAL LAMP OIL
Sold in all countries and recognized as the highest grade oil manufactured.
WHOLESALE ONLY.
THE QUEEN CITY OIL COMPANY, Limited
TORONTO, ONT.

McCaskill, Dougall & Co.
Manufacturers
RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

GLUES AGAIN Our **IMITATION FRENCH MEDAL GLUES** are of such high class and are so suitable for Export that we would like to quote you. Export trade in this line is growing rapidly, and we pack in casks or cases as preferred. Quality unrivalled.
GROVE CHEMICAL CO., LTD., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want
—THE PRICE IS RIGHT.—
Our Distributing Centres keep down your freight charges and give a speedy delivery
The Consolidated Plate Glass Co., of Canada, Limited
TORONTO MONTREAL LONDON
OTTAWA WINNIPEG

BREAK! BREAK! BREAK!

We want to break the news to you that ***your order*** for

"Island City" Brand

Paints and Varnishes has not come yet and time is slipping by and ***trade*** slipping into ***other hands.*** We can supply the class of Paints or Varnishes that you have set your mind on and give you the quotation you are just looking for. Even if you don't send the order our prices are worth writing for, anyway.

P. D. DODS & CO. **Toronto, Montreal, Vancouver, Winnipeg**

SPECIAL
TO THE
TRADE

We do not offer any Paints other than what we manufacture ourselves. The great development of the Carriage Building Industry in the Dominion has stimulated a demand for the finest description of ground colors. That is to say, colors ground in Oil, ground in Japan and ground in Varnish. This business is a specialty of ours, and the bulk of the consumption in the Dominion is the product of our Factories. The making of Fine Coach and Car Colors in every form is a distinct branch with us, employing expert makers and finishers and testing with our own painting staff.

The appliances are modern and an abundant completed stock is carried at our factories and warehouses in Montreal and Toronto.

THE
CANADA PAINT
COMPANY
Limited

$8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c.; boiled, 50c.; 5 to 9 barrels, raw, 46c.; boiled, 49c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Shipments to the north and west are very large and will continue until the close of navigation. Water white, American water white, 16 1-2c. to 16c.; Canadian prime white, 14 1-2c; 18 1-2c. ex warehouse.

Crude Petroleum—An advance of 2c. has been made on crude petroleum, the rise holding good on all lines. We quote: Pennsylvania, $1.61; Ohio, 94c.; Canadian, $1.34.

MONTREAL WINDOW GLASS.

The Montreal jobbers are considering the advisability of again advancing prices as it is agreed that there will be practically no further arrivals during the present season. For some weeks they have been hoping that sufficient quantities would come in after all, but this has now been abandoned and the feeling is very much more pessimistic. While awaiting increase in prices jobbers meanwhile are holding the old prices firm. We are quoting: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20, eleventh do., $24, and twelfth do., $28.50.

SHERWIN-WILLIAMS CONVENTION

(*Continued from pape 48*)

Mr. Ballantyne, the Canadian manager, was then called upon and after returning thanks for the applause which his name called forth, he extended a welcome to the representatives on behalf of the Canadian Division. He was glad they appreciated the growth of this branch of the business and, though it was hard work at first, success was finally attained through judicious advertising and an excellent traveling staff. He paid a glowing tribute to Mr. Cottingham and in closing called upon Mr. "Bob" Johnston, one of the "Old Guard," to read an illuminated address to Mr. Cottingham. The general manager, in reply, expressed his appreciation of this splendid token of regard and said that he would rather possess the good-will of the Sherwin-Williams staff than any other honor in the world.

The results of the "top-notch" competition were then announced, showing that the Southwest Division had again captured the beautiful bronze trophy, while the district manager, Mr. Myers, received the top-notch fob and a cheque for five hundred dollars. The Canadian Division came second, the "top-notch" salesman of this division being Mr. "Joe" Auger, Montreal.

After the various "top-notch" presentations had been made an extension of this system of premiums was announced to take effect during the coming year, amid vociferous applause.

A ten-minute intermission was followed by a tour of the works in a number of squads, each under the leadership of a manager or superintendent. On all sides the greatest admiration was expressed for the completeness and cleanliness of the works.

This brought the opening ceremonies to an end and the convention was for the remainder of the week given over to business discussion, Friday afternoon being devoted to papers on promoting, advertising and salesmanship.

On Friday evening occurred the annual banquet of the company at the Windsor Hotel. After ample justice had been done to the menu, some excellent speeches were made by the officers of the company and Mayor Laporte, Hon. R. Prefontaine and F. D. Monk, M.P. The 25th annual convention was then over, and the race for next year's "top-notch" prizes had begun.

BILLING'S TOWELS.

Can any reader of Hardware and Metal advise us where Billing's Trowels can be procured. We have an inquiry for this line and it is not known on the local market.

ELECTRIC TRACTION FOR RAILROAD SERVICE.

AT a recent meeting of the Canadian Railway Club held in the Windsor Hotel, Montreal, Mr. J. A. Shaw, the assistant electric engineer of the Canadian Pacific Railway Company, gave a valuable paper on the above subject.

Mr. Evans, of the Canada Paint Company, made a few remarks which will particularly be of interest and be appreciated by travelers who use the Sarnia tunnel.

As an observer traveling over the country for the last 25 or 30 years, on railroads operated by steam, electricity and otherwise, Mr. Evans expressed the opinion that the power required to move the heavy freight trains, such as one may see upon the Grand Trunk, Canadian Pacific or Intercolonial, would be so great and require such an immense voltage that the operation would be very expensive.

He had traveled on electric roads in Switzerland and was not sure what system they use, but they seemed to have supplementary stations or auxiliary feeders wherever there was a waterfall. The cars were clean, the trains were frequent and they seemed to be extremely popular. The greatest change, however, was in Liverpool and Birkenhead in the Mersey River tunnel. For years they had difficulty with gases (sulphuretted hydrogen) from the engines collecting in the tunnel, until the people hesitated about going through the tunnel. On one occasion when Mr. Evans was a passenger, a train was held in the tunnel for some time waiting a chance to get into the station, and the people got extremely nervous on account of the bad air and the "creepy" feeling which comes over one when you know there is only an "envelope" between you and a deep river. The road soon became unpopular and was going into bankruptcy, when they got some strong company to take their bonds and convert it to electricity.

"If this electrical system were put into operation in the Sarnia tunnel it would lead to a great deal of confidence with the traveling public," said Mr. Evans. "People become very nervous when they know they are going to enter the tunnel, far more so than in the olden days when they crossed the ferry at Point Edward and Fort Gratiot, and for this reason I hazard the opinion that the money would be well spent if an electric locomotive were employed to draw the trains through the Sarnia and Port Huron tunnel. The London underground railways have become extremely popular since electric traction was adopted.

"We can not take the Montreal street railway as a criterion of what a well ballasted long distance railway would be. The Montreal street railway had to lay their tracks at first on the old car lines, and take a street as they could find it, perhaps with a porous 'spongy' foundation, but when they have completed laying their new rails, as they are now doing, building from 'hard pan' upwards, they should run very smoothly. The objectionable 'jerking' when starting could easily be overcome by regulating the lever so that power could go on gradually; any clever mechanic could devise a contrivance to overcome this fault.

"Regarding the question of snow removal, it is only a question of power, and if you can drive a snow plough with steam, you can drive it with electricity, and where you can take a locomotive you can take an electric plough. Perhaps you would have to run over the road more frequently, but that could be easily got over. The whole essence of the paper, however, is, 'which would be cheaper and most efficacious?'

"The prediction of Mr. Westinghouse that at no very distant time the electric locomotive will supersede the steam locomotive may prove true, but I am sure we will all part with the old war horse steam engine with a great deal of regret, because undoubtedly it has been a valuable and efficient servant, whose services we cannot well afford to dispense with in a hurry." (Applause.)

RETURNED
NOV 23 1905
To Montreal
Cat. Book 143
Page 81

Horse Sense

You're in business to make money. You have to buy right to sell right. Can't afford to pay too much for your goods—there's no glory in a turnover without profit. On the other hand, it doesn't pay to buy goods you can't depend on.



"M" Horse Nails

are the right goods at the right price. They'll yield you a good margin and they'll give perfect satisfaction to your customers. The best of material—points clean cut—nail well tapered—careful culling—means every nail a good one.

THE MONTREAL ROLLING MILLS, CO.

H. & R. SINGLE GUN

Automatic and Non-Ejecting



Simplest "Take Down" Gun Made

12 and 16 Gauge, Steel and Twist Barrels
20 Gauge, Steel Barrel

Superior in Design, Workmanship and Finish
and the most popular Gun on the Market.

HARRINGTON & RICHARDSON ARMS CO.
Worcester, Mass., U.S.A.

Catalog on request

Also makers of H. & R. Revolvers

Have We Your Order?



If your order hasn't been posted yet for an

Economy Hot Water Boiler

send it in to-day.

We will ship the goods to you the same day as order is received.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE American Window Glass Machine Co. expect to employ 400 hands in their new factory at Cayuga.

The Standard Wire Fence Co. are to erect a new factory in Woodstock, Ont.

The Northwest Machinery & Iron Co., Winnipeg, have assigned to John W. Lord.

The big plant of the Canada Car Co., at Montreal, has commenced operations.

The Winnipeg Rubber Co. have decided to erect a large warehouse in Calgary.

Welsh coal exporters are hoping to establish a trade with Canada in anthracite coal.

The Canadian Rand Drill Co. are contemplating a large addition to their plant at Sherbrooke, Que.

Work has been commenced on the new thread factory being erected in Stratford by Dr. Beattie Nesbitt.

Maritime Engineering Co., Moncton, have been installing machinery in the new saw mill erected by the A. L. Wright Co., at Salisbury, N.B.

The Mutual Binder Twine factory at Brandon, Man., has been sold for $15,700. The plant originally cost $65,000, and the new owners will continue to use it in making binder twine.

A company has been formed to establish a large power generating plant on the Thames River about eight miles from London, Ont. J. M. McEvoy is one of the promoters of the company.

Port Arthur has voted to expend $112,000 to improve its water system, $110,000 for a sewerage system, $10,000 for a new fire hall, and $18,000 to extend the municipal telephone system.

The Dominion Iron & Steel Co. are considering improvements for enlarging the output of the open hearth steel department—that is, the supplementing of modern machinery to improve the tonnage.

The operation of the street railway, electric light and gas franchises at Cornwall has been taken over by the Sun Life. A new office is being built for them in Cornwall by J. B. Atchison & Co.

The Rideau Mfg. Co., Ottawa, are erecting a large factory, in which they will employ four hundred to five hundred hands in making ladies' clothing. The company have a branch office in Winnipeg.

It is proposed to establish a veneer mill at St. John. N.B., for handling the woods grown on the property of the Chemalpa Land Co. of Mexico. G. W. Fowler, M.P., is the president of the company.

A company has been organized at Fort William, to be known as the Northern Engineering Construction, Heating & Supply Co., capitalized at $100,000, and a large foundry will be constructed. W. J. Ross and John Crearer are interested in the company.

A 7,000-ton steamer is now being constructed in England for the ore-carrying trade of the Dominion Iron & Steel Co. She is being built by Wilhelm Wilhelmson, of Tonsberg, Norway, and is expected to arrive in Sydney at the opening of navigation, next Spring.

Work on the building of the extension of the Niagara, St. Catharines & Toronto Railway from Falls View to Montrose has been commenced. This extension will form the connecting link between the N., S. & T. system and the projected Toronto & Hamilton Railway.

The Banwell, Hoxie Wire Fence Co. is forming a Canadian company for the purpose of manufacturing wire fences. It is an offshoot of the McGregor, Banwell Wire Fence Co., of Adrian, Mich. The capital stock will be $100,000, $75,000 being paid up. The company has secured a site in Hamilton, and will erect a factory at once.

An express train, with Governor McKinnon, Premier Peters, and many other inland notables, passed over the million dollar Hillsborough bridge and 44 miles of new Government railway to Murray Harbor, on Oct. 27. The bridge stood the strain of the heaviest engine and train with little or no deflection. The formal opening of the bridge and railway is expected about Nov. 1.

The Dominion Coal Co. has been considering some improvements at the works. A $100,000 contract has been awarded to the Canadian Westinghouse Co. for installation of electrical apparatus for the collieries at Glace Bay, N.S. The contract calls for three generators of 500 k.w. each, twelve motors, and 89 transformers. The motors will be used for driving pumps and other machinery about the mines.

A new company, called the Canadian Cordage Company, to have headquarters in Toronto and to operate factories at Chatham, where binder twine will be made of flax, is being organized. The capital is to be $250,000 and well known men are named as financing it, including Wm. Mackenzie, G. H. Campbell and J. P. Murphy, Toronto; R. P. Roblin, Winnipeg; A. F. MacLaren, Stratford; H. Mountain and L. H. Marshall, New York. If Chatham offers sufficient inducements a $60,000 factory will be built there and the flax twine will be sold at about 8 cents per pound.

The Pratt & Whitney Co., of Hartford, Conn., have purchased a plant in Dundas, Ont., for the manufacture of its full line of small tools, taps, reamers, milling cutters, punches, dyes, etc. The building is a modern structure and the power plant is already in place. The machinery equipment is being gotten ready and will be sent there and operations begun immediately. This plant will also include a department for manufacturing a full line of twist drills and elaborate equipments of special machinery having been purchased for this purpose. The output of this new factory will be handled by the Canadian Fairbanks Co., Limited, who will have the exclusive sales agency for Canada.

Companies Incorporated.

Dunlop Tire Co. have changed the corporate name of their company to the Dunlop Tire & Rubber Goods Co., Limited.

Economy Powder Co., Ottawa, share capital $10,000; purpose, to manufacture explosives. The directors are Frank Joy Boyer, John Tyson Embree, Arthur Heim, all of Reading, Pa., and Philip Leslie Neame, of Ottawa.

W. C. Wilcox, Limited, Winnipeg, share capital $200,000; purpose , to manufacture all kinds of tools and machinery. The incorporators are Wm. H. Meneray, W. C. Wilcox, Henry Veasey, Thomas Sharpe and Geo. A. Metcalfe.

Liskeard Brick, Coal & Lumber Co., Toronto, share capital $40,000; purpose, to manufacture, buy, sell and deal in brick-earth, bricks, tile, lumber. The directors are Milton Robbins Jennings, James Hossack Woods, and Henry Jasper Martin, all of Toronto.

Alexandra Oil & Development Co., Toronto, share capital $100,000; purpose, to carry on mining, milling, reduction and development work. The directors are Arthur Radcliffe Boswell, Herbert Wedderlie Edgar, and Alice Maude McGlasham, all of Toronto.

Alberta Portland Cement Co., Toronto, share capital $1,000,000; purpose, to manufacture portland cement, lime, clay, plaster, etc. Incorporators are Elias Talbot Malone, J. Worth Mitchell, Anthony L'Estrange, Albert Mearns, and John Alexander Fraser, all of Toronto.

Chester Silver Mining Co., New Liskeard, share capital $25,000; purpose, to carry on mining, milling, reduction and development work. The directors are Samuel Soloman, Charles Elgin Binkley, James Albert Pritchard, and Albert Victor Summers, all of New Liskeard.

White Silver Co., Toronto, share capital $100,000; purpose, to carry on mining, milling, and reduction and development work. The directors are William Fullerton White, New York; Edward Carlton Hargrave, Bay City, Mich.; William Halloway Wallbridge and John Shilton, Toronto.

Dominion Engineering & Construction Co., share capital $100,000; purpose, to carry on the business of electrical, mechanical and civil engineers and contractors. Incorporators are Victor Evelyn Mitchell, Edouard Fabre Surveyor, Charles Mackay Cotton, Joseph William Weldon, Stephen John LeHuray, all of Quebec.

Colonial Cordage Co., Toronto, share capital $50,000; purpose, to manufacture rope, cordage, twines, and all other products of hemp, jute, etc. Incorporators are William Bernard Converse, Stephen L. LeHuray, Joseph William Weldon, and Claude O. Pangman, all of Montreal.

Baynes Carriage Co., Hamilton, share capital $250,000; purpose, to carry on the business of wholesale carriage and vehicle manufacturers and dealers. The directors are Charles Tooker Grantham, Henry Norman Kittson, Peter Duncan Crerar, William Southam, Frederick William Gates, Paul Augusta Kompass, and James Bibby Baynes, all of Hamilton.

Pedlar Talks

"KEEPING EVERLASTINGLY AT IT BRINGS SUCCESS"

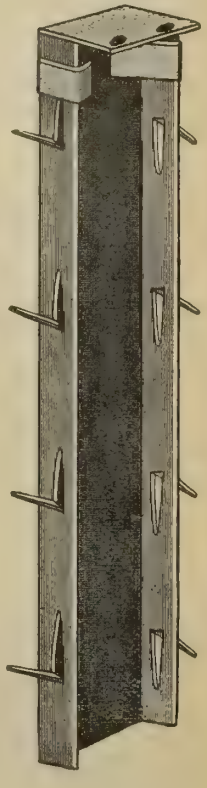
No 28. OSHAWA, ONT. Nov. 4, 1905

Pedlar's Sheet Steel Furring Strip



A Message

Pedlar's Steel Studs
For Hollow Fireproof Partitions.



Are you equipped with Pedlar Goods? Are you yet convinced that **Perfect Metal Lath** is a meritorious lath and in greater demand every day? Are you doing anything about Pedlar's latest manufactures, **Fire Proof Partition Stud, Sheet Steel Furring Strip?** Builders are fast realizing the necessity for the Pedlar Products. Lumber is at a premium, fire insurance is by no means low, and life and treasure **must be safeguarded.**

To Dealers

You can secure a share of the new trade if you prepare for it. Write immediately for full particulars concerning Pedlar's **Fire Proof Partition Stud, Sheet Steel Furring Strip** and **Perfect Metal Lath.** Also see to your stock of **Steel Ceiling** and **Wall Covering, Metal Shingles, Tile, Siding, Cornices, Store Fronts, Ornamental Zinc** and **Copper Work, Eavetrough, Conductor Pipe** and all accessories. **Do it Now.**

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CAPE TOWN, S.A.—141 Longmarket St.

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TARRED FELT

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"Dominion Brand" Roofing Materials

Are made only by us

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OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



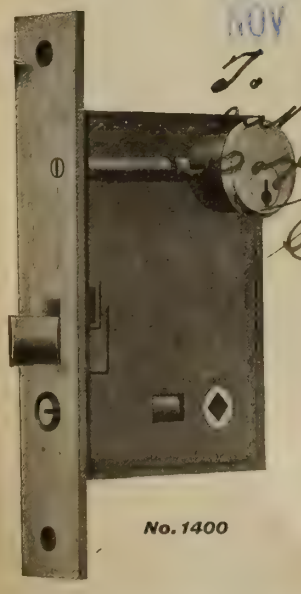
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Will stand comparison either as to price or material. One of the features of these Locks is the Anti Friction Latch, which gives the greatest ease of operation, reducing wear by eliminating friction. Wouldn't you like to know more about **Gurney Cylinder Locks?**

Catalogue No. 7 and Supplements can be had, free, by sending a post card.

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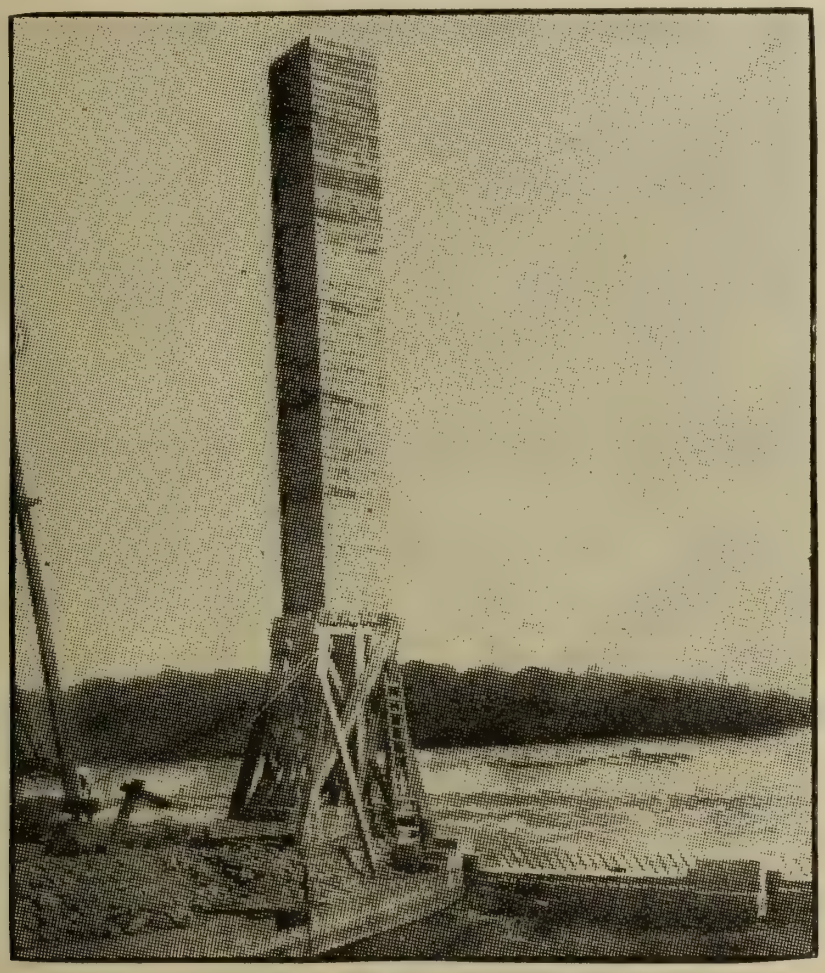
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ENGINEERING FEAT AT NIAGARA.

A CHICAGO engineer has performed one of the strangest engineering feats yet witnessed at Niagara. The Canadian city of Niagara Falls operates its own water plant, and it has had difficulty in getting enough water at its intake to supply the pumps. This intake is in Victoria Park, where the big power development is under way, and the work on all sides has been very extensive. The park commissioners consulted Isham Randolph, consulting engineer of the Chicago Drainage Canal, and he proposed a remarkable plan, a plan that has excited great interest at Niagara. He suggested that the park commissioners erect a concrete column on the shore of the river at the intake, and when completed tip it over into the river so as to form a dam.



A concrete dam, built like a column, to be pushed over into Niagara River.

The concrete column has been erected. It is 50 feet high, and stands on a trestle that is twenty feet high above the ground level. The column is 7 1-3 feet on each side. Right through the centre runs a heavy chain, the purpose of which is to hold the six big blocks of concrete together when the column is broken, as it falls, by wooden wedges placed in one side about six feet apart. These wedges are twelve inches thick on the outside, and taper to six inches toward the centre of the column. The chain weighs 300 pounds, and it will be strong enough to hold the blocks together against the current as the water is sucked over the Horseshoe Falls. The site for the work is only about 600 feet back from the brink of the precipice.

This concrete column was built in a wooden frame, with scaffolding around it at various stages as its height grew. Its approximate weight is about 200 tons, but it is planned to tip it easily by means of jacks that will work under timbers at the base of the trestle. When it falls it will tumble a little up stream, and in order that ice may be floated off from the intake in Winter an opening will be left between the dam and the edge of the river. This giant column is now standing near the edge of the Horseshoe Falls drying out. It will be about a month before it is dropped into the river to serve the purpose of a dam.

TO AMEND BUILDING BY-LAWS.

The Montreal City Council will shortly be asked, by Ald. Chausse, to reconsider the building by-laws now in force there.

A great many concrete structures are now going up, and as the by-laws do not cover this class of building Mr. Chausse desires that laws be enacted so that the city may collect the necessary taxes.

The Canada Motor & Cycle Co. have commenced work on a new brick building at Toronto Junction.

Winnipeg Baptists are to erect a new church near St. James' Park.

STREET PAVING and SIDEWALKS a SPECIALTY

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OF ONTARIO Limited
Head Office:
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Walter Mills, General Manager
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Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.



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That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
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Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
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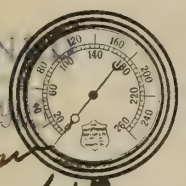
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The kind that last.

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HEATING AND PLUMBING

MODERN FACTORY PLUMBING

IT is becoming more generally recognized that it pays for employers to show consideration for the comfort and welfare of their workmen and in the United States the National Civic Federation has a department with a permanent secretary, who devotes her time to working amongst manufacturers and aiding as far as possible to bring about conditions which will tend to encourage the growth of a better feeling, and the development of more rightful relations between employers and employes.

In Canada this important work has not been taken up aggressively as yet, but in the recently erected model manufacturing plant of the Canadian Westinghouse works at Hamilton a splendid example exists of what can be done in this direction by far-seeing and liberal-minded employers. In the Westinghouse factories a system of plumbing has been installed for the workmen's use, the equal of which does not exist in any Canadian factory. Illustrations are reproduced to show the class of work done, the photographs being taken especially for Hardware and Metal in order that the Canadian plumbers may have before them an outline of what can and should be done in other manufacturing plants throughout the country.

This plant of the Canadian Westinghouse Company is one of many illustrations of Canadian industrial expansion during the past few years. The name "Westinghouse" has now a world-wide reputation in the industrial field, built up by the inventive genius, business capacity and enthusiasm of the founder of the Westinghouse industries, Mr. George Westinghouse, assisted by the powerful group of practical mechanics and executive heads he has gathered around him.

The Canadian organization is quite distinct from the American concern, considerable Canadian as well as Westinghouse capital being invested in the enterprise. The board of directors consists of the following: George Westinghouse, George C. Smith, L. A. Osborne, W. Y. Soper, C. F. Sise, H. H. Westinghouse, F. H. Taylor, Thos. Ahearn, P. J. Myler and Hon. J. M. Gibson. Besides the head office in Hamilton the company have sales offices in Toronto, Montreal, Halifax, Winnipeg and Vancouver. The air brake department, a manufacturing plant for which was started in Canada about ten years ago, has been consolidated with the electrical department in the Canadian company, the old air brake works being left intact.



Row of Basins, with Closets in Rear, General Machine Shop, Westinghouse Works, Hamilton.



Toilet Room in Detail Bldg., Westinghouse Works, Hamilton.

The buildings comprising the plant are constructed of concrete and brick, and in addition to the fireproof construction of the buildings an excellent fire protection system exists, a fire pump of 1,500 gallons per minute capacity being located in the boiler house annex. The fire equipment throughout the building includes piping for sprinkler sprays, also numerous coils of hose connected to piping, each coil being marked by red incandescent light, constantly burning.

The heating and ventilating is designed on the plenum system, the air being drawn from the outside by large fans and discharged into the building by means of piping, the foul air finding egress through doors, windows and regular ventilating outlets. The system was installed by Sheldon & Sheldon, Galt. Steam used in the heating system is supplied from a Stirling boiler plant, being piped to convenient centres in each building where the necessary steam coils and fans are located. Besides this steam radiators are installed where deemed necessary. To distinguish the various piping systems in the plant according to their use, such as steam, water, pneumatic, gas, etc., each system is painted a distinctive color, thus lessening danger of accidents.

There are nine toilet rooms located throughout the works for the convenience of the employes and the illustrations will give a fair idea of the beauty and

high quality of the materials installed. Four of the rooms are located in the detail building, two in the office, one in the foundry, one in the pattern shop and one in the warehouse, and in order to save floor space and be of greatest convenience to the various departments served the work is installed on mezzanine floors. There is also an emergency toilet room in case of accidents. The rooms on the various flats are accessible by broad stairways of steel concrete construction, guarded by iron pipe railings of special pattern. These as well as much of the sheet metal work, including a large paint machine, were included in the work done by Messrs. Wallace & Son. Lockers are also available for the uze of the company's employes.



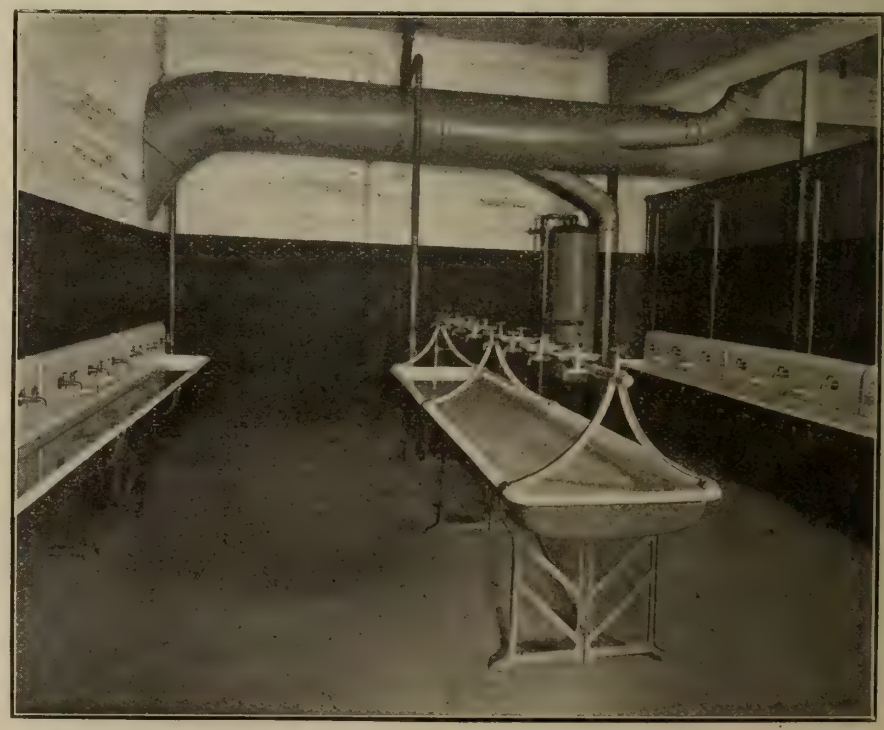
Toilet Room in Warehouse Westinghouse Works, Hamilton

Accompanied by Alderman Wallace and a representative of the Westinghouse Company, a member of the editorial staff of Hardware and Metal made a tour of the works recently. The first place visited was one of the toilet rooms in the detail building, the excellence of the material installed and the general cleanliness being such as to lead one to believe that the location was in a high class hotel or public building. In remarking upon this the Westinghouse representative stated that their experience had been that they could secure a higher class of work from men who were cleanly in their habits than from slovenly employes. It pays, therefore, to set a good example and by adopting a set of rules the employes readily co-operate in the endeavor to improve their working environment. In the room referred to there were eleven open and one closed closets, the former being for general use and the latter for the heads of the department. In addition to this there were six urinals, twenty-four basins and a slop sink, this outfit being practically duplicated in another room set aside for the female employees. Both hot and cold water for the users of the lavatories. As the illustrations show, the arrangement of the various rooms differs according to the space available and the requirements of the staff. In one case as many as thirty basins are arranged in a row while in the foundry it will be seen that the trough system with running streams of water is used in preference to the individual basins.

The fixture which attracted most attention was the "Arno" Syphon Washdown Closet in universal use throughout the works, it being fitted with the Osborne improved automatic valve and galvanized sealed tank with a water pressure of seventy-five pounds for flushing purposes. A cut of this fixture, supplied by the Standard Sanitary Manufacturing Company is reproduced, it differing, however, from the one installed in the detail that an aluminum seat is used instead of the regular natural oak oval seat. Another neat fixture was the drinking fountain, supplied by the J. L. Mott Company, the fountains being located at convenient situations throughout the buildings.

The specifications called for the installation of sixty of the "Arno" closets, twenty-four "Stevens" urinals, over one hundred basins of the "Omar" type, one wash trough with double sink and two with single sinks, eight slop sinks and five hot water heaters, practically all the material being porcelain enamelled iron and manufactured by the Standard Sanitary Manufacturing Company, Pittsburg, the wash troughs, however, being made by the Standard Ideal Sanitary Company, Port Hope. The work covered included the furnishing, setting and laying of all the soil pipes, waste pipes, vent pipes and floor drains from all the fixtures to their respective traps, branches, and connections to the outside drainage system, and the furnishing of all fixtures and fittings except the slate work. All valves 1½-inch and under were stipulated to be the Jenkins Brothers' Globe Valves.

The entire job amounted to over $10,000, and so well did Messrs. Wallace & Son do their work that after six months operation of the plant they can say that they never had to send a man back to do the slightest repair job or make a single change. The firm make a specialty of factory work and have recently had in hand the installation of plumbing systems in the new factories of the Canadian Shovel Company and the Chipman & Holton Knitting Company, the plumbing and heating in the works of the Canadian Drawn Steel Company and the installation of a shaving exhaust system in the Fensom Elevator Works.



Wash Troughs in Foundry, Westinghouse Works, Hamilton.

Reference was made at the commencement of this article to the work of the

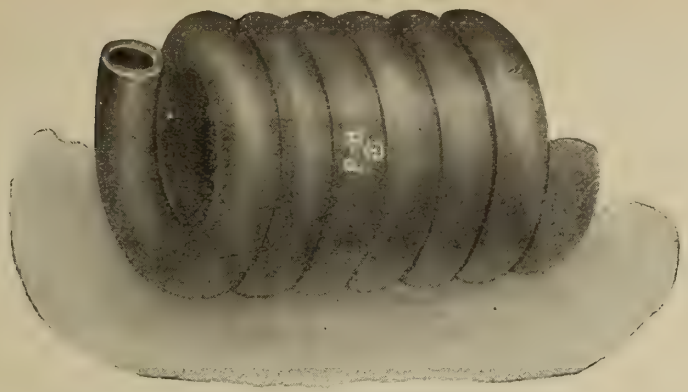
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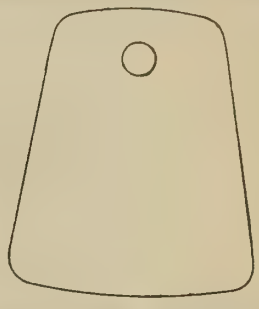
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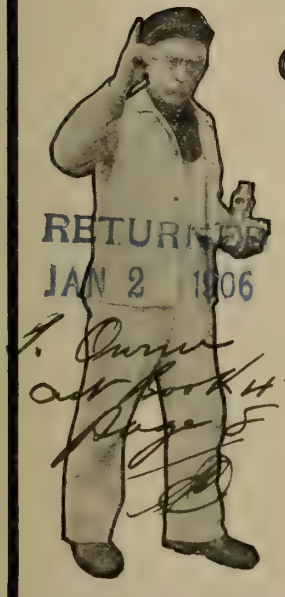
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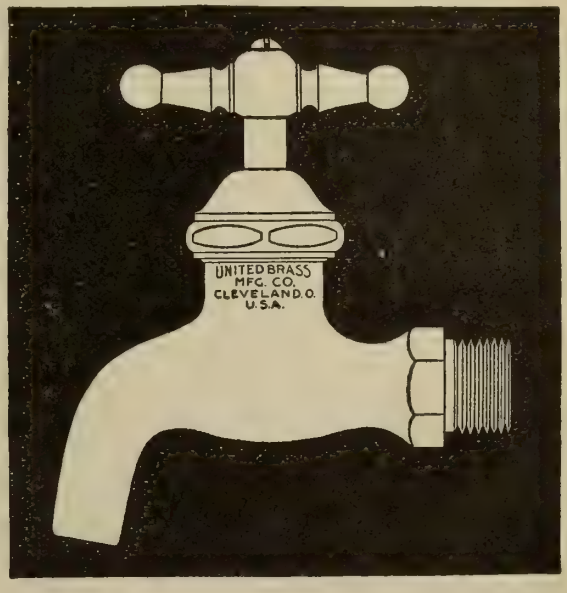
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Quality the Best.
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Shipment prompt.
Correspondence Solicited.

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HALIFAX, N. S.

Welfare Department of the National Civic Federation and in order to outline their plan of propaganda the following extracts from a report of an address recently delivered by Miss Gertrude Becks, secretary of this organization, is reproduced :

"The great value of light and depressing effects of dark work rooms were emphasized, poor light being the cause of many headaches. Ventilation by means of sliding doors in the roofs and the exhaust air system was also alluded to, and the various methods in vogue at different establishments explained. Slides were shown of apparatus employed for removing dust from the foundry sand room, and the advantage of automatic stokes in use at different places was demonstrated. By means of a series of pipes fresh air is supplied to the faces of the workers. Pure drinking water easily accessible is another essential feature. One method of supply was shown where water is delivered at 55 degrees F. and kept in constant circulation.

"A slide was exhibited showing an establishment fitted with individual wash bowls of enamelled iron, so constructed that they might be tipped over into troughs where the water would run off. Shower baths were also installed, and departments well fitted with wire lockers, it being claimed that wooden lockers are not the best on account of the accumulation of vermin, and by the use of wire lockers this danger is not only eliminated but a good source of ventilation is admitted. Methods of drying clothes on steam pipes were also shown on the screen, and the necessity for general janitor service in large establishments mentioned. In many cases the question as to why these facilities were not made use of by the men was answered by the fact that they are inadequate, unclean, too cold and frequently the men do not know of the existence of such accommodations, which were sometimes in remote places. In several instances the floors are of concrete with wooden racks in the individual compartments upon which the men stand, and the entire floor can easily be cleaned by a hose. Slides were shown of dressing rooms for women, where the clothing in stormy weather is hung over steam pipes and dried in a method similar to that used for the men. While it is not essential that a girl should be seated all day at her work, yet it is necessary that she should sit part of the time, and chairs fitted with back and foot rests according to the height should be provided for her welfare. These can be so constructed on rollers, fitted in grooves, that they may be readily moved from place to place, enabling the girl to operate several machines. Photographs were shown of lunch rooms for the officials, the superintendents and the working classes, and the different styles of lunch counters in use, where some bits of food have a nominal price of three, four or five cents. The attractive and clean lunch room is more apt to be a success than one which is not pleasant. In some establishments the junior help have coffee, tea and milk given. Rest rooms and hospitals for both sexes were also shown, and the methods of fire protection and the advisability of organizing fire brigades among the younger men suggested, and a description given of some houses for firemen showing the delightful surroundings.

"The question of transportation was referred to, showing conveyances for both men and women, and the better methods of allowing the girls to leave the factory a few minutes before the men, instead of all leaving at the same time, thus meeting the moral question and preventing the jostling of the girls by the men. Special stress was laid upon the importance of forming men's clubs where the men may assemble and play pool, and of providing places where meetings may be held once a month ;



The "Arno" Syphon Closet and Galvanized Presure Tank.



General Machine Shop, Canadian Westinghouse Works, Hamilton.

"None so blind as those that won't see!"

If you refuse to "see" our proposition
and take advantage of it—
the blame is your own entirely.

Here again we state it, as plainly as possible:

You exhibit a line of NATURO CLOSETS
in your showroom and explain their good
features to your customers—
That's all you have to do.
We do extensive advertising
Refer all inquiries to you
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THE NATURO CLOSET

does the rest, bringing you
a large volume of business.

THE NATURO CO.

C. H. MUCKENHIRN,
President.

Salem
N. J.

also emergency hospitals where relief may be had in cases of serious accident. Another very good feature adopted by different concerns is the policy of establishing vacation houses, where employes may spend their holidays. In some establishments two weeks' vacation is given with pay to all engaged over one year, and in other cases overtime has been abolished with good results. Several views of employes' homes and tenement houses were exhibited, the rent for which is made nominal, and all for the welfare of the employes.

"Each industrial establishment is a study. Certain things may be done in one place which may not be applicable to another in the same trade, but in any event constant attention is needed or failure is the result."

SEMI-ANNUAL PROVINCIAL CONVENTION

OF MASTER PLUMBERS AND STEAM FITTERS' ASSOCIATION.

ABOUT ninety delegates were present at the semi-annual convention of the Master Plumbers' and Steam Fitters' Association held in Toronto on Thanksgiving Day, the gathering being an unqualified success, there being twice as many delegates present as at any former semi-annual meeting and indeed only one annual meeting surpassed it in numbers, that being the Good Friday convention held in Guelph this year when twenty-five towns and cities were represented by ninety-five delegates. The ninety delegates present on Thanksgiving Day represented twenty-two towns and cities, even distant Port Arthur sending down a representative for the first time in the history of the association. Gananoque also had two delegates present for the first time since the organization of the local association.

The convention was called to order promptly at ten o'clock by President W. J. Walsh, he appointing C. E. Pickard, Toronto, to act as sergeant-at-arms, and W. J. Clark, Geo. Clapperton, Toronto, and T. L. Partridge, London, as a credential committee. A roll call of the officers showed the following to be present:

President, W. J. Walsh, Hamilton.
Vice-Pres., Harry Mahoney, Guelph.
Treasurer, J. H. Wilson, Toronto.
Financial Secretary, T. H. Davies, Hamilton.
Secretary, W. H. Meredith, Toronto.
Executive committee, E. H. Russell, London.

The credential committee reported the following delegates present:

Delegates Present at Convention.

Alliston—W. B. Clifton.
Berlin—John Hainsworth, A. Sacks, P. Gies, H. Wolfardt, H. G. Hymmen.
Barrie—J. H. Neelands.
Brantford—T. A. Cowan.
Guelph—Harry Mahoney, Fred Smith, A. Malcolm, W. J. Stephenson.
Galt—Jas. Scott, T. D. Lockart, Harry Dakin.
Gananoque—W. W. Bennett, W. F. Martin.
Hamilton—W. J. Clark, T. H. Davies, H. W. Morley, W. D. Smith, Geo. E. Pyle, Wm. Archibald, Hugh Wallace, Jas. H. Stewart, A. Rodgers, J. S. Kennedy, Thos. Jones, W. J. Walsh.
London—E. H. Russell, R. Haslett, C. F. Needham, B. Noble, T. L. Partridge, Thos. Rich, A. Milne, James Green, O. L. Robb, Wm. Young, Wm. Smith.
Montreal—J. A. Gordon, Peter Ogilvie.
Midland—T. J. Campbell.
Niagara Falls—F. Heximer, G. H. Clark, S. R. Ward, T. J. Miller.
Orillia—H. T. Andrews, T. Phillips, R. Manier.
Paris—J. Glenister.
Peterboro—T. D. McGregor, E. M. Best, R. G. Sturgeon.
Port Arthur—J. Marshall.
Stratford—H. J. Peter, A. E. Sylvester, A. McDonald.
St. Thomas—C. C. Bull, J. E. Stott, F. Cook.
Sarnia—A. J. Joss.
Strathroy—A. Stoner.



W. J. Walsh, Hamilton, Provincial President.

Toronto—J. E. Knott, Geo. Clapperton, K. J. Allison, W. B. Inwood, J. H. Flaherty, J. J. McKittrick, James Wilson, F. Armstrong, A. Purdy, A. M. Bond, L. LeGrow, C. E. Pickard, J. E. Fullerton, P. Jessimane, J. W. Erwood, J. B. Fitzsimmons, D. Morgan, N. Blumberg, J. Sherlock, Geo. H. Cooper, John Ross, J. J. Lyndon, H. Hogarth, W. H. Meredith.
Waterloo—J. Conrad.

Committee Reports.

President Walsh in opening the business of the convention stated that he was glad to see Mr. J. A. Gordon, Montreal, national secretary, and Mr. Peter Ogilvie, Montreal, a past national vice-president of the association, present as fraternal delegates, and on behalf of the convention he gave them a hearty welcome and extended them the full privileges of the convention. Both gentlemen in reply assured the meeting that they were not present as representatives of the national organization, but merely came to gather new ideas that might be of benefit to the craft down east.

This being the semi-annual meeting the officers' reports were short and of a routine nature. The president's report referred to the reception accorded to the delegation that attended the Master Steam Fitters' Convention held at Atlantic City and the Master Plumbers' Convention held in Atlanta, Georgia, last June. In both instances the American organizations gave the Canadian delegates a hearty reception and much information was obtained of value to association work in Canada. The president also referred to the work of the special committee appointed to draught a sanitary by-law for adoption by each municipality throughout the Province, the committee being likely to have their work completed in time for the annual meeting on Good Friday next.

The secretary's report dealt more particularly with the organization work, the report showing that while Niagara Falls was the only association organized there were substantial additions made to the membership of other associations and many individual members had been enrolled from towns where no local association exists. It was the intention of the executive to push the work of organization in the eastern part of the Province during the Fall and Winter, and substantial gains were expected before the next annual meeting. The treasurer reported that while he only made an annual statement of the association finances he would say that all liabilities had been met and the association still had a balance on the right side of the ledger.

Next Gathering at Hamilton.

Regrets were expressed on all sides at the absence through illness of the past national president, Robert Ross, and Provincial Past President Wm. Mansell, who is on a trip to the Pacific coast. It was pleasing, however, to see the familiar face of William Smith, of London, a past president of the national organization and a regular attendant at conventions in the early days of the association. It was during Mr. Smith's presidency that the national association appointed a committee to draft a constitution for the formation of Provincial associations.

It was felt that there should be some kind of by-laws governing local associations and to this end the executive committee were requested to draft a model code of by-laws, and present at the next annual meeting together with any suggested changes to the Provincial association by-laws.

Much friendly rivalry was indulged in when selecting the next place of meeting for the annual convention on Good Friday, the choice finally resting with Hamilton, the delegates from the Ambitious City assuring the delegates that a good time was in store for them.

General business of a routine nature was transacted, and under the head of good of the association a most interesting discussion took place in which delegates from all parts of the Province participated.

Convention Gossip.

A. B. Jardine & Co., Hespeler, had an exhibition of Jardine Patent Pipe Dies and Machines at the Iroquois Hotel, many delegates being present to inspect the working of the machines




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The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

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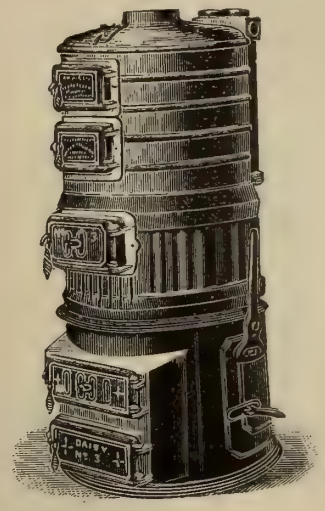
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Sales exceed all others.

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JENKINS BROS.

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New York Philadelphia Chicago London, E. C.

which are made in Canada and very popular among Canadian steam fitters and machinists.

The office of the Taylor-Forbes Co., in



Henry Mahoney, Guelph, Provincial Vice-President.

the same building as that in which the master plumbers' offices are located, was over-run with delegates at many times during the day. Mr. H. R. Flett, the company's popular representative, was kept busy showing Sovereign Radiators to interested inquirers from all parts of the Province. Although this is the first season for the Sovereign Radiators they have already won great popularity, this being well evidenced by the large number of visitors at the Taylor-Forbes exhibit on Thanksgiving Day.

The representatives of the United Brass Manufacturing Co., Cleveland, distributed handsome tie pins to the delegates. Any plumber in Canada who has not received one of the pins can secure one by sending four cents in stamps to the company.

The Loew Supply & Manufacturing Co. had a representative, Mr. Gustav A. Peternell, present, bringing the merits of the Loew Adjustable Die Stock before the delegates by means of handsome printed pamphlets.

Of the 90 delegates present 23 were from Toronto, 12 from Hamilton and 11 from London, over half the delegation being from the three cities.

Delegates were present from 22 towns and cities, including the two from Montreal.

J. A. Gordon, the national secretary, and Peter Ogilvie, past national vice-president, came up from Montreal to give the delegates the benefit of their advice and experience.

When business is to be done the delegates were "Johnny on the spot," but when the convention was over fun and a general good time was indulged in by the ancient association of bell-ringers.

THE BANQUET.

The annual banquet of the Toronto Master Plumbers' and Steamfitters' Co-operative Association was held on Thursday evening, Thanksgiving Day, the delegates of the Provincial and representatives of the various supply houses being the guests of the Toronto association. The event was held in the beautiful assembly room of the Temple Building, and was one of the most successful of the many pleasant and enjoyable affairs held under the auspices of the association since its organization. Five long tables, seating about forty each, were arranged about the room, about one hundred and seventy being gathered around the tables.

After an elaborate menu had been disposed of to the satisfaction of all present, Mr. Fred. Armstrong, president of the Toronto association, as chairman, opened the second part of the evening's enjoyment by toasting "The King," and announcing that there would be no long speeches allowed during the evening, as a splendid musical programme had been prepared in addition to the dinner and the regular toasts. "The King" was heartily toasted, the number being followed very appropriately by a song by



W. H. Meredith, Provincial Secretary.

Mr. Jas. Fiddes, entitled the "Coronation of the King."

The next toast, "Our Guests," was proposed by Mr. C. H. Beavis, of the Toronto association, and was replied to by President W. J. Walsh, of Hamilton, Provincial Vice-President Harry Mahony, Guelph, and Provincial Secretary W. H. Meredith, Toronto. Mr. Walsh referred to the time, not long ago, when the master plumbers gave their labor for next to nothing, and cut each others throats in an endeavor to obtain contracts from competitors. The association had changed this, and by co-operating together the members were trying to secure a fair remuneration for their labor and secure prices which would allow them to install the highest type and most sanitary fixtures in order to meet the modern regulations of the Provincial Board of Health. The object the association was striving to obtain had been criticized by the press, newspaper men having secured information from interested parties, but the association, which had now grown to nearly three hundred members, residing in all parts of the Province, did not fear the press or the law courts, because they knew they were in the right. Mr. Mahoney said he was heart and soul in the organization of the Provincial association, which was the backbone of the national body, and he hoped to soon see Eastern Ontario as well organized as the west. Secretary Meredith said the Ontario plumber stands at the head of the trade in America; nowhere had he found better work done than in our own Province. It was the aim of the members of the association to put as much as possible into a job rather than to get as much as possible out of the work. The association had raised the standard of plumbing in all parts of the country, and there is now no room for the botch plumber. The association would not be satisfied before it was heard before municipal councils, Legislature and Parliament, and secured the passage and enforcement of better sanitary laws. In closing Mr. Meredith called upon the members of the association in all parts of the Province to stand shoulder to shoulder and united win.

Mr. Fred. Armstrong proposed the toast of "Manufacturers and Jobbers," and read a letter from Mr. Edward Gurney, stating that he regretted exceedingly his inability to be present at the banquet, and wishing the delegates a very pleasant evening, as well as congratulating them upon the completion of another prosperous year. President Alex. McMicheal, of the Central Supply Association, responded briefly, stating that the manufacturers and jobbers had felt the benefit of organizing themselves into an association, and felt certain that the master plumbers would find equal benefit in co-operating together rather than fighting together. Mr. McMicheal wished the master plumbers' association another successful and prosperous year. Mr. Peter McMicheal, of the Dominion Radiator Co., said the Central Supply Association was not or-



W. J. Colesworthy, Representative of the United Brass Manufacturing Co., Cleveland.

ganized to fight the master plumbers but merely to protect the interests of the supply men. Practically every class

(*Continued on page 70*)

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Post Office and Telegraph Address
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The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



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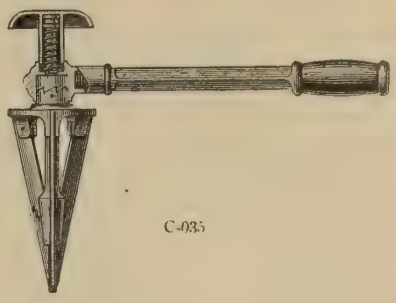
in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

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MUELLER PIPE REAMERS

RATCHET HANDLE PATTERN



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A tool for cutting purposes may have the keenest kind of edge and yet work slow and hard because the edge hasn't enough relief to prevent dragging.

Mueller Pipe Reamers have the blades so relieved that no part of them but the immediate edge has contact with the pipe. They do the work fast and do it easy.

Mueller Pipe Reamers ream all sizes of pipe up to 3-inch., and are made in plain handle and ratchet handle patterns. The reamer illustrated is the ratchet handle pattern.

Each reamer is given a working test, bears the Mueller trade mark and is *unconditionally guaranteed.*

We also make ground key, compression and fuller work for plumbers' use. Catalogs upon request.

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MANUFACTURERS OF

Solder,
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WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 2, 1905.

IRON pipe, which has been reported scarce for two or three weeks, is still firmer, a decided shortage having developed in certain sizes. The advance shown last week has been stiffly maintained and strength is, more than ever, the characteristic of the market.

Lead pipe, though it remains unchanged in price is expected to be advanced as the result of another jump in pig.

Fittings are still very difficult to obtain, owing to the fact that the foundries are unable to fill orders as fast as they come in. Much of this activity is of course, due to the anxiety of plumbers to stock up before the close of navigation. The last sailings of some of the barges and boats on the river have already been announced, and even in districts which cannot be reached by water, winter freight rates will soon be in force, and there is a great rush to get in stock before this advance.

Range Boilers—Nothing has developed to change the situation and prices are: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—There is a strong feeling evident that prices must soon be raised to correspond with the continued upward movement of pig lead. For the present, however, prices remain as follows: Discounts twenty-five per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe—There is a still more noticeable scarcity which holds last week's advance. Very firm. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.; 1-2 inch, 72 per cent.; 3-4 inch, and upwards, 74 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Iron Pipe Fittings—Orders are being filled only with great difficulty owing to the inability of local foundries to keep up to the demand. We are quoting the following prices: Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Soil Pipe and Fittings—The optimistic feeling continues and the market is very strong. Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—Prices are steady, showing no fluctuations. We quote: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Nov. 2, 1905.

IRON pipe manufacturers have increased their prices as expected, the advance amounting to five per cent. For some weeks Hardware and Metal has been predicting this action, the declaration of an open market on iron pipe and fittings a couple of weeks ago coming as a surprise to the entire trade. The open market still continues, although the jumping of prices by manufacturers will tend to strengthen the market. Cutting is not nearly so prevalent as a week or so ago, but the steamfitter still has a chance to load up at shaded prices.

Other advances are expected next week, closets being one line booked for a rise. The strong condition of the metal markets also indicates that brass, copper and lead goods will make an upward jump.

Business in all lines continues very lively, last month's trade again reaching top notch figures. A falling off is looked for shortly, but in the meantime the supply houses are doing all the business they can conveniently handle and some of the manufacturers are behind in their shipments considerably.

Prices continue as reported last week.

Lead Pipe—An advance is certain owing to the increasing price of pig lead. Our quotations are as follows: Lead, 7c; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Demand is active with producers keeping well up to their orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Manufacturers have advanced prices 5 per cent. owing to the high prices of iron and the price-cutting in Toronto is not likely to last much longer. A large trade is being done at the shaded quotations. We quote as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9.00; 2 1-2 inch, $15.75; 3 inch, $30.50; galvanized 1-4 inch $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Iron Pipe Fittings—Prices are being held firmer. The open market, still exists, however, and a larger trade than usual is being done. We quote as follows: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper and Range Boilers—An average business is being done. The discount continues at 15 per cent.

Galvanized Iron Range Boilers—Building is well advanced and many boilers are being installed. Trade continues brisk. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Solder—Higher prices for solder as lead and tin are both jumping upward. We quote: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware — An enormous demand for Canadian ware is reported, so much in fact that the producers are fully a fortnight behind in their shipments. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50; special, $15.50; 3 inch rim, first quality, $18; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality, $19; special, $17; 3 inch rim, first quality, $20.50; special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.00.

The ratepayers of Woodstock, Ont., last month carried a by-law to raise $50,000 for improvements to the water works and electric light plants.

G. Keller, New York, N.Y., has invented an improved lamp for electric lights, gas lights, etc, arranged to shed a powerful but extremely soft light. This result is accomplished by forming the lamp globe with a chamber in which water or any other desired fluid may be contained, and through which the light must pass.

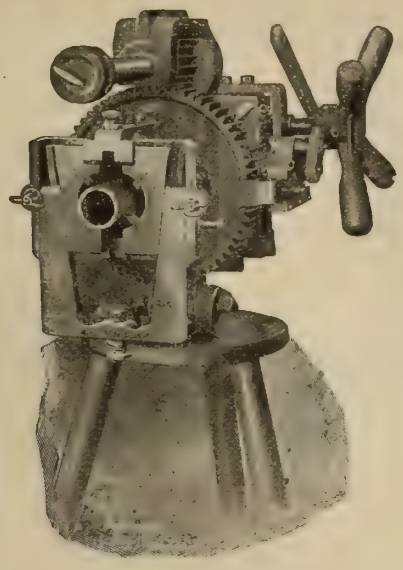
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The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

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"Solid Adjustable" Die Machine

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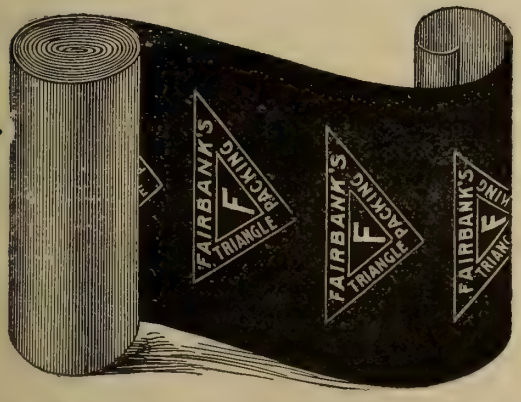
More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

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RETURNED NOV 15 1905 to own Boiler cut No. 43 page 15 ofo



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FAIRBANKS TRIANGLE RED SHEET PACKING

For Steam, Hot Water, Oil, Ammonia, Air or Cold Water Joints.

All red sheet packings look more or less alike.

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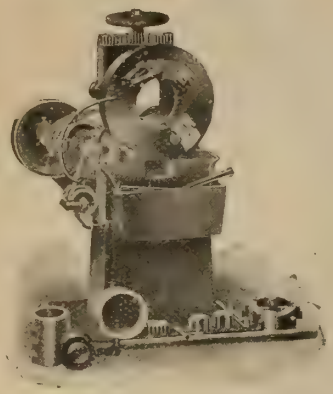
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MONTREAL TORONTO WINNIPEG VANCOUVER

MERRELL COMBINED HAND AND POWER MACHINES



No. 5½ cuts and threads pipe 1 to 4 inches, nclusive. No. 6½ cuts and threads pipe 1 to 6 inches, inclusive. Both have our Standard adjustable quick-opening and closing die heads and our improved cutting-off knife. The chasers are five in number. The vise is self-centering and is actuated by a rack and pinion to feed the pipe to the chasers. These machines are better and more rapid, both in threading and cutting off, than any other combination machine on the market. They have a greater range of work and make quicker changes rom size to size of pipe.

Our Catalogue is interesting.

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KERR'S GENUINE WEBER

GATE VALVES

have many imitations, but none equal the "real" article made by us. Be sure you get "Kerr's." Every valve made of the best red metal, and beautifully finished.

The KERR ENGINE CO.,

Manufacturers Limited

WALKERVILLE, ONT., CANADA

SEMI-ANNUAL CONVENTION.

(*Continued from page 66.*)

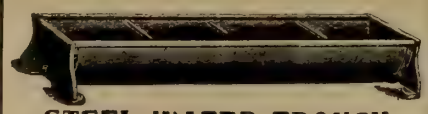
of men were organized to-day, and the manufacturers were only in line with modern business methods in coming together into an organization. If the supply association did not believe that the master plumbers' association was in the best interests of the public they would not support it, but they realized that it had done a vast amount of good, and their best wishes were with the M.P.A. in its continued success. Mr. W. H. Carrick, of the Gurney Foundry Co., congratulated the delegates upon the large and successful convention they had held, and wished them every success during the coming year. Mr. H. W. Anthes, of the Toronto Foundry Co., spoke briefly and received an ovation from the delegates. Mr. F. J. Travers, of the Canadian Radiator Co., Montreal, was the last speaker responding to this toast, he drawing attention to the fact that the public was getting better service now than before the association was formed. He reminded the delegates of the old motto, "In union there is strength."

Mr. Jas. McKittrick proposed the toast of "Our Sister Associations," stating that the association was building not for to-day but for the future. Great good had resulted from the work of the organization undertaken three years ago, and the delegates were to be congratulated on the feeling of unity and loyalty which existed among the master plumbers through the entire Province. Messrs. Ben. Noble, London; W. G. Smith, Hamilton, and Peter Ogilvie, Montreal, also spoke to this toast, dwelling upon the good results which had followed the organization of the associations in their districts, and of the satisfactory manner with which they had been able to adjust differences with the manufacturers and jobbers, owing to the association's influence. It was very satisfactory to know that their relations with the manufacturers were satisfactory in every particular.

Mr. K. J. Allison proposed the toast to the "Medical Health Department," making the only long speech of the evening, and receiving a most extended ovation from the delegates who had become possessed of the United Brass Co.'s cow bells. Mr. Allison referred to the inability to be present of Medical Health Officer Dr. Sheard, illness being the cause of his absence. The delegates re-echoed the sentiment expressed by the speaker when he stated that Dr. Sheard was the most efficient health officer on the continent. Inspectors Kirk and Meadows responded to this

Alderman Hugh Wallace, of Hamilton, proposed the toast of the "Master Plumbers' Association of Toronto," stating that formerly the work of plumbing organization throughout the Province was left entirely to Toronto, but now the influence of the association extends to every place in Ontario where plumbing work is done. He made reference to the self-sacrificing and pioneer work of Ex-Presidents Robert Ross and William Mansell, and President Fred. Armstrong, in responding, stated that credit should also be given to Messrs. McKittrick and Sherlock, to whom much of the credit for the success of the association in its early days was due.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.**

TWEED, Ontario Limited

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL

29 Melinda Street TORONTO

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT **GALVANIZING** ONT WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.

$ $ $ $ $ $ $ $ $ $

CONTRACTS

mean dollars for the pockets of contractors. The weekly reports in the

CANADIAN CONTRACT RECORD

tell where contracts may be had.
$2 per year buys them. Address

THE CONTRACT RECORD

TORONTO, MONTREAL, WINNIPEG and VANCOUVER.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

The Best South Wales Produces

IN STEEL COKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

A BOILER OF THE HIGHEST EFFICIENCY

We have produced in the Oxford Hot Water Heater a boiler which contains many exclusive features and for which we claim a greater amount of power and efficiency than any other make on the market. Our boiler has proved these claims correct after two years' use in the United States.

By greatly increasing the heating surfaces, we have produced a boiler that will more quickly and with a less consumption of fuel give a much higher temperature.

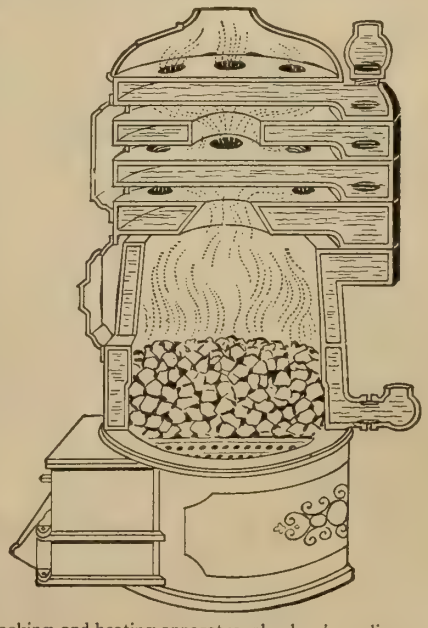
The fire-pot has a greater diameter at the bottom than the top. This prevents an accumulation of dead fuel and ashes around the most active surface of the boiler. Above the level of the top of the fuel the walls overhang the fire, giving a great heating surface, compelling the heat to sharply impinge instead of merely passing by them, as would happen if these surfaces were vertical.

The first section above the fire is double the thickness of other sections, and the flue openings are bell-shaped, thus giving a great amount of heating surface.

The entire boiler is steel and iron, no rubber washers being used. All joints are made with smooth tapered steel nipples, pressed into smooth tapered openings, making an absolutely indestructible joint. The smaller sized boilers are shipped with all the sections built together, thus saving three quarters of the time ordinarily taken in erecting a heater.

Oxford Steam and Hot Water Radiators can't leak because every joint is metal to metal—no gaskets or washers—with Oxford Boilers they make a perfect Heating System.

Write for the "Gurney Oxford Book of Hot Water and Steam Heating Apparatus." It is free.



WE also manufacture cast iron and steel plate ranges, gas stoves, ranges and heaters, hotel ranges, warm air furnaces and all kinds of cooking and heating apparatus, plumbers' supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 128
The Gurney Standard Metal Co., Limited, Calgary, Alta.

The final toast of the evening was that of the "Ladies," presented by Mr. Geo. Cooper, who, in the eloquent language of one who has decided to desert the life of a bachelor for that of a benedict, extolled the good qualities of the fair sex. Harry Mahoney, of Guelph, responded, bringing an enjoyable evening to a close by one of his witty Irish speeches.

Toothpicks.

The invitations to the banquet said business suits would be worn. Some of the boys couldn't attend because they had nothing but law suits on their hands.

Who was chairman—Kenneth Allison or Fred. Armstrong?

Did you hear Alex. Joss sneeze? Some likened it to an engine coming out of the Sarnia tunnel.

Messrs. Shoenberger and Colesworthy refused to let the delegates forget that the United Brass Mfg. Co. is still doing business at Cleveland.

"Real pain for our sham friends and champagne for our real friends," was the motto inscribed on the package of toothpicks presented to each banquetter by the United Brass Mfg. Co., Cleveland, Ohio.

"Jimmy" Brown made himself solid with the boys by his well-rendered songs.

Kenneth Allison made a good leader of the cow-bell orchestra. The United Brass Mfg. Co.'s popular representatives brought up a parcel of brass bells for distribution after the banquet, but some of the delegates made a raid and captured the bells. Thenceforth there was music in the air, and the chairman's job was anything but a "lead pipe" cinch.

Even if some of the Toronto M.P.A.'s are booked for a term at the Provincial Sanitarium on Strachan avenue, they will have pleasant memories of Thanksgiving night.

The committee responsible for the jollification were: Fred. Armstrong, chairman; W. H. Meredith, secretary, and Messrs. P. J. Hayes, K. J. Allison, C. H. Beavis and Wm. Mansell.

Master Glynn, James Fiddes, and Bert Harvey, ably entertained the delegates with their songs, interspersed between the various toasts and speeches.

Supply Men Present.

Amongst the representatives of the supply houses present Hardware and Metal noticed the following:

Central Supply Association — B. J. Morris, secretary.

Jas. Morrison Brass Mfg. Co. — Charles Morrison, Robert Morrison, F. Armstrong, and C. World.

Taylor-Forbes Co.—H. R. Flett.

Gurney Foundry Co.—W. H. Carrick, W. H. Helliwell, and H. L. Gurney.

Jas. Robertson Co.—Alex. McMicheal, W. H. Sheppard, and Geo. McGuillen.

R. J. Cluff & Co.—W. J. Cluff.

Standard Ideal Sanitary Co. — A. D. McArthur and William Linten.

Ontario Lead & Wire Co. — Fred. Summerville.

Toronto Foundry Co. — H. W. Anthes and L. L. Anthes.

Page-Hersey Iron & Tube Co.—W. W. Near.

Dominion Radiator Co.—Peter McMicheal, E. J. Brewer, W. J. Fulton, and Geo. H. Reid.

United Brass Mfg. Co.—Samuel Schoenberger and W. J. Colesworthy.

Canada Radiator Co.—F. J. Travers and N. B. Huffman.

Toronto Hardware Co.—J. H. Patterson.

Canada Metal Co.—M. Matthews.

A. B. Jardine & Co.—A. B. Jardine.

Queen City Brass Co.—W. B. Malcolm.

PLUMBING GOSSIP.

A. Descoteaux, of Kingsey, Que., was in Montreal this week, purchasing supplies for his business.

W. Gaulin, tinsmith and plumber, of St. Cesaire, visited Montreal a few days ago, and left his orders with the supply houses there.

A. McDonald, tinsmith and stove dealer, of Huntingdon, Que., was in Montreal this week on a business trip.

Mr. Longard, of Longard Bros., steamfitters, Halifax, was a caller at the supply houses in the Royal City this week.

Messrs. McDonald & Crago Florence, Ont., have been awarded the contract for warming and ventilating the Methodist church, that place, with "Kelsey" generators.

Mr. L. J. Payette, of Warden King & Sons, Wontreal, has been in Toronto several days this week conferring with R. J. Cluff regarding the erection of a new building to be erected in Toronto shortly.

Wm. Mansell, Toronto, is on a business trip to the Pacific Coast.



A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

BEFORE PLACING ORDERS FOR
GALVANIZED SHEETS
GOOD WORKING-UP QUALITY, ASK
RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND,
J.C.M.
FOR PRICES OF THEIR BRAND

No. 650. Long Flat Nose Side Cutting Plier
In Quality, Design and Finish UTICA TOOLS lead



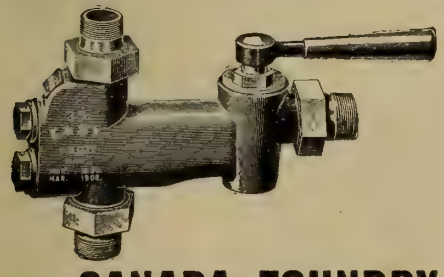
ONLY THE GENUINE BEAR THIS MARK
We make the most complete line of pliers in the world.
UTICA TRADE MARK
WRITE FOR THE GREEN BOOK
Canadian office, 215 Coristine Bldg., Montreal. Factory, Utica, N.Y. UTICA DROP FORGE & TOOL CO., 296 Broadway New York, U.S.A.

FOR SPRINGS,

made and backed up by a concern with fifty years experience, send your specifications to

The WALLACE BARNES CO., BRISTOL, Conn.

NEW CATALOG JUST ISSUED.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.
Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED
HEAD OFFICE AND WORKS: TORONTO, ONT.
District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland.

TIN PLATES

"ELYN" "LYDBROOK" "GRAFTON"

I can supply these famous brands at Lowest prices.

Write for prices and ascertain.

J. A. HENDERSON, Agent for **T. W. & J. WALKER,**
Board of Trade Bldg., **MONTREAL.** **WOLVERHAMPTON.**

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

The Best Door Closer is . . .
NEWMAN'S INVINCIBLE FLOOR SPRING
Will close a door silently against any pressure of wind. Has many working advantages over the ordinary spring, and has twice the wear. In use throughout Great Britain and the Colonies. Gives perfect satisfaction. Made only by
W. NEWMAN & SONS,
Hospital St., - - BIRMINGHAM

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED
5 5 5
YEARS YEARS YEARS
5 5 5
GUARANTEED



At the Same Price

Isn't it Best to use the Kind that are

GUARANTEED
FOR
5 YEARS 5 YEARS 5
BY
GLAUBER, CLEVELAND, OHIO, U.S.A.

Think Ahead and Plan Ahead

Add to your stock reliable goods like our "CYCLONE" and "JOLIETTE" brands of SHEATHING or any of our

"BLACK DIAMOND"

TARRED FELTS
BUILDING PAPER



WRAPPING PAPER
READY ROOFING

They are all durable, of fine appearance, and are to be had at fair prices. What about your trade?

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Nov. 3, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TIN PLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Terne plates	6 75
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. 14x60, " }	7 00
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 92½	1 95
Forged iron "	2 17½	2 05
Refined " "	2 32½	2 05
Horseshoe iron "	2 32½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	2 02½	....
Tire steel	2 17½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality, best warranted	....	0 18
"Y" " warranted	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
16 gauge	2 35	2 30
18 "	2 25	2 40
20 to 24 gauge	2 20	2 50
26 "	2 25	2 65
28 "	2 30	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 50
Galvanized Canada Plates, 52 sheets	4 00

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs.	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 75
26 "	3 60	4 00
28 "	3 85	4 25

APOLLO.

10½ oz	4 25
28 gauge (American gauge)	4 00
26 "	3 75
24 "	3 65

	Comet Bell.	Queen's Head
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 60
26 "	3 60	3 85
28 "	3 85	4 10

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10½ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 5 per cent.	40 and
Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ¼ to ¾ in.	21 00 23 00
Cut " round and square, 1 to 2 inches	21 00 23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 0
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 50	7 25
Part casks	7 75	7 50

LEAD.

Imported Pig, per 100 lb.	4 10
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft. lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in.	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
Black pipe—	Per 100 feet.
1 inch	4 12
1¼ "	5 62
1½ "	6 75
2 "	....
Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over, an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 " "	" 1 75
No .7 Fuller's	" 2 10
No. 4½, "	" 2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	" 22 00
" 35 "	" 24 00
" 40 "	" 28 00

Discount off copper boilers 15 per cent.

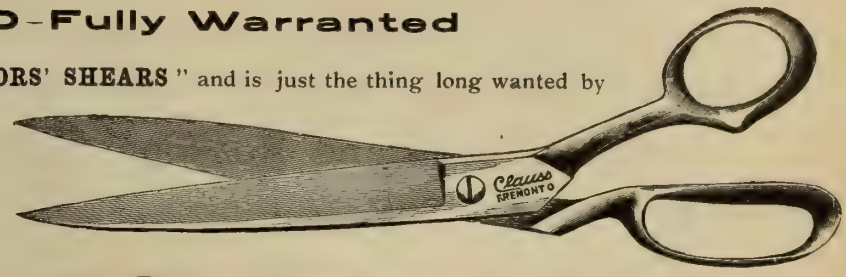
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Dressmakers' Shears

CLAUSS BRAND—Fully Warranted

This shear is made after the pattern **"TAILORS' SHEARS"** and is just the thing long wanted by the dressmakers.



Manufactured by Our Secret Process.

Ask for Discounts.

The Clauss Shear Co., Fremont, Ohio.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls	1 50
Bulk in less quantity	1 80
Bladders in bbls	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots.	Per gal.	Net.
Carriage, No. 1		1 50	1 60
Pale durable body		4 10	4 25
" rubbing		2 85	3 20
Gold size, japan		1 50	1 60
No. 1 brown japan		0 85	0 90
Elastic oak		....	1 50
Furniture, extra		1 10	1 25
" No. 1		0 90	1 00
Hard oil finish		1 35	1 50
Light oil finish		1 60	1 70
Damar		1 75	2 00
Shellac, white		2 40	2 50
" orange		2 30	2 40
Turpentine, brown japan		1 10	1 20
" black japan		1 10	1 20
" " No. 1.		0 85	0 90
Elastilite varnish, 1 gal. can, each			2 00
Granitine floor finish, per gal			2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.			
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.			
Canada Paint Co's sun varnish			2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	....	5 75
" hunters	....	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discourt 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz.	6 00	9 00
American	"	12 00	18 0 0

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt	per ton	45 00
Heavy Straw Sheathing	per ton	35 00
Dry Sheathing	per roll, 400 sq. ft.	0 40
Tar "	" 400 "	0 50
Dry Fibre	" 400 "	0 55
Tarred Fibre	" 400 "	0 65
O. K. & I. X. L.	" 400 "	0 70
Resin-sized	" 400 "	0 45
Oiled Sheathing	" 600 "	1 00
Oiled "	" 400 "	0 70
Root Coating, in barrels	per gal.	0 17
Roof " small packages	"	0 25
Refined Tar	per barrel	5 00
Coal Tar	"	4 00
Coal Tar, less than barrels	per gal.	0 15
Roofing Pitch	per 100 lb.	0 80 0 90
Slater's felt	per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz.	1 00	1 50
Bullard's	"	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt.	0 60 0 65
Red		0 05 0 06
Crayon	per gross	0 14 0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English	per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.			
Button's imitation	per doz.	5 00	9 00
man	"	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz.	0 55	1 00
Axle	"	0 22	0 33
Screw	"	0 22	1 00
Awning	"	0 35	2 50

PUMPS.

Canadian cistern	1 80	
Canadian pitcher spout	1 40	

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
"	"	4 00
"	" "	5 25
"	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5	"
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
95 to 100	....	20 50
101 to 105	....	24 00
100 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ½-inch	per gross	9 00
Rope, ⅝ "	"	12 00
Rope, ¾ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.'Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$ 3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes		2 50
Woodyatt, ball bearing, 12 to 20-in	5 60 to	7 45

Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.

Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent		
Russell & Erwin, steel rim	per doz.	2 25
Cabinet.		
Eagle, discount 30 per cent.		

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen

Gem	each	1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cert.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

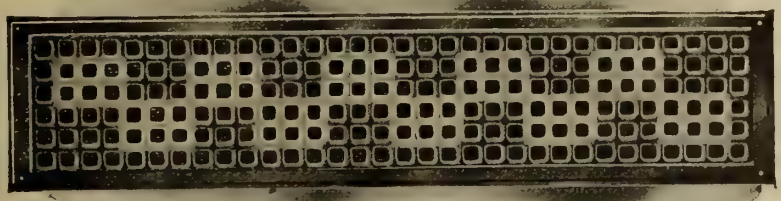
Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
" "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's ..... "	3 00	15 00
Tinners', solid ..... per set	....	0 72
" hollow ..... per inch	....	1 00

RAKES.

Wood ..... per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines ..	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0	10½
Pure Manilla	0	15
"British" Manilla	0	11½
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea	0	16
Jute	0	09
Lath Yarn, single	0	10
" double	0	10½
Sisal bed cord, 48 feet ..... per doz.	0	65
" " 60 feet ..... "	0	80
" " 72 feet ..... "	0	95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished ... per set	0	75
" No. 50, nickle-plated, "	0	80
Common, plain	4	50
" plated	5	50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ... per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's ... per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete ..... each 0 75 2 75
" frame only ..... each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century $6 25
" " No. 1 Maple Leaf 5 25
" " Happy Medium 4 25
" " Watch Spring 4 25
" common frame 4 00

SASH WEIGHTS.

Sectional ..... per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's ..... per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style ..... per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style ... per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish ..... per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood ..... per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	....	0 85
" 18 x 30	....	1 00
" 18 x 36	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb ..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ..... per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita ..... per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador ..... "	....	0 13
" Axe ..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas ..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe ..... per gross	3 50	5 00
Grind, 40 to 200 lb., per ton		25 00
" under 40 lb., "		28 00
" 200 lb. and over		31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch ..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ½ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk ... 85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers ..	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin ..... per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's ..... each	0 90	2 85
" steel ..... each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German ..... per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian ..... per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress ..... per lb	0 33	0 45
Staging ..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent. .....
Diamond, Famous, Premier, discount 50 and 10 per cent. .....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17 $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net .. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in. ..... per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

Have you ever tried the "Cutwell" Razor, manufactured by the celebrated firm of J. A. Henckels, Twinworks, Solingen, Germany? It is to-day the leader in the Canadian market. Your stock is incomplete without it.



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Ramsay & Son, Montreal.
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Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

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Greening, B., Wire Co., Hamilton.

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Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
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Gurney Foundry Co., Toronto.
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Lewis Rice & Son, Toronto.
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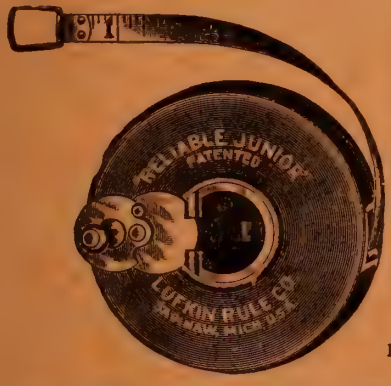
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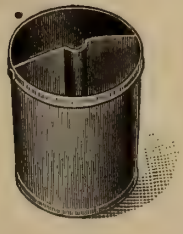
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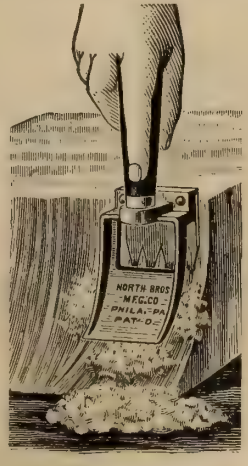
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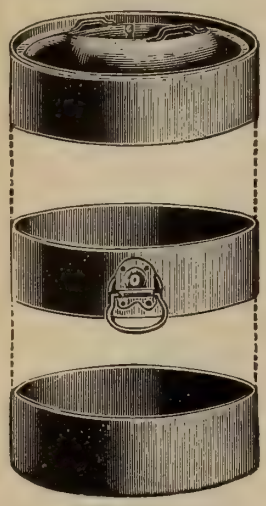






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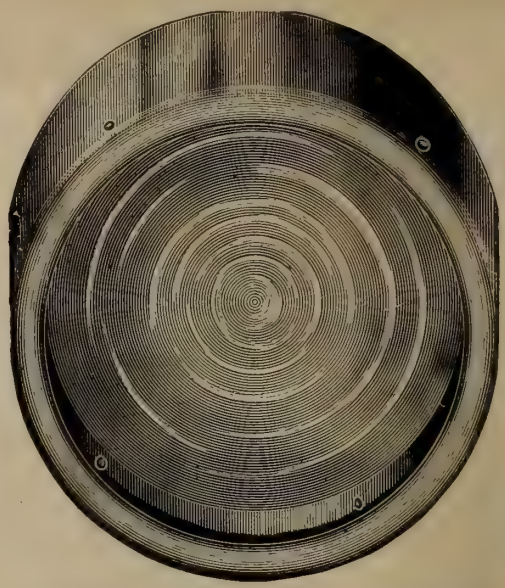
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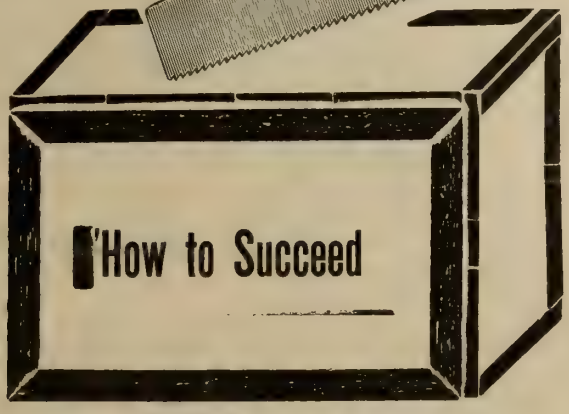
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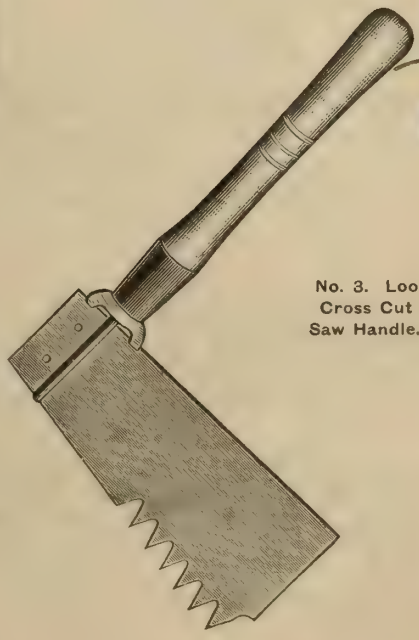
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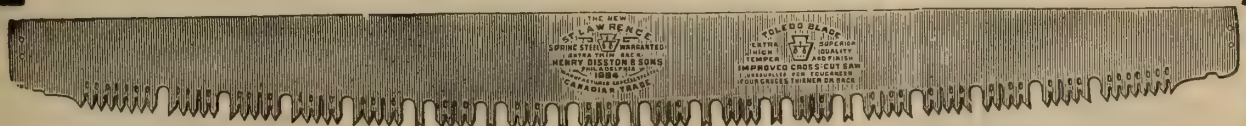
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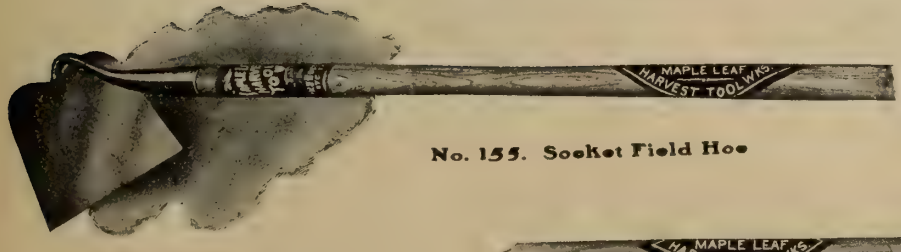
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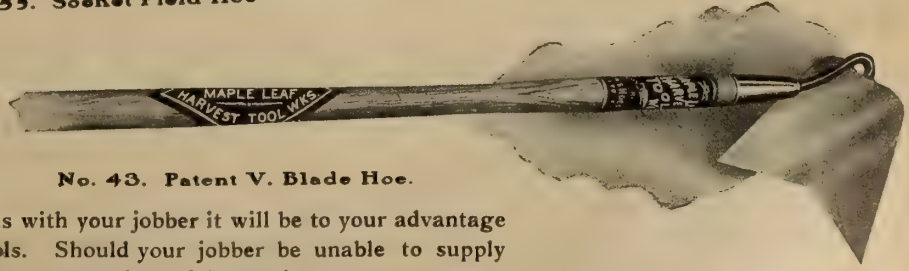
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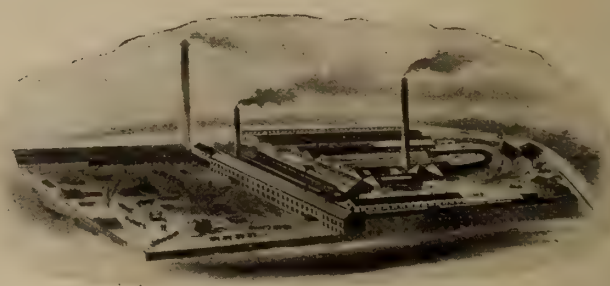
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These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



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For Business and Pleasure



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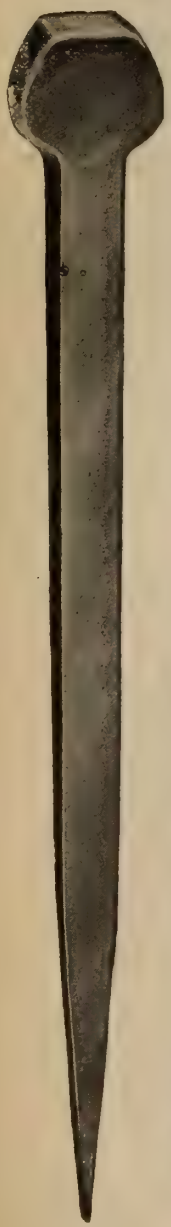
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Remember, that the recollection of the quality will remain long after the price has been forgotten.

Your orders and preference for the "C" brand respectfully solicited.

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SILVERWARE fully GUARANTEED as to Quality

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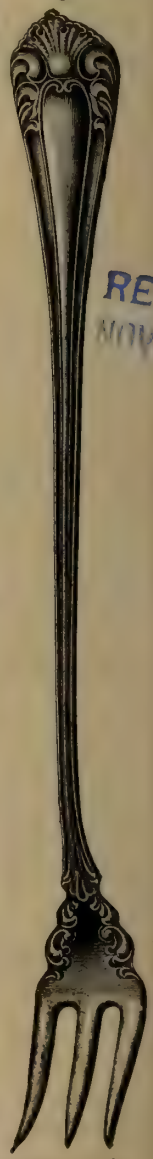
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NEW DESIGNS in every line of our manufacture



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To Owner
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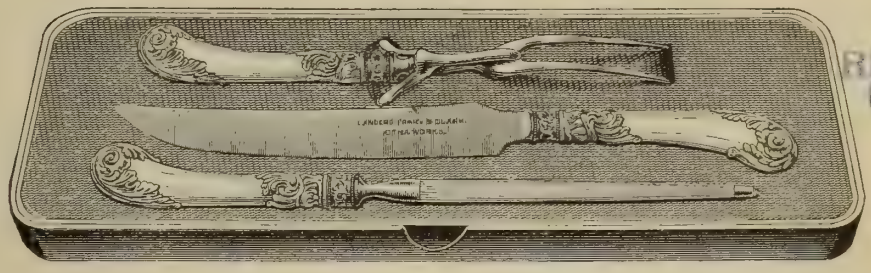
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E. G. GOODERHAM, Managing Director

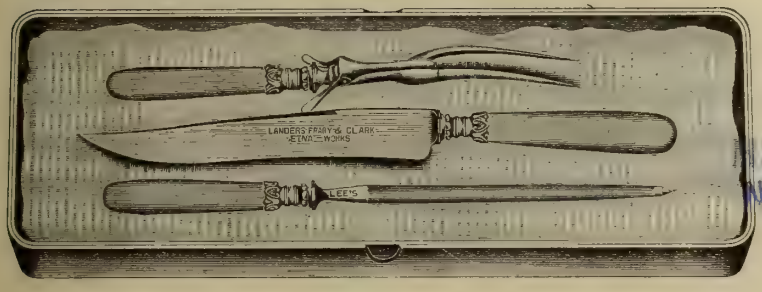
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Set includes Meat Carver, Fork and Steel.



No. C 99



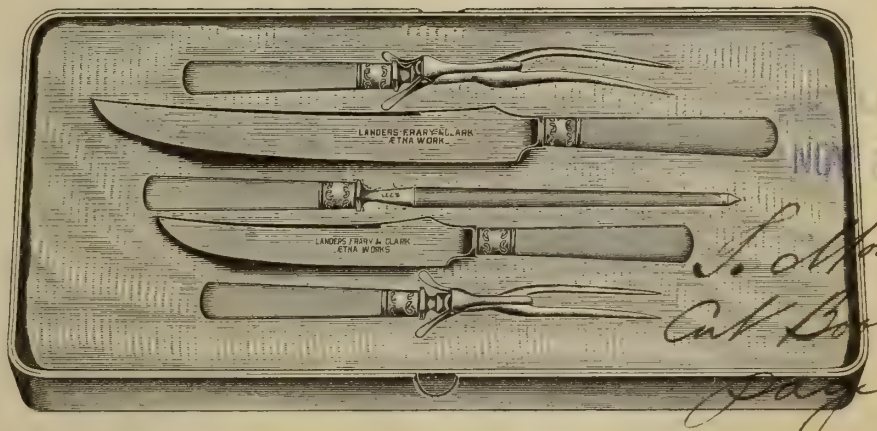
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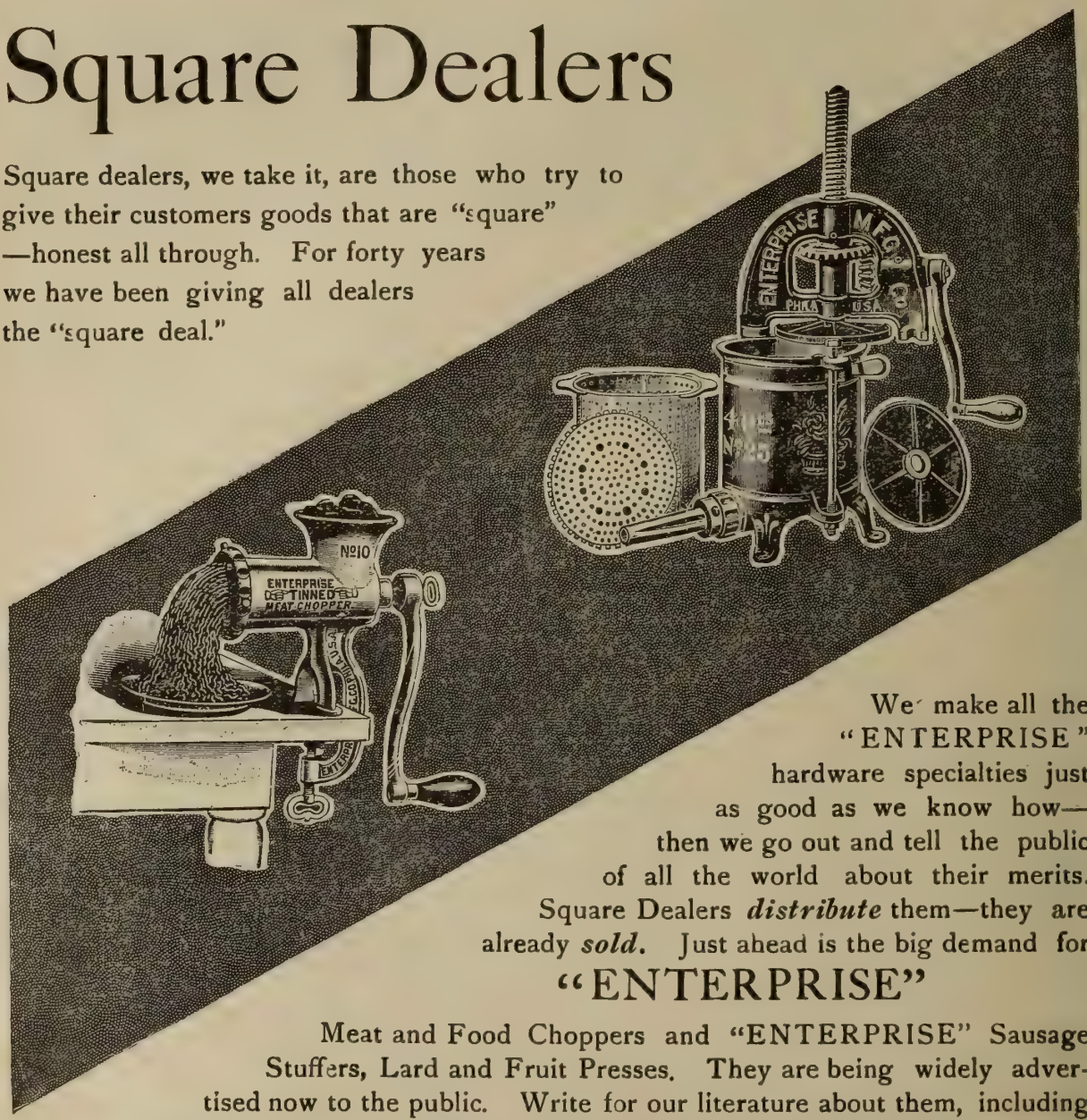
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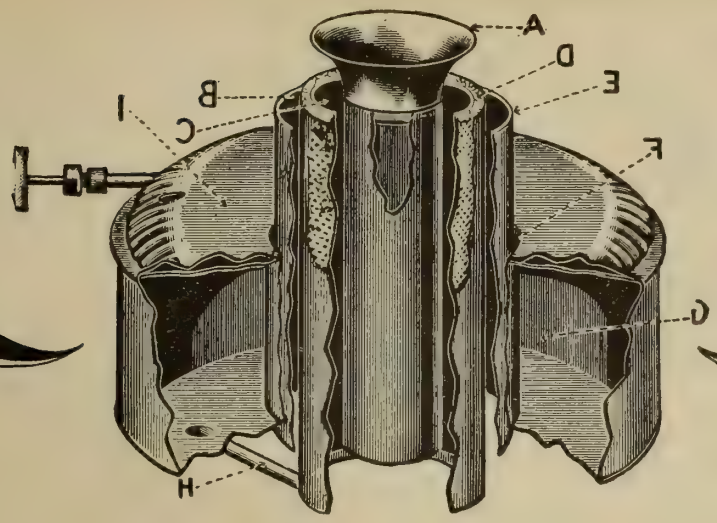
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It's the Safety Burner that makes the Aluminum Oil Heater a perfect heater. Note construction above :

A—Flame Spreader free from perforations, clogging up impossible. B—Air Space outside of Wick Tube. C—Air Space inside of Wick Tube. D—Wick. E—Outside Casing to Burner. F—Air Space between Fount and Outer Casing. G—Fount for oil, entirely separate from Burner, oil fed to Wick by small tube. H—Feed Pipe, conducting oil from Fount to Burner. I—Shield resting on top of Fount with Air Space underneath,

Radiates heat like a base burner from top, sides and bottom—and radiates a lot of heat, too.

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Is not "Brazed like a Bicycle." Do not be deceived by our imitators or their agents. INSIST on having the Fisher Tube Skate; they are fully guaranteed by us, no matter whom you buy them from. We will gladly repair or replace, free of charge, any defective skates of this year's make, upon their being returned to us by the purchaser. The Fisher Tube Skate has been on the market longer, is better made, and there are more of them sold than all the other tube skates put together. Remember the guarantee. Send for Catalogue.

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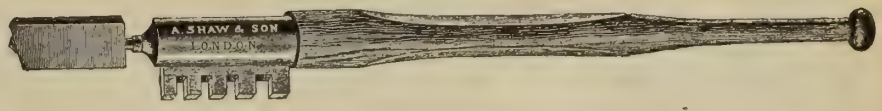
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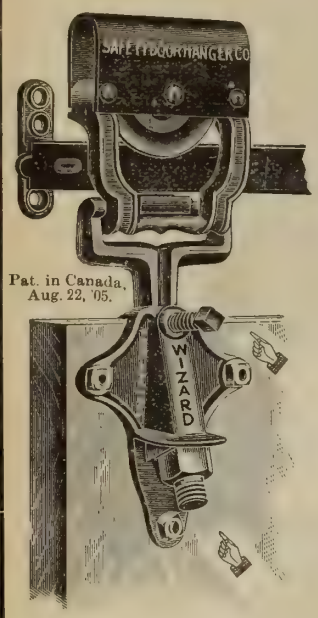
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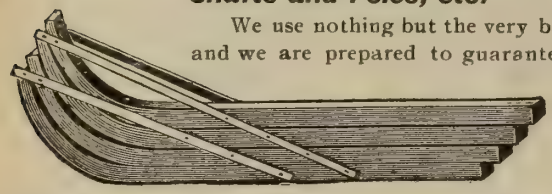
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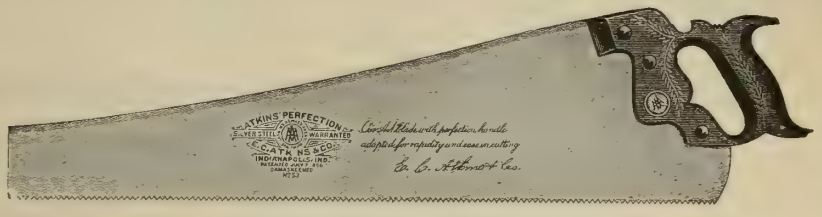
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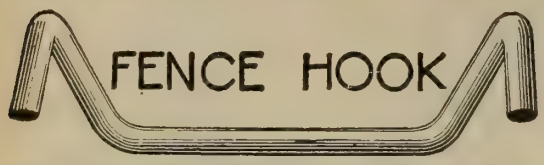
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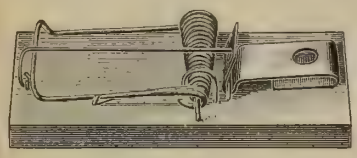
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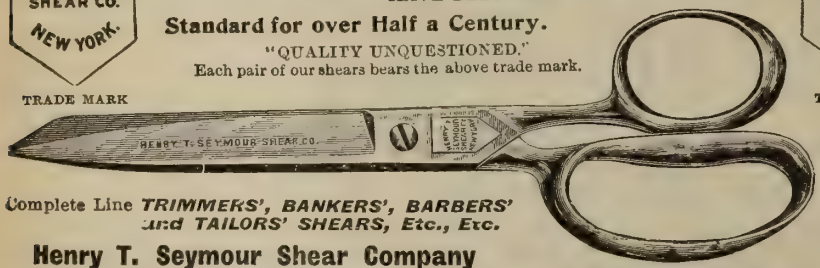
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Brand

Sold by all jobbers who are up-to-date.

It sells readily. Is selected carefully; soft and smooth. Prices lower than other high grade brands.

MAKERS:

W. GILBERTSON & CO., Limited.

PONTARDAWE, SOUTH WALES.

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL

TELEPHONE, MAIN 3389

GALVANIZING AND TINNING

THE CANADA METAL CO. TORONTO, ONTARIO.

MAPLE LEAF

STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

A Royal Warrant



couldn't secure you more fully.

WARRANTY

This saw is made of CRUCIBLE CAST STEEL, of the FINEST QUALITY, is tempered in Oil, carefully tested, and is

FULLY WARRANTED

If found defective upon reasonable trial the purchaser may return it to the Ironmonger from whom he bought it and who is hereby authorized to replace it free of charge or to refund the price paid.

If returned, this label, properly filled in on the reserve side, must be attached to the saw.

SPEAR & JACKSON
Etna Works, SHEFFIELD

To every hand saw we send out is attached a label corresponding to this.

You assume no risk in selling our saws—your customer takes none in buying them.

We stand behind you and guarantee satisfaction.

Couldn't have anything fairer than that could you?

SPEAR & JACKSON ETNA WORKS SHEFFIELD

Don't Stand in Your Own Light

YOU DON'T BELIEVE THAT THE RESULTS REPAY THE TROUBLE. THAT IS WHY YOU DON'T WRITE US ABOUT

MAXIMUM LIGHT GLASS

You say: "I believe there is merit in the article. Those statements about what the glass does could not be published if they were not true. But the question is: Will it pay me to give MAXIMUM LIGHT GLASS a portion of my attention?"

Cautious Hardwareman! **IT WILL PAY YOU.** Not so long ago a group of Hardwaremen, just as cautious, just as incredulous as you are, were tempted, through hearing of the rich results elsewhere, to make a Sales Test. Each one ordered a trial supply. They sold sufficient glass to place 8,300 windows in office buildings. That group of merchants are now regular buyers. They had no more energy or sagacity than you have; and no more luck came their way than comes any Hardwareman's way. They merely adapted themselves to conditions, kept their eyes open, and when the chances came seized them. Those chances are increasing every day, because building regulations are growing more rigid and because property owners are growing wiser. Is MAXIMUM LIGHT GLASS—the only absolutely successful daylight increasing system in the world—not worth an enquiry from you? You can get Samples and Booklet free of charge, even if you don't intend to buy just now.

Sole Canadian . . Agents . . **THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.**

Glass Importers and Manufacturers.

SPIRAL PACKING

THE CANADIAN RUBBER CO OF MONTREAL LIMITED

Hundreds of Hardware Men have learnt wisdom from experience, and are placing their stock orders for Spiral with us.

We've manufactured 90% of Spiral Packing sold in Canada during the past 20 years.

THE MARK OF QUALITY.

Under our own name and Brand we now offer "CANADIAN" SPIRAL,—the matured results of our exclusive experience in manufacturing this special kind of packing.

Place a trial order with us, and it won't require any advertising talk to make you a permanent buyer.

We would be glad to put our proposition fully before you.

Write our nearest Sales Branch to-day for samples and information.

172 Granvill St., Halifax, N.S. | Imperial Bank Building, Montreal, Que. | Front and Yonge Sts., Toronto, Ont. | 89 Princess St., Winnipeg, Man. | 403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



Arctic Snow Shovels

are securely fastened to the handles by bolts, which pass through iron straps encircling the handles.

Are the shovels that you are selling made in this manner?

We stock them in two qualities—Japanned and Galvanized.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. CO. OF MONTREAL, 58 McGill St., Montreal, Que.

KEMP MFG. AND METAL CO., Limited, McDermot Ave. East, Winnipeg, Man.

WINDOW AND INTERIOR DISPLAYS

IMPORTANCE OF DISPLAY.

THE slogan of the moment is, and should be, that every department should push its business steadily forward. Business must not stand still. Everything should and must expand. If a department stands still its condition is anxiously and immediately looked into and the remedy applied, because the astute proprietor well knows that any department that comes to a sudden halt will not be long in descending the down grade.

Now, the decorating is a department in itself, and the trimmer is just as responsible for the conduct of its affairs as any other department in the building. He should closely scrutinize his expenses and see that the goods entrusted to him for display are not impaired in value while in his possession.

Novelty in Display.

Of all the elements that go to make a good window display, perhaps the most important is novelty. It is the trimmer with brains, originality, thought, and unique ideas who will be most successful in drawing the attention and coin of the realm to his establishment.

There are few trimmers who are blessed with a sufficiency of new ideas to run them for a year without at least a few thoughts that have been sprouted or originated by others. For this very reason the decorator and retailer should be on the alert for new ideas that can be revamped and turned to good account.

Don't forget that a hint may often be found in some other lines of business that can be advantageously adopted or slightly altered to ring in a telling and creditable display in your chosen line.

No good trimmer can afford to ignore a single suggestion that can in any way be turned to account. The cleverer you are the more you will appreciate and improve upon what you see. None of us are yet so bright as to know it all, and none of us do our work so perfectly and thorough that it cannot be bettered. Just when you think that your work is about perfect is the time when you are liable to run across the same work executed just a trifle better. That is exactly what excites emulation and acts as a spur to bring out the best that is in us.

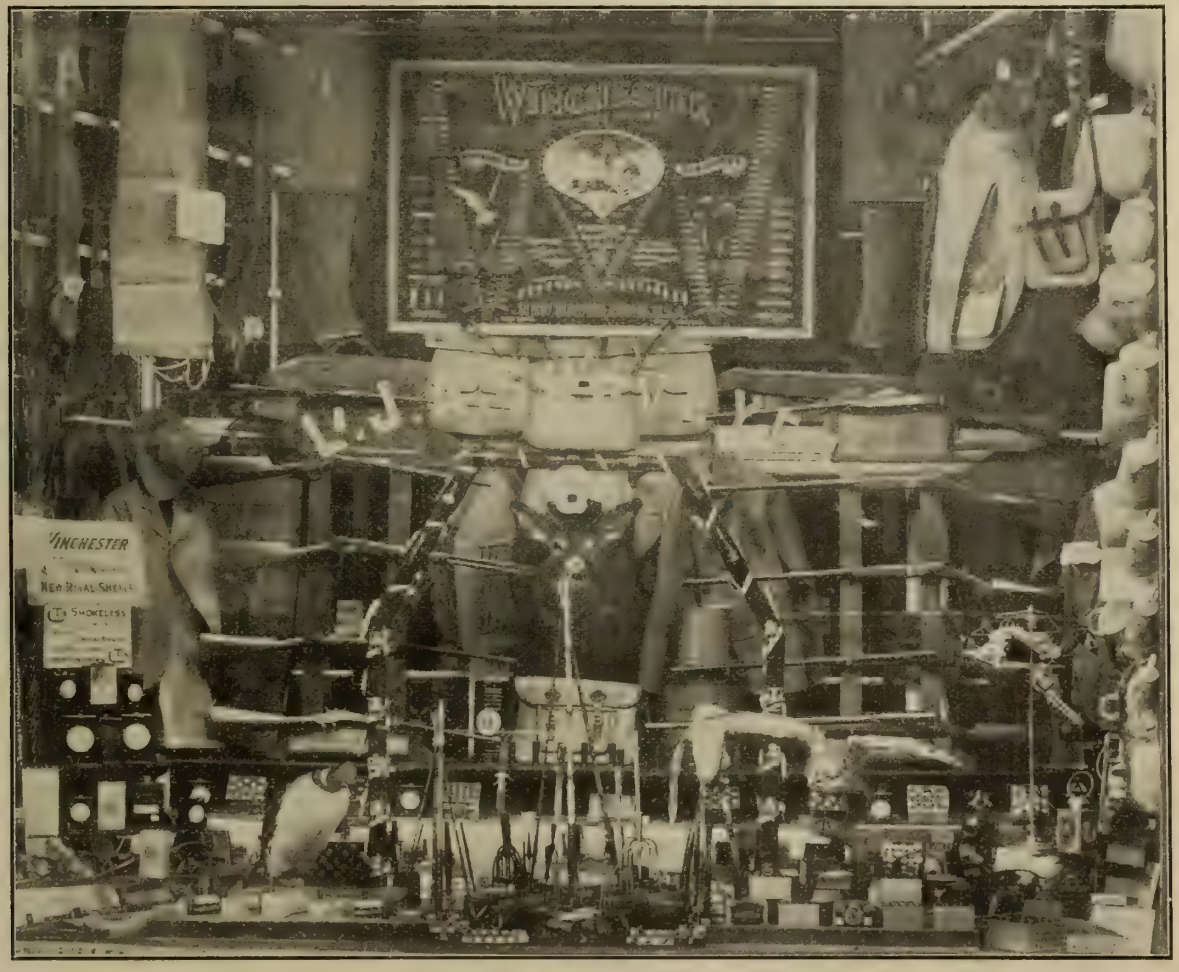
Never rest satisfied with yourself and your best endeavors. Window trimming is like learning, there is so much ahead that we don't know that the little we do know seems so puny, insignificant and small that it ought to keep us humble.

Aim at Results.

Methods are many, designs differ, ideas vary, windows are architecturally different, and stocks never alike. Yet the aim of every trimmer should be the same—to excite in the mind of the public a desire for possession of the goods displayed.

It may not be generally known that the word "advertise" means literally to "turn to." Therefore your displays should be original and attractive enough to cause the passer-by "to turn to" them. In other words, they should be designed primarily to catch the eye of the passer-by.

The next desideratum is that the display be of such a nature as to induce a



Sporting Goods Window Shown by L. J. A. Surveyer, Montreal.

generous percentage of the gazers to enter the store and become purchasers.

In order to get best results severe extremes must be avoided. For instance, a display that is simply beautiful to look upon without pushing home some salient point or argument to the possible buyer is not apt to accomplish much.

A window may be very beautiful, may even stop people in crowds, and not sell a dollar's worth of merchandise. That may be good window dressing, but it is bad business from a business point of view, and it is business that most people are after, not simply glory.

Give First Attention.

Usually a salesman, the brightest and most inventive of the store's personnel, is selected or commissioned to "dress the windows." But he is so burdened with other duties, expected to sell as many goods, and have as large a book at the day's end as those whose duties are only to handle customers, that he cannot possibly do both satisfactorily. This is manifestly unfair, and we believe one of the principal reasons why so many windows are neglected and unattractive. He is first of all a clerk in the eyes of his employer, and being a clerk he is expected to give foremost attention to "clerking," as our rural friends and brothers term it. Decorating, if his trimming duties may be dignified by the word, is a side issue with him. Not because of any desire on his part to make it so, but because his employer insists upon regulating his duties in such a manner that he cannot alter them.

It is false economy, impolitic, passe, weak-kneed and limpy to make the decorations the secondary part of the decorator's duties, and the number of stores that are backward and only semi-profitable in consequence thereof are legion.

Interior Correspondence.

We would like to see more of our merchants awake from their lethargic slumbers and infuse life, energy and system into their business. Many great stores grow from small beginnings, but they must be watched over with an acute sense of the management which fertilizes and promotes, that they may grow to be big and sturdy, and stand as fitting monuments to the industry, perseverance and "get up" of the men who planted them.

The chief fertilizer should be system and prominent display. Magnetic windows assist in getting people through the portals; the decorations on every side should then make the interior enjoyable to your visitors. No little store will ever become great, and big, and powerful, if a niggardly hand is at the rudder.

The general hospital committee of Port Arthur has purchased a site and will erect a hospital in the Spring.

A FINE SPORTING GOODS WINDOW

An illustration of one of the most attractive windows seen in Montreal for some time will be found on page 19. It represents the sporting goods display of L. J. A. Surveyer, the St. Lawrence street hardware merchant.

It is safe to say that a sporting goods window will always attract general attention, if prepared with ordinary taste. The public always seems to be interested in this class of goods.

Consequently there is much to recommend such a window even at first sight, and this coupled with Mr. Surveyer's well known ingenuity as a window dresser, has produced the result here shown.

FLEXIBLE FLYER SLED NO. 6.

S. L. Allen & Co., 1107 Market street, Philadelphia, Pa., have this year increased their line of Flexible Flyer Sleds by adding the one which we present in the illustration herewith. They previously made but five sizes of this sled, but the one exhibited is designed to carry six adults and is intended to compete especially with double runners or bob sleds. It is mentioned by the makers as being particularly fast but especially strong and light. The No. 6 is 101 inches in length, 8¾ inches high, 16 inches wide and weighs 41 pounds. It is steered in the same style as the other sizes of these sleds, without touching the feet to the snow or ice.



Flexible Flyer Sled No. 6.

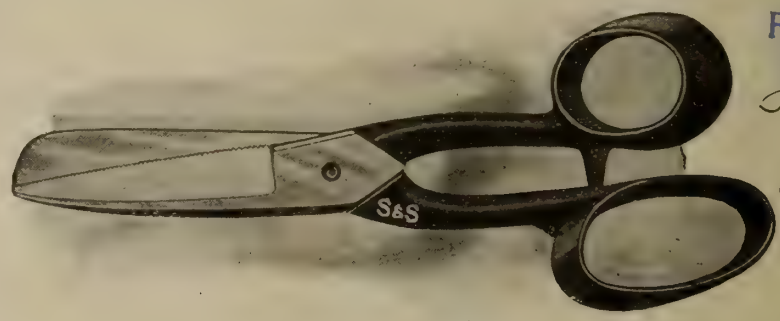
S. AND S. COGGED SCISSORS.

THE scissors here illustrated are of a most interesting character inasmuch as they are designed to cut leather, rubber, packing, linoleum, asbestos, and similar material as easily as paper.

It will be noticed that the lower blade is equipued with cogs or teeth, which hold the leather or other material in place while it is being cut. The upper blade is of finely tempered steel, and is sharp enough to go through any thickness of leather belting with the greatest ease.

The scissors have been found to be very serviceable in a number of manufacturing plants, where leather belting is used for transmission purposes. They also possess fine lasting qualities, as is attested by the fact that one Montreal firm have been using a pair of these scissors for over two years, with no apparent effect upon their efficiency.

Schuchardt & Schutte, New York, who are the manufacturers of this article, as well as many other hardware specialties, have recently appointed as their Canadian agents McLean & Sophus, 301 St. James street, Montreal. This firm is anxious to appoint agents throughout the country to handle Schuchardt & Schutte's specialties, and will be pleased to correspond with interested parties. Kindly mention Hardware and Metal in writing.



S. & S. Cogged Scissors.

NEW STORE AT STRATHCLAIR.

About a month ago Geo. Manson opened his new general store in the town of Strathclair, Man., with a stock of groceries and dry goods. He has a very attractive store with a floor space of 35 by 65 with two large glass fronts. The interior is finished in cherry with hardwood floor, oak counters and metallic ceiling painted white. He has put in a system of high pressure gasoline lamps and in fact every modern facility for do-

WIRE NAILS
TACKS
WIRE

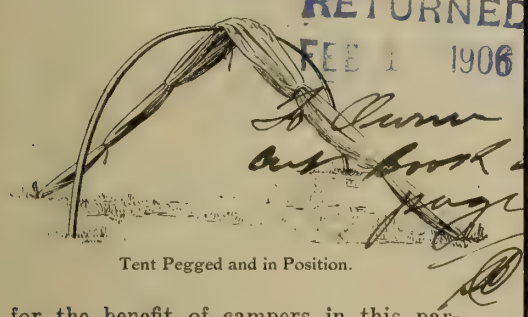
Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

ing business is found in this store. Mr. Manson's efforts met with such great success that he is now branching out into the hardware business, having secured the store next door, and is having it completely remodelled. It will be open about the first of November with an entirely new stock and will be in charge of D. Manson, who has had considerable experience in that line.

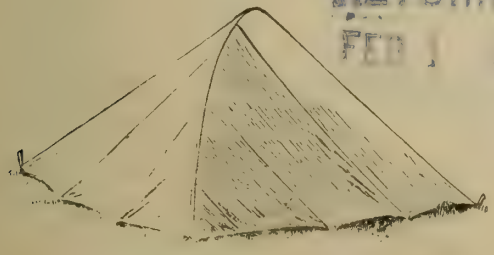
A NEW PORTABLE TENT.

IN the march of progress of the manufacturers the evolution of the tent has been, until the past few years, comparatively slow. We, however, have noted a number of improvements



Tent Pegged and in Position.

for the benefit of campers in this particular line. The latest to be brought to our notice is the V.X.L. portable tent, manufactured by F. H. Gotsche, of 416 Hoffman avenue, San Francisco, Cal., who claims that his new invention



Tent Ready for Occupancy.

is an improvement over all others for the reason that it will resist the wind, is easier to carry and can be erected without much trouble. Another advantage for it is that it can be erected so that it is a tent within a tent, using a larger one over it, thereby leaving a sufficient space between the two tents to keep out the hot air and resist heavy rains or storms. The Canadian agents for this tent are Messrs. Rochussen & Collis, Victoria, B.C.

MADE MONEY ON THE TRADE.

A CUSTOMER purchased a dozen of a certain article in a Brooklyn hardware store. At the end of a month he found that he would need only one. With doubt in his mind as to his reception he bundled the eleven up and called at the store. "Of course we will take them back," said the salesman. "Thank you. I was wondering as to what I had better take in place of them. Can't think just at the moment as to what I need." "You do not need to take them out in trade," said the salesman. "We are perfectly willing to give you the cash." "I hardly feel like asking that," was the response, "but it would be an accommodation." The salesman figured a moment, went away, and came back with the money. When the other man received it he counted it over and said: "Hold on, you have made a mistake!" "I guess not," said the salesman. "Yes, you have given me too much." "Oh, no," said the dealer. "That is just what the goods are worth to-day. You see, the price has gone up, and it is only fair that you should receive the benefit." The customer went away musing. And it is safe to say that on the next occasion when he needs hardware he will go back to that store.

Make the Most of Your Paint Business

THERE'S opportunity for steady trade and larger profits for you in selling ***Sherwin-Williams Buggy Paint*** and ***Sherwin-Williams Enamel Leather Dressing.*** We want wide-awake agents everywhere to push these goods and take advantage of the plan we have for increasing their use among livery stables, repair shops, and all owners of vehicles.

For steady, year in and year out sales there are no better paint specialties made than ***Sherwin-Williams Buggy Paint*** and ***Sherwin-Williams Enamel Leather Dressing.***

The former has the toughness, high gloss and permanency of color that make it especially adaptable and popular for refinishing buggies, wagons, boats, and similar surfaces exposed to the weather; while the latter is unexcelled for refinishing carriage tops, curtains, etc.

There is a demand all around you for these goods. Write our nearest office today for our special proposition

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre Street, Montreal.
Warehouses: 80 York St., Toronto; 147 Bannatyne St., E., Winnipeg.

1508



Adjustable Drill Attachment.

ADJUSTABLE DRILL ATTACHMENT

EMMERT MFG. Co., Waynesboro, Pa., represented in Canada by the Canadian Fairbanks Co., are offering an adjustable drill attachment with bracket of improved form for holding the drill, as shown in the cut. The bracket can be attached at any point along the side or end of a bench and is adjustable in any position or height. The drill can be used with any kind of vise, but is here shown in connection with one of the company's Universal vises. Twist drills from 1-16 to ⅝ inch may be used in the device, but are not supplied with the attachment.

The Bemis Bag Co., of St. Louis, have purchased a site for a factory in Winnipeg, and will instal a large amount of machinery.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

PAGE-HERSEY IRON & TUBE CO., Guelph, have issued a valuable booklet of 44 pages, well bound in an elaborate cover. The reading matter contained in the book shows the different lines of pipe manufactured by the company. The Page-Hersey plant at Guelph has been in operation over two years, during which time several additions and improvements have been made, the most important being the establishment of modern galvanizing and a large pipe department. Various illustrations of piping, nipples, couplings, etc., are given in addition to tables giving dimensions, prices, etc., of the different goods manufactured, another feature of the book being the reproduction of many testimonial letters sent to the company by users of their material. Any reader of Hardware and Metal who mentions the paper can secure a copy of the catalogue.

Mechanics' Fine Tools.

The Athol Machine Co., Athol, Mass., have sent Hardware and Metal a copy of their catalogue illustrating the different styled tools manufactured by them. The book is of one hundred and eight pages and cover, of compact size and exceedingly well illustrated, below each cut appearing tables giving prices for the various sizes of tools and machines listed. This valuable little book can be secured by any reader of Hardware and Metal on request.

Walker's Cork Screws.

Walker's Self-Pulling Cork Screws are being presented to the trade as good holiday souvenirs and large sellers during the whole year by the Erie Specialty Co., Erie, Pa. A large sheet showing illustrations of about a dozen types of the Walker goods is being mailed to the trade, the sheet containing an offer that with each half gross a beautiful display stand will be given the dealer. The company also offer to send illustrated catalogues and discount sheets to any inquirer who mentions having seen the offer in this paper.

Builders' Hardware.

The Coleman Hardware Co., Chicago, Ill., have issued catalogue No. 9 describing the builders' and cabinet hardware manufactured by them. The thirty-six pages contain many illustrations of types of casters, caster rings, ceiling hooks, chest handles, barn door hangers, hinges, pulleys, shelf supports, etc., prices of the different lines also being given. The catalogue is well gotten up and will be sent to any reader of Hardware and Metal on request.

Auto Lock Clasps.

Price lists of the Auto-Lock Clasp Co., Buffalo, N.Y., have been received. The sheets contain many illustrations showing the workings of the lock clasp, which has undoubtedly great merit as a fastener for tents, canopies, awnings, covers and all canvas goods. The sheets will be sent to any user of these goods if the name of this paper is mentioned in a letter of inquiry.

IT IS SAFE



LOOK HERE

for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

New York Office: 99 Chambers St.

As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them, anyway—it costs you nothing. If you will ask for it, we will gladly send you our bright little booklet, 'Shots," together with our handsome catalogue.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

Pure Water and Pure Air.

Under this caption an interesting little booklet is issued by the J. W. Harris Co., Limited, Montreal. The first part of the publication is devoted to an illustrated description of the Harris Filter, which is said to make bright and wholesome the ordinary turbid and impure city water. Then follows twenty-five pages of reading matter dealing with the Aeolian and Zephyr Ventilators manufactured by this company, including testimonials from several who have tried this method of procuring pure air. Finally, the Harris Expansion Conductor Pipe, which, it is claimed, will not burst by frost, comes in for a share of attention. Altogether, the booklet is well worth having, especially as the Harris Co. will be pleased to send it to any interested person mentioning this paper.

Electrical Accessories.

Sheets illustrating and describing the products of the Pioneer Electrical Works, Liverpool Road, London, England, have been received by Hardware and Metal and will be forwarded to any reader who handles these goods. The lines given special attention on the sheets are armored plugs, switches, pivot combinations, etc.

For Heating, Cooking, Lighting.

Reineke, Wilson Company, Pittsburg, Pa., manufacture natural gas appliances for heating, cooking and lighting, and carry a large stock to promptly supply the trade. This company, known as makers of good gas goods, does a very large business and is widely known for progressive methods and furnishing that which draws trade and makes business. The trade is invited to ask for catalogues, furnishing full particulars concerning all of the goods made. Mention Hardware and Metal.

SEEING BY TELEPHONE.

"How well you're looking this morning!" says the facetious man in telephonic greeting to his friend a hundred miles away. Mr. J. B. Fowler, of Portland, Oregon, has taken the nub out of this joke by inventing an apparatus by which images displayed before a lens at one end of a telephone wire are projected upon a screen at the other end. Mr. Fowler invites his visitors to talk with his daughter. They place the telephone transmitter to the ear, apply the eye to an aperture in the telephone box, and see the young woman in miniature speaking 5,000 feet away. Mr. Fowler is preparing now to show a train in motion in his invention. He has no doubt of its commercial practicability, and declares that within a few years it will be in operation throughout the country. For some it may be a boon. For others it will be a curse. Who has not telephoned when he wanted to avoid a face-to-face interview? What will frisky husbands "detained at the office" say to a machine that shows to suspicious wives the chips that pass in the night? Mr. Fowler may not be a public benefactor after all.—Everybody's Magazine.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

HORSE CLIPPING MACHINES

RETURNED NOV 11 1905



Stewart's Patent Knife

RETURNED NOV 11 1905



THE 20TH CENTURY

It is suspended from the ceiling by a rope, permitting all parts of the horse to be reached with facility.

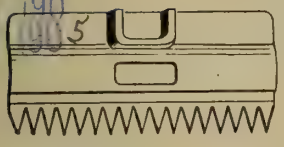
Turns easy and cuts as fast as any machine made. Requires no experience to operate it.



20th Century Machine

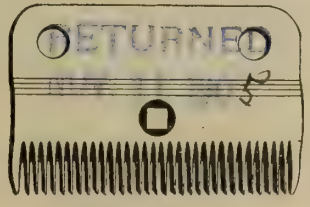
PLATES FOR STEWART'S PATENT KNIFE

RETURNED NOV 11 1905



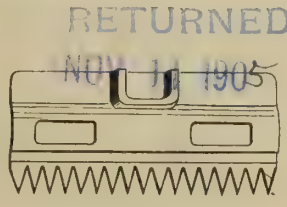
Top Plate—One Hole.

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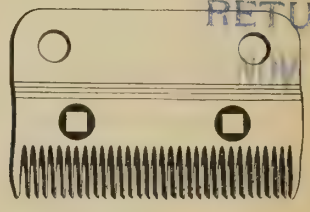


Bottom Plate—One Hole.

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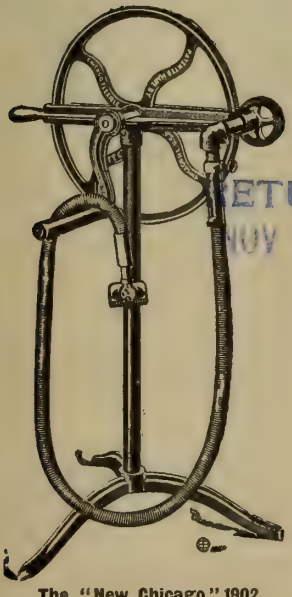


Top Plate—Two Holes.



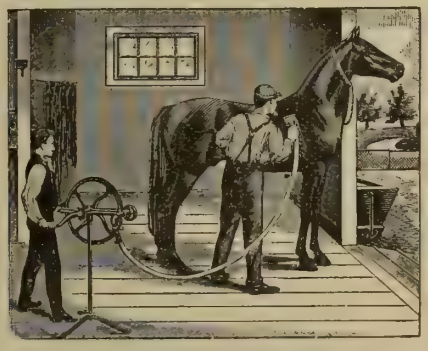
Bottom Plate—Two Holes.

RETURNED NOV 11 1905



The "New Chicago" 1902

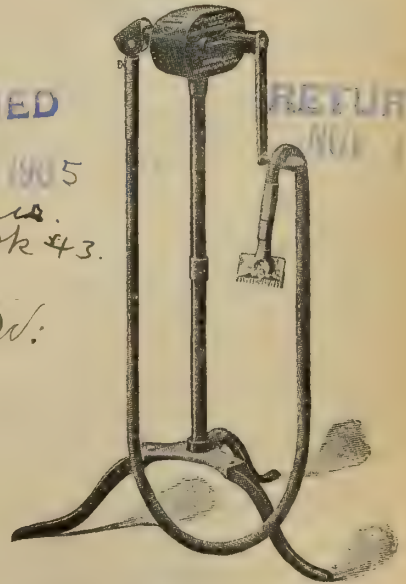
RETURNED NOV 11 1905



The "New Chicago" 1902 Clipping Machine

It is made with all cut gearing from solid metal. The teeth are milled **not cast**, and engage with hardened steel pinion. It has a positive power—no belt to slip; no lost motion. Every turn of the wheel is sure to bring 28 vibrations of the knife blade.

RETURNED NOV 11 1905
To Annis.
Cut Book 43.
Page 1
A.A.W.



Stewart's Clipper, New Inclosed Type

An inclosed machine that converts the slow motion of the crank handle to the high speed required for the knives with practically no frictional loss. All the moving parts are cut from the solid steel bar; are hardened file hard, ground absolutely true, and being thoroughly incased and protected from dust and dirt and run in a bath of oil, will last forever.

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST

Factory: Dufferin Street, Toronto.

Our prices are right

——Here is the——

"GOOD CHEER" RANGE

You Will Want

A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price

It Has a Full Sized

20-INCH OVEN

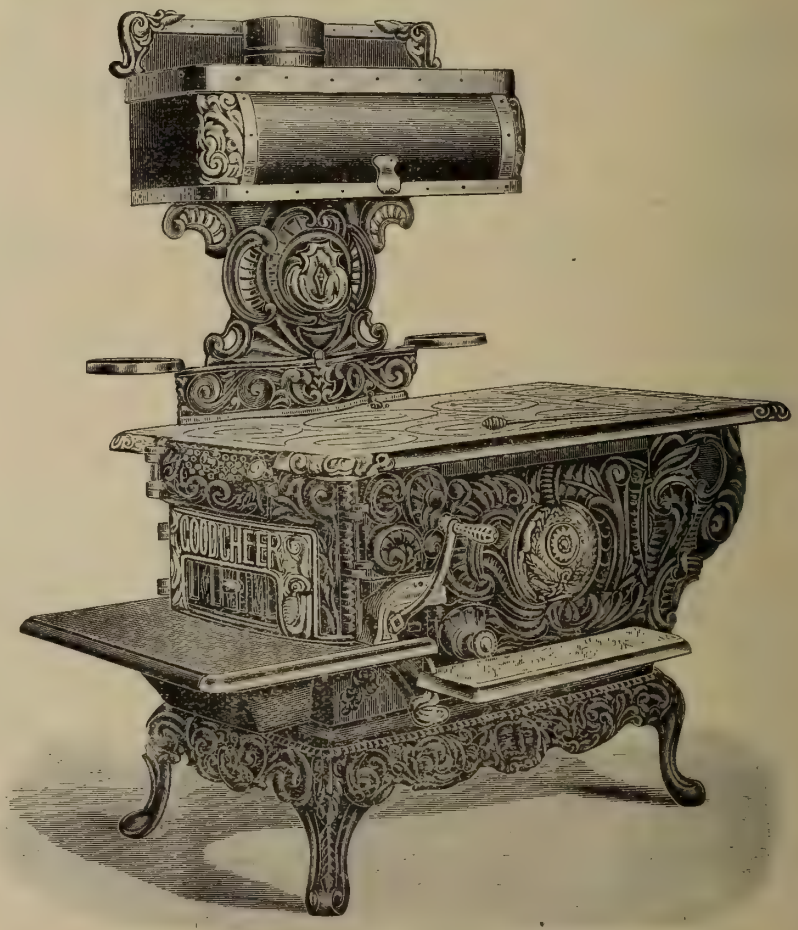
Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted



The "GOOD CHEER" KITCHEN QUEEN

THE JAMES STEWART M'F'G CO. Limited

Winnipeg, Man. ***Woodstock, Ont.***

STOVES AND TINWARE

THE PROPOSED TIN INDUSTRY.

IS the project of attempting to manufacture tin plates in Canada at the present time a practical one? In order to answer this question it is not only necessary to weigh the matter carefully as it affects all the conditions in Canada, but also to consider the history of the tin plate industry in the United States.

The home of the tin plate industry is in Wales, which country is admirably adapted for its production, having nearly all the necessary baser products which go into the article in close proximity, and with excellent transportation facilities, the works in many cases being upon the seaboard. The principal countries to which exports are made from Great Britain are: Germany, Holland, Belgium, Russia, France, Australia, India, Canada and the United States. No country in the world is able to compete with the Welsh makers, except under the advantage derived from extremely high protection.

A fair illustration may be found in the history of the tin plate industry in the United States. Long before the industry was first established in the United States that country had developed the heavier and baser products of iron and steel, which at the present time are not produced in Canada, with the exception of steel rails. This industry is just now being started.

The total amount of finished rolled iron produced in the United States, exclusive of hammered or forged products, was 2,038,948 gross tons in 1886.

The production of steel rails in the United States was 1,305,212 gross tons in 1880, 1,885,307 gross tons in 1890, and 2,385,682 gross tons in 1900.

The production of iron and steel structural shapes in the United States was 453,957 gross tons in 1892, and 1,300,326 gross tons in 1902.

The production of iron and steel wire rods in the United States was 279,769 gross tons in 1888, 536,607 gross tons in 1891 and 1,699,028 gross tons in 1904.

Although this is not a complete list of the various kinds of rolled iron and steel which were produced, it serves to illustrate to what extent the industry had been developed in the United States previous to 1891, when it was decided to put a protective tariff on tin plates to the extent of upwards of 80 per cent. ad valorem. Let us see what the situation is in Canada at the present time.

With the exception of steel rails, which we have just commenced to produce, our production is practically nil in respect to these commodities. The following is a list of some of the importations into Canada for the fiscal year ending 30th June, 1905, of the heavier or baser products of steel which are not at present being produced in this country. In fact, it may be said that no concern is prepared to produce these, with the exception of steel rails, which commodity is of only recent development. The list includes some classes of iron and steel imported into Canada during the year ending 30th June, 1905, which are subject to a protective duty:

	General Tariff.	1905.
Bar Iron or Steel, n.o.p.	$7 per ton	$ 875 067
Iron or Steel Ingots	$2 "	319,665
Bridges and parts of	35 p.c.	719,284
Railway Bars, n.e.s.	30 "	421,084
Railway Fish Plates	$8 per ton	176,002
Rolled Angles, Beams, etc. n.e.s.	10 p.c.	1,380,841
Rolled Hoop, Band, etc., n.e.s.	$7 per ton	98,889
Rolled Angles, Beams, etc., n.o.p. less than 35 lbs per yd.	$7 per ton	385,997
Rolled Plates & Sheets, n e s.	$7 "	28 ,239
Rolled Plates & Sheets, n.o.p.	10 p c.	640,776
Steel Bridge Plates	10 "	407,380
Iron or Steel Rods for making coil wire	Free	792,078
Steel Rails	"	5 0 1,702

It will also be noted that the article of rails for electric tramways is not being produced in thir country, large orders only recently going to the United States. Therefore we are producing little or nothing in most of the heavier grades of steel products, the development of which in the United States had reached the maximum at a time when it was thought in the interests of the country the tin plate industry should be fostered.

In other words, we are not producing structural steel, angles, beams, girders, channels, ship plates, tank plates, bridge material, and many other lines, the manufacture of which it has been the endeavor of the country to foster for many years past.

EXTENSION TO FACTORY.

IN order to keep pace with their rapidly increasing business, the Thos. Davidson Mfg. Co. have found it necessary to extend their already large works both at Montreal and Winnipeg.

Their Montreal plant, which is situated at the corner of Albert and Dominion streets, Ste. Cunegonde, is being greatly enlarged by the addition of a fine four-storey brick wing, 220 feet long by 50 feet wide.

At the west end of the new wing, an engine room 45 x 50 feet is being equipped to contain two large engines, while, close at hand, a huge concrete tank, with a capacity of 105,000 gallons, will afford a great addition to the factory's water supply. At the east end is situated a fire-proof tower, in which the stairs and elevators will be constructed, while space is also provided for the bookkeeper's office and vaults, and storage for dies, patterns and tools.

The feature of the new addition is the splendid stamping shop, which occupies the basement for its entire length. This has been pronounced by experts to be among the finest stamping shops on the American continent. The ceiling of this room is twenty-five feet high. A kind of shelf, one-third the width of the wing, runs along one storey above the stamping shop, and on this shelf the machine shop will be located. Here all the lathes and other machines will be set up.

The whole building is constructed on the most solid lines, and all floors are four or five inches thick, surmounted by one inch of hardwood.

A new concrete tunnel six feet and a half by four feet and a half, covering automatic conveyors, runs across Albert street, connecting the stamping shop and enamel shop.

This addition will increase the capacity of the Thos. Davidson Mfg. Co. by nearly 25 per cent., and this enterprising firm have every reason to feel proud of their efforts to keep up with the growth of the country.

STOVE SALESMEN.

"ONE of the most essential things is for a salesman to think well of, and have confidence in himself. Now, the best way to elevate yourself, in your own estimation, as well as in others, is to devote a reasonable amount of time and attention to your personal appearance.

"The salesman who patronizes a good laundry, uses his razor, clothes brush and shoe brush freely, is in keeping with the high grade goods he claims to be selling. It is uphill business for a slouchy, cheap-looking salesman to sell high-grade goods for a profit.

"If you invite some friends out home for a little dinner, or a card party, don't you generally hurry home to wash your face and brush up a bit? Now if you will go to that much trouble to make a good impression upon your friends, who are going to burn your gas and increase your bill at the grocery, why not spend a little time in preparing to make a good impression upon the people who visit the store and make it possible for you to live in a steam-heated flat.

"Much depends upon the reception given a prospective purchaser, when he or she enters the store. The first impression is generally lasting. If, in order to do a profitable business, it is necessary to have a clean, light store, a complete and well selected stock of goods, nicely dressed show windows and the most attractive advertising that it is possible to get up, why is it not equally important to have clean, neatly dressed, courteous salesmen? Why shouldn't a salesman give a prospective purchaser the same cordial reception in the store that they would receive in his own home?

"Were you ever invited to a strange place where you received a chilly reception, when you really expected to be shown special attention? You didn't have much of a desire to pay your party call, did you? Now, let's apply this to your business. Suppose your house comes out next Monday with a nice big ad announcing a special sale, and extends everyone a cordial invitation to call, and when a lady comes in and asks for some article advertised at an extremely low price the salesman looks disgusted, but finally condescends to show it in an unconcerned way. He not only renders the ad worthless, but he drives away what might have been made a good customer had he taken an interest in the special and then shown her some new goods that had just been received in another department, etc.

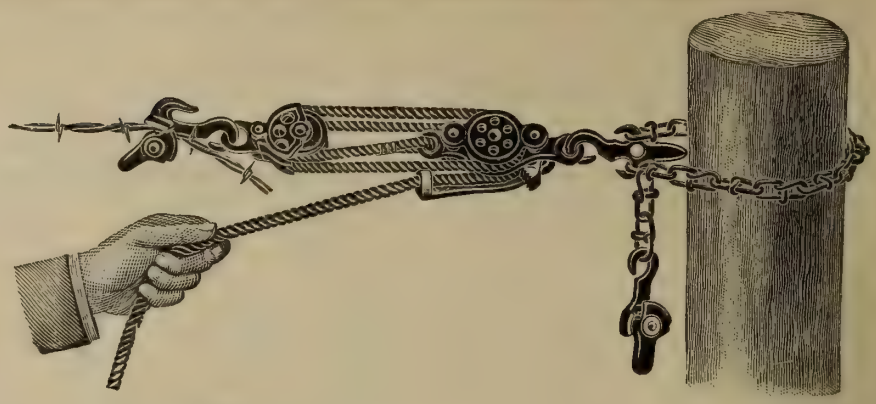
"Do you know how much it costs to bring a prospective customer into the store? If you don't, get the advertising man to figure it out for you, and

THIS IS THE
OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our Illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

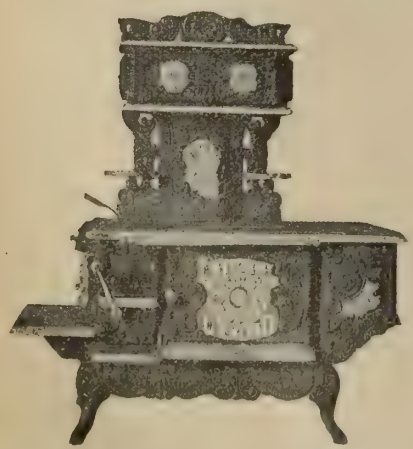
LLANELLY, WALES

The Shrewd Dealer

allows a good many feet of floor space to the **IMPERIAL OXFORD RANGE** because its many points of superiority are so apparent that it practically sells itself.

The lavish, yet judicious use of nickel plate attracts the eye of the particular housekeeper at once, and she realizes that the Imperial Oxford will be easily kept clean.

The oven is the most important factor of any range. The diffusive oven flue is exclusive to the Imperial Oxford, and by far the most effective practical improvement ever made in oven construction. The economy and satisfactory results obtained by this flue need only to be explained to sell



The Imperial Oxford Range

The Imperial Oxford has many other selling points—the patent draw-out duplex grate—the perfect arrangement of draught dampers and flues—the accurate oven thermometer and the perfectly proportioned fire-box.

You should do your share of the high-class range trade—the trade that pays.

Forty thousand Imperial Oxfords are in use to-day in Canada.

The Imperial Oxford is the range the people want because it has been and is being well advertised.

We help the dealer all we can. ***SEND FOR CATALOGUE 61.***

Can you supply the demand?

WE also manufacture Cast Iron and Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO WINNIPEG VANCOUVER 74

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

then you will appreciate the importance of showing them where to sign while they are there.

"When advertising has created a desire and induced a prospective purchaser to cross your doorsill it is then up to you, and advertising starts out after another one.

"Some salesmen, by their manner and talk, give a customer the impression that they are selling goods simply to make a profit and a good showing with the house. Others make customers feel that their only desire is to please them, no matter if it only amounts to ten cents. The salesman who can take an interest in the sale of a lamp chimney, or a bottle of furniture polish, will have no trouble in selling large bills, and will invariably have someone waiting for him when he is finished with a customer.

"Did you ever notice in a barber shop that one barber has from two to three men waiting for him, when others have nothing to do? If you will watch that barber you will find he takes his time and makes every man feel that he is receiving special attention. His razor is sharp; he puts four or five hot towels on your face when he is only supposed to use two. If you will make a further investigation you will find that this same barber spends his leisure moments stropping his razor instead of reading the Police Gazette.

"Do you know I think that we all spend too much time sitting around the front door talking about the Japanese and Russian War, or how tight the lid is on in St. Louis, when we should be writing Mrs. Jones a follow-up letter, enclosing a booklet giving the reasons why she should buy the steel range we failed to sell her yesterday."—J. T. Templeton, of the Buck Stove Co., St. Louis, Mo.

SYSTEMATIC STOVE ADVERTISING.

STOVE advertisements have been reviewed a good deal in this department. Faults have been found with some dealers' style of advertising and praise has been given to others. To make the department really profitable it is necessary that some policy be outlined whereby stove dealers may avoid certain errors in stove advertising and adopt what are considered trade-winning methods.

* * *

I think that sometimes dealers advertise stoves too often, considering the fact that perhaps in the same paper the manufacturers are advertising the same stoves so as to work up the trade for the dealers.

* * *

Such space might occasionally be more profitably devoted to general hardware and plumbing, and the expenses of the advertising divided over a greater number of lines.

* * *

The majority of dealers also give too much attention to illustrations—that is, have them appear in their advertisements too frequently. It is well-nigh impossible to get a satisfactory reproduction of a stove on the class of paper used in dailies and weeklies. Why, then, bother with poor reproductions?

* * *

About two-thirds of the stove advertisements I come across have illustrations in them—all sizes, all grades. In many cases the effect is just so much "black," resembling a silhouette. I do not remember having seen many stove advertisements where the illustrations impressed me as being of much benefit to the buyer.

* *

The dealer should size up the case and realize that he is advertising, not to make use of some cuts, but to sell stoves. The stoves that he has for sale are usually pretty well known by the people. It is the policy of the manufacturer to make them known.

* * *

Thus it will be seen that a retailer's stove advertisement needs no illustration—at least, no big illustration and assuredly no poor illustration. Neither does it need lengthy descriptions. Far better is it for the dealer to enumerate just sufficient details to awaken interest and then to clothe the advertisement with reasons why stoves should be bought from him.

* * *

Stove advertising is a branch of publicity that ought to be approached cautiously. In the first place, stoves are not what can be called everyday commodities. In the second place there are not a greater number of people changing their old stoves for new ones. The chances for trade rest largely with two classes of people—the newly-married and new residents in the town. So stove advertising should always be particular in wording and attractive in design.

* * *

As prices sound high on paper it is better to omit them, except in special cases. The dealer has to please the woman as regards the stove, but the man as regards the price. Getting the price in the store, when the stove has been examined and the points explained, is quite different to looking at a poor illustration and a big price on paper.

* * *

A dealer should consider the above points before he pays for a line of advertising. He should size up pretty well the community in which he lives, his chances for stove business and know the prices likely to be paid. After doing this the dealer can advertise—if it is necessary to advertise.

* * *

I shall reproduce in this department at another time one or two samples of my own conception of what a retailer's stove advertisement ought to be.

* * *

Bridge Bros., Thessalon, Ont., forward for review some first rate examples of stove and hardware advertising. They use space liberally in their local paper, but to good advantage.

* * *

While I do not just agree with the whole makeup of their advertisements they certainly evince knowledge of the subjects on the part of the writer, besides care and system in the preparation.

* * *

"Hardware News" is especially good in the fact that the buyer is given a variety of stoves to choose from and because order characterizes the arrangement. The cuts used stand out extra well for newspaper print. Bridge Bros. are to be commended on their splendid showing and striking enterprise.

A. A. B.

ALUMINUM OIL HEATERS.

AN oil heater which is winning favor is the Aluminum Oil Heater, manufactured by the Metal Stamping Co., Jackson, Mich, U.S.A.

It is the inside of a watch that is vital, and it is the same with an oil heater—the burner is the very soul of the heater, and the success in heating and safety depends altogether upon the burner. The safety burner used in the aluminum oil heater has many liberal air passages which render perfect combustion. The flame spreader is solid; there are no perforations to clog up and smell. The wick does not enter the oil fount, and so thorough is the combustion that a partition or deflector is placed about in the centre of the drum or barrel of the heater, that is, midway between the flame and top, just like a damper in the stove pipe. By reason of this deflector the heat is thrown downwards, and thus the aluminum oil heater radiates heat just like a base burner, from top, sides and bottom.

Probably no stronger testimony as to the practical merit of the aluminum oil heater can be given than that by Messrs. Butler & Johnson, the large wholesale stove dealers of Syracuse, N.Y., who say: "During the past ten years we have sold over 50,000 of your Aluminum oil heaters, and in that time have never returned one for repairs or otherwise."

The operating and wicking process of the aluminum oil heater is so simple that a child understands it and the heater is a success from the start. Write the Metal Stamping Co., Jackson, Mich., U.S.A., for a catalogue and descriptive information, giving the name of this paper, and the matter will be mailed promptly.

GURNEY COMPANY WINS.

That a moulder is worth twice his wages to his firm was the contention made by Mr. Stewart, of the Gurney Foundry Co., in connection with the action brought by that company against the Western Foundry Co., of Wingham, in which the official referee, Mr. J. S. Cartwright, has delivered judgment. In 1903 both foundries were embarrassed by a strike in their moulding shops, and the Wingham people are said to have induced several of the Gurney Co.'s moulders, who were under contract, to desert to them. To recover for losses thus sustained the Toronto firm brought an action for $15,000 damages. The referee finds rather strongly in favor of the plaintiffs on the evidence, and awards them $2,000 damages. The case will be appealed.

THE WALKER OAK

In three sizes
14, 16 and 18 inches

In four styles
Straight for wood
Straight for coal
With Hot Blast for soft coal
With magazine for hard coal



The Walker Oak is throroughly new and up-to-date. Is the strongest heater of its size in Canada.

Some Points: Cone Centre Grates, Corrugated Exposed Fire-pot, Cup Joints, Smoke Door, Screw Drafts, etc.

We can ship promptly.

Walker Steel Range Co., Limited
Grimsby, Ont.



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S 'WELLINGTON' KNIFE POLISH
The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada

VORTEX HOT BLAST COAL STOVE



for Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.

For Sale by
E. T. Wright, & Co., Hamilton, Canada.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

THEY NEVER DEPRECIATE

One of the chief reasons why you should be in line with

Metallic Ash-Sifters

is because they never depreciate in value. That is where they are totally different to the wooden sifters. which rust and wear loose after standing in the store awhile. The **Metallic Ash-Sifter** has no equal for giving results, so no equal for making sales. Would you like our Booklet?

C. M. CUTTS & CO., Toronto Junction, Ont.
Sole Makers

NO HEAT CAN DESTROY IT



Sterne's Asbestos Stove Lining

is the best thing on the market for putting in the fire-box of a stove. Vastly superior to fire-brick. Also cheaper. Always ready. No bad fits. **STERNE'S ASBESTOS STOVE LINING** is a ready seller. If you haven't got a supply send for prices.

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

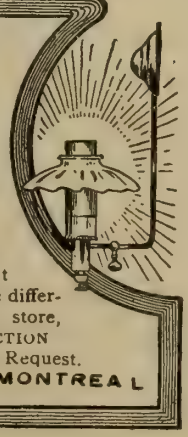
No. 3 Brookfield Street, - - TORONTO, ONT.

THE AUER GAS LAMP



Delightful to read by.

Gives the light of 100 Candles and Costs Less Than Coal Oil.



No smoke or smell. The whitest, clearest, softest light for reading or sewing. The different styles are suitable for store, church or home. SATISFACTION GUARANTEED. Catalog on Request.

AUER LIGHT CO., MONTREAL

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.

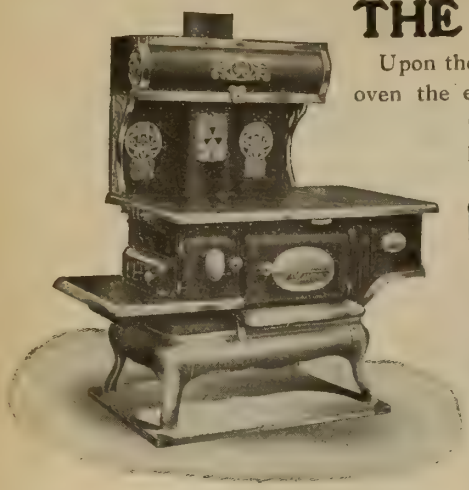


Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.



THE OVEN

Upon the efficiency of the oven the entire usefulness of a range depends. In

THE EMPIRE QUEEN RANGE

a high degree of success has been achieved. As a result the oven of this range applies heat evenly on all sides ; thus perfect baking is made possible. Such good workmanship as this must tell in "stove-buying time" and it **does** tell. If you have never sold **The Empire Queen Range** resolve to change your policy in the future. It will pay you. **Send for Booklet.**

The Canadian Heating & Ventilating Co.

OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

ARK-EL-ITE TRADE MARK

FITS ANY STOVE

For lining and repairing Cooking and Heating Stoves, Ranges, etc.

ARK-EL-ITE ASBESTOS STOVE LINING

HAS NO SUPERIOR.

ARK-EL-ITE Asbestos Stove Lining is invaluable as a fire mortar for laying fire-brick in boiler furnaces, as it is more lasting than fire-brick and clinkers will not adhere to it.

Packed in heavy cardboard cases.
10-six-lb. pkges. in case, price $1.50

SEND YOUR ORDER ALONG.

MANUFACTURED BY

THE FRANCIS-FROST CO. LIMITED

TORONTO

Makers of the Celebrated "Ark" Brand Paints.

Tri-Use Cooker



PATENTED



PATENTED

Every dealer should stock a few of these Cookers. They sell wherever introduced.

No well-appointed kitchen is complete without one, and after once using it a woman will not do without it

Can be used in various ways, viz., as a double boiler for cooking cereals of all kinds, as a steamer for vegetables, puddings, stale buns, bread or cake, or as two separate saucepans, etc.

Advertising matter for general distribution sent free to any dealer.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

The MacLean Publishing Co.
Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

OFFICES:

MONTREAL, - - - - - - 232 McGill Street
Telephone Main 1255
TORONTO, - - - - - - 10 Front Street East
Telephones Main 2701 and 2702
WINNIPEG, - - - 511 Union Bank Building
Telephone 3726
LONDON, ENG. - - - - 88 Fleet Street, E.C.
J. Meredith McKim
Telephone, Central 12960

BRANCHES:

ST. JOHN, N.B. - - - No. 3 Market Wharf
VANCOUVER, B.C. - - - Geo. S. B. Perry
PARIS, FRANCE - Agence Havas, 8 Place de la Bourse
MANCHESTER, ENG. - - - 92 Market Street
ZURICH, SWITZERLAND - - - Louis Wolf
Orell Fussli & Co.

Subscription, Canada and United States, $2.00
Great Britain and elsewhere - - 12s
Published every Saturday.

Cable Address { Adscript, London
Adscript, Canada

NEW ADVERTISEMENTS.

Thos. Pink, Pembroke, Ont.
Frederick Fenner & Co., Limited, London, Eng.

HARDWARE SPECIALTIES.

EVERY year sees new lines added to hardware stocks, the time having long since passed when the hardware merchant sells nothing but hardware. The modern merchant must keep abreast of the times, and not be afraid of the criticism of the old fogies who may say "that is a queer business for a hardware store to be engaged in."

A few years ago hardware dealers dealt only in staples and heavy hardware, and it was considered putting on style to wash the windows very often or have a clean up oftener than once a year. Nowadays the successful merchant makes his store attractive and cleanly. Handsome showcases and boxes are installed to keep the stock orderly and show samples in an attractive manner.

But the change has not been altogether in the stores. The merchant advertises more intelligently and his clerks study salesmanship scientifically. Side lines of innumerable varieties are stocked and the hardware store becomes, in fact, a "home furnishing" supply house —a resort for the housewife as well as the mechanic.

Sewing machines are one of the best lines which hardware merchants have taken up in recent years. The line naturally belongs to the hardware store, but it has been left to the traveling agents too much. Sewing machines are as much a requirement in the average household as the kitchen range, and the dealer who puts as much energy into selling machines as he does into stoves is almost certain to meet with as good results. Unlike stoves, sewing machines are seasonable at all times, and the profit on the good makes is large enough to pay good margins.

There is, probably, no better side line, however, than sporting goods. Rifles, shotguns, ammunition, fishing tackle, skates, etc., are now recognized as strictly hardware lines, but sleds, hockey sticks and gymnasium supplies are too often left for the bookseller or some other enterprising merchant to handle. To be successful in selling sporting goods the dealer should be a sportsman in the widest sense, as his association with users of the goods will be of great advantage in working up and holding the trade.

Silverware is becoming almost as much a hardware line as cutlery, and the dealer who stocks hollowware as well as flat and plated goods is able to handle the holiday trade and secure a larger share of Christmas business than the one who stays in the rut and merely carries the lines his father carried in stock before him. The holiday season will soon be upon us, and the wise dealer has already prepared for a large trade in some of the side lines referred to.

CONVENTION AT WASHINGTON.

A COMMITTEE composed of Messrs. Wm. Vallance, of Wood, Vallance & Co., Hamilton, president of Canadian Wholesale Hardware Association; T. H. Newman, of Caverhill, Learmont & Co., Montreal, vice-president; James Hardy, of Jenkins & Hardy, Toronto, secretary-treasurer; Thomas Dexter, of H. S. Howland, Son & Co., Toronto; Wm. Starke, of Starke Hardware Co., Montreal; Cyrus Birge, of Canada Screw Co., Hamilton; T. B. Lee, of Rice Lewis & Son, Toronto, are attending the annual convention of the National Hardware Association, the hardware manufacturers of the United States also meeting at the same time.

The Canadian delegates are permitted to participate fully in the doings of the convention, and as their sources of supply are largely the same as the American dealers, the benefits of association are of great value to the trade in Canada.

A report of the meeting will be given in the next issue of Hardware and Metal, which is represented at the convention by Mr. H. T. Hunter. The catalogue house and parcels post questions are the main topics under discussion.

THE MORRISBURG TIN MILLS.

RECENT issues of Hardware and Metal have contained articles showing the absurdity of the proposed establishment of tin plate mills at Morrisburg. The scheme was criticized from various standpoints, but the promoters have made no reply to the points raised in our articles. The objections to the proposition might be summarized as follows:

1. The location of Morrisburg is not a favorable one, the town being remote from the source of supply of raw material, is not near coal mines or already developed steel works and, in fact, has practically nothing to recommend itself as a manufacturing site for such an industry.

2. The records of the promoters are not such as to encourage the investment of capital in enterprises promoted by them. The principal promoters were largely interested in the defunct Cramp steel works at Collingwood, a poor namesake of the wealthy Philadelphia shipbuilders lending his name to that ill-fated enterprise and many investments being made as a result of this trick.

3. The time is not yet ripe for a tin plate industry in Canada. A heavy duty of nearly 100 per cent. would be required to make the proposed plant profitable and this duty would bear heavily on the canning industry and all other users of tin in Canada, the only ones to be benefited being the few stockholders in the tin plate company in the event of its success.

In another column another phase of the matter is discussed, it being pointed out that it is necessary to develop other classes of the metal manufacturing industry in Canada before a tin plate industry can hope to be successful. The history of the metal industries of the United States are referred to in illustrating how, despite high duties and bounties in many cases, importations still continue.

In view of the fact that some construction work is being done at Morrisburg and investors are being asked to finance the enterprise hardware merchants, who are interested in the continuation of low prices for tin products, should bring the matter before their parliamentary representatives as well as before the Tariff Commission during its sittings in various parts of Eastern Canada. The columns of Hardware and Metal are open for a discussion on this question.

THE PHILOSOPHY OF DISCOUNTS.

In his eagerness to buy at the best possible rates the dealer should never lose sight of the quality of the goods or their reputation with the public when the question of discounts is considered. How often the traveling man is told: "I can't very well handle your line. You see you allow only a discount of 25 per cent., while Messrs So-and-So have offered me 40 per cent." Often the dealer says this in a decisive, matter-of-fact way as if quality or salability were no considerations whatever. Quite likely the article on which the lower discount is offered is a standard article of proved merit, well advertised and known to the public. In such a case the wise merchant will, first of all, compare the time and cost of selling, say, $200 worth of goods with an established reputation, and that are asked for by the public, with the time and cost of disposing of the same amount of another practically unknown, and that you have to persuade customers to buy against their own inclination. Not infrequently an unusually big discount is a suspicious symptom of dangerously poor quality, and be it remembered in this connection that a dealer's good name is his most valuable asset.

In handling reliable goods that are thoroughly advertised the dealer has an advantage that means much to him in dollars and cents. If the dealer has to make the reputation for the goods he handles and create a demand where none existed, and this, too, in competition with goods of established reputation and in constant demand, twice the discount offered by the manufacturer of the standard product would be too small.

When the progressive dealer rents a store he doesn't go into the side streets or away from the retail centre where he might get an elegant store at a very low figure, but he secures the best location possible, right on the principal street, and pays a good rent for it, knowing that the location will secure a volume of business that will justify the rental.

Just so in handling goods that are known to be standard, that have secured a reputation, that are advertised so extensively and judiciously that they are known almost to the exclusion of competitors' goods—the volume of sales of such merchandise will more than justify the small discount received.

The difference in discount represents but part of the cost to the manufacturer of making his wares the best known in the world, of advertising them in trade and other newspapers and creating a demand for them, of placing them in a position where they're called for and very little effort is required to sell them. He has taken the land in its virgin state, cut down the timber of prejudice, cleared the stumps of opposition and prepared it for the highest cultivation. Incidentally this costs the manufacturer lots of money, but it makes, at the lowest discount, the most profitable line of goods the retailer can handle.

There's more money in selling $100 worth of goods a month at 25 per cent. profit than there is in selling $100 worth of goods in two months at 40 per cent. profit. Furthermore, there may be reputation for you in one, and possible disaster in the other. It is the dealer's privilege to insist on the most favorable terms, but he must not allow an exaggersted discount to blind him to what is best for his good name and business.



Mr. William B. Converse, Manager of the newly organized Colonial Cordage Co., Toronto.

NEW CORDAGE COMPANY.

MR. W. B. CONVERSE, for the past three years assistant treasurer and assistant manager of the Consumers' Cordage Co., Montreal, has accepted the management of the newly organized Colonial Cordage Co., which has secured the mills and plant formerly operated by the Independent Cordage Co. He will also act as treasurer and as a director of the new company which has a capitalization of $50,000 and will have offices on Strachan avenue, Toronto.

Mr. Converse's connection with the cordage industry dates back eighteen years, having been with the Consumers' Cordage Co. in the various departments of the offices since it took over the Converse mill in 1891. The late Hon. J. A. Converse, who originated the cordage industry in Canada and established a mill in Montreal in 1825, was his grandfather, the Converse family having been connected with the industry in Canada for three generations.

The Colonial Co. will have up-to-date machinery and will make all kinds of hard fibre cordage and binder twine, the mill having a capacity of 1,200 tons. Toronto being a very central point for distribution the new company should meet with great success.

AUTOMOBILE SUPPLIES.

AS the popularity of the automobile keeps growing apace, a new field is opened up for the hardwareman—a field which will ultimately, no doubt, occupy the place filled some years ago by bicycle supplies. We refer to the handling of automobile supplies—a line which has already shown itself a success in many of the city hardware stores. In fact, one of the largest hardware dealers in Montreal is now selling out his staple hardware lines and will hereafter confine himself exclusively to automobile supplies and some other specialties.

But some of our readers in the smaller places may object that there will never be a field for these goods so far as they are concerned. In some cases, of course, this will hold good, but there are many towns—nay, even hamlets—which could take up this line to great advantage.

The writer recalls a small hardware store in a small village east of Toronto on that highway known as the Kingston Road. This is, as is well known, a thoroughfare extensively used by motorists, some days, when the roads are fine and the weather invites to outdoor sport, showing a regular procession of automobiles varying from heavy touring cars to the smaller but equally noisy and bad smelling runabouts. The young proprietor of the hardware store referred to saw the possibilities in this traffic, and one fine morning a large sign appeared by the roadside in front of his place of business, announcing the fact that he sold gasoline. That sign paid for itself many times over by the trade which it attracted, and it is in the hope that some of our readers will be able to follow his example with advantage to themselves that these words are penned.

There are many auto supplies besides gasoline which a country dealer on a busy highway could handle profitably, but it is the best starter. Later on, or perhaps simultaneously, he could add lubricating oils, tire cement, calcium carbide (for supplying the auto lamps) and the various tools necessary to a repair kit.

AN IMPERIAL BOARD OF TRADE.

A LARGE meeting of Montreal business men, recently held in the Board of Trade chambers, was addressed by Sir Frederick Pollock and Mr. Geoffrey Drage, who have been visiting this country in the interests of binding more closely together the various parts of the Empire. Although it was frankly admitted that the time is not yet ripe for the formation of any new body, whether it be styled an Imperial Council or anything else, still it will be interesting to note what these gentlemen are aiming ultimately to establish in the way of creating better understanding between the component parts of Britain's domain.

In the first place, if any more formal union is to come about it must be a gradual evolution, and come out of business arrangements. And in the process of this evolution there are many practical problems to be solved. The all-British cable must be dealt with; the question of naturalization and that of copyright must be settled, and there should be one uniform commercial law ruling throughout the Empire, consolidated and codified by the Imperial Government. Such an arrangement would remedy the glaring discrepancies which now exist in the insolvency law and the law of patents. It is said that in order to patent any invention throughout the Empire it is necessary to take out no less than twenty-eight distinct patents.

In solving these and similar problems the idea of Imperial co-operation and closer union would work itself out; but without assistance the evolution would be a painfully slow one. And in order to hasten the result it is proposed to make a systematic attempt at getting adequate information to bring about the various reforms suggested. How could this be better accomplished than by establishing an Intelligence Department, which would perform the same function towards civil business as similar Intelligence Departments do towards the army and navy? A competent secretary could be appointed in England, and he should be assisted by an able staff of clerks throughout the Empire. The British House of Commons would, no doubt, be willing to defray the expenses of this system. Furthermore, the conference of Premiers should be revived, and meet periodically under the name of "Imperial Conference," to promote the affairs of the whole Empire. The result of these investigations and deliberations could be incorporated in a uniform statistical blue book for the Empire.

This is a dream of the future, but it is one that could surely be realized, if natural evolution were assisted in some such manner as that described. Canadians will wish the project every success.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 5.

IT will be a surprise to the heating trade to learn that the gentleman whose portrait is reproduced below, Mr. Thomas Worthington, is now representing the Taylor-Forbes Co., Guelph, in the sale of "Sovereign" heating goods in Western Ontario. Mr. Worthington had decided to leave the road and re-enter business on his own account, but with the characteristic enterprise which has made the Taylor-Forbes name favorably known in all parts of Canada, representatives of this company induced Mr. Worthington to reconsider his decision, thus adding to their staff a popular and successful



Mr. Thomas Worthington, Toronto, who will sell "Sovereign" heating goods in Western Ontario in future for the Taylor-Forbes Co.

traveler and an experienced heating engineer, the company now having in Messrs. Flett and Worthington two heating engineers thoroughly capable of upholding the high standard of the "Sovereign" radiators and boilers.

"Tom" Worthington, as he is familiarly known to steamfitters throughout Ontario, has the confidence of his customers, as he is well-known to have handled large contracts before taking up the work of a traveling salesman. In 1885 he entered the employment of Messrs. Keith & Fitzsimons, Toronto, serving his apprenticeship with that successful firm, later becoming foreman for E. Larter, and superintendent for Mashinter & Co., Toronto. While in the last named position he had charge of the installation of the steam heating and ventilation systems in the King Edward and Winchester schools, two of the best and most up-to-date school jobs in Canada. Another large work superintended by him was the installation of the steam heating system in the Manning Chambers, Toronto.

During the past couple of years Mr. Worthington has represented the Dominion Radiator Co. in Western Ontario, the same territory he will now cover for the Taylor-Forbes Co. He has won a reputation for himself as a salesman, and handling such a high-class line as the "Sovereign," backed by the record of Messrs. Taylor-Forbes for enterprise in business and excellence in manufacture, there is every reason to believe "Tom" will win further success in his new sphere of activity.

OF INTEREST TO HARDWAREMEN.

A NON-RATTLING window wedge is on sale in the hardware stores in England, it being a band of spring steel to be wedged in between window sashes.

* * *

Talking machines are one of the most popular side lines in the ironmongery and hardware stores in Great Britain.

* * *

Prizes are being offered in England and in the United States for the invention of traps which will capture or kill wild animals or small game without causing suffering to the game. The Society for the Prevention of Cruelty to Animals is behind the move from a humane standpoint. An economic reason is that suffering before death taints the meat.

* * *

Mr. Albert Karges, of Gardiner & Company, Woodstock, Ont., writes Hardware and Metal that during the past year he has been conducting the advertising in two daily papers for his firm and has found that it helps him wonderfully in explaining the advantages of stoves and other goods to customers and in making sales. Other salesmen could profit by Mr. Karges' experience.

* * *

The hardware dealers and manufacturers of the United States have a good market in Canada. They sent us last year articles to the value of $4,412,000.

To make an effective Christmas window display the windows should be dressed early in December and the needful goods should be in stock in November.

* * *

Few things are more valuable to a household than a cutlery cabinet, as in addition to its value as an ornament the cabinet provides a place for all the plated cutlery used in the house. There are many handsome designs on the market and the dealer should have at least one on display.

PERSONAL MENTION

Ontario.

Mr. W. L. Parish, Port Perry, was a visitor in Toronto this week.

Mr. J. M. Winters, King, called on Toronto hardware jobbers this week.

Wm. Dickenson, of Dickenson & Allen, Hamilton, was a visitor in Toronto this week.

S. T. Hadley, of the James Morrison Brass Manufacturing Company, Toronto, is on a duck-shooting trip to Dunbarton.

Mr. John M. Boyd, of Boyd, Burns & Co., Vancouver, passed through Toronto last week on his return from a trip to Europe.

McColl Brothers, oil merchants, Toronto, are enlarging their premises by the erection of a one-story galvanized building.

Fort William Hardware Co. has purchased the business of A. Dawson and Mr. H. H. Dawson will conduct the business in future.

Attention is drawn to the condensed advertisement in another column asking for a first class hardwareman for an established house.

Mr. John Connell, Clifford, has accepted a position as salesman in the new hardware store established by C. W. Clark at Burk's Falls.

Mr. B. Warren, hardware merchant, of Perth, Ont., is making a fine display of guns, ammunition, snowshoes and other sporting goods in his window.

It was the wife of Mr. C. L. MacNab, not that of Mr. D. A. MacNab of MacNab Brothers, hardware merchants, Orillia, who died recently in the Toronto General Hospital.

Mr. V. Eastwood, of the Peterboro Hardware Co., has left on a deer hunting expedition. The big hardware store will no doubt have a specimen of some fine antlers on his return.

Mr. R. G. Kingan, of the Kingan Hardware Co., left on the 30th ult. with a party of friends for New Ontario to hunt moose, cariboo and bear. Great results are expected as Mr. Kingan is a crack shot.

Mr. John McKechnie, of the Vulcan Iron Works, Winnipeg, was a visitor in Toronto a few days ago. Mr. McKechnie was returning from a trip to Ottawa where he had been attending a Masonic function, 33rd degree Scottish Rite.

John M. Owston, of the James Robertson Company, Toronto, is on a hunting trip in the wilds near Mount Forest. A preacher and an undertaker accompany him and all wear black coats so as not to be taken for deer or winged animals.

Messrs. Rice & Barnes, hardware merchants, Whitby, were the first to reply to the inquiry in last week's Hardware and Metal as to where Billings trowels could be procured. These goods can be had from the Gun Tool & Supply Co., Pittsburg, Pa.

Mr. Stanley Barr of Cobourg and a few friends have returned from their annual hunting trip. Mr. Barr said: "We had good luck. I saw several bears, but as our guns were loaded for duck did not waste our powder. We owe our good luck to the celebrated tonic G. & W."

Ald. William Wyatt, one of London's most successful business men, and head of the Wyatt firm, has sold out to Mr. John Brownlee, and is retiring, his realty holdings being over $75,000. His son Frederick, not enjoying very good health, will also retire for a while from active business.

Mr. I. M. Robertson, the well-known and popular hardware merchant of Tweed, has put his fine launch, the Thistle, into Winter quarters. He mentions that he has had the best season yet for picnics and excursions, and has had no trouble with his compounded gasoline engine.

Mr. R. S. Thompson, brother of A. Thompson, hardware merchant, Maple, was a visitor in Toronto this week buying mining machinery and hardware supplies. Mr. Thompson went to Cobalt last Spring and was fortunate to make a big strike, fourteen men now being employed on a silver property in which he is interested.

The Brantford Screw Company has appealed against the judgment of Justice Anglin awarding $1,000 damages to Nicholas W. Lynn, a Brantford youth, who while operating one of the company's nut machines had his hand badly mangled. He sued for $2,000, but the jury found that the company was guilty only of contributory negligence, and gave him half that amount.

John Lewis & Co., hardware merchants and plumbers, Belleville, who have carried on business under the same management for fifty years, have sold out the hardware department to Mr. Hudson, who has been book-keeper for Mr. Henry Corby. The new firm will be known as the Hudson Hardware Co., John Lewis & Co. still continuing the stove and plumbing department.

The Fader Screwless Door Knob Co., Orillia, which recently amalgamated with the Imperial Hardware Co., Toronto, has now got its factory in good running order, twenty-five hands being employed. Mr. H. A. Crocall expects to double the size of his staff before Spring. The company manufactures light hardware, such as locks, knobs, hat and coat hooks, etc.

The wholesale carriage and hardware business carried on in Hamilton under the name of A. K. Melburne & Co. will in future be conducted under the firm name of Wilkinson & Kompass, who have been connected with the business since its establishment in 1893 and have been sole proprietors since Mr. Melburne's death in 1898. The firm have erected a new warehodse at 28-32 McNab street south, Hamilton, and will remove from their present premises, 19 McNab street north, at the beginning of the year. The new firm is composed of Messrs. H. L. Wilkinson and Paul A. Kompass.

Western Canada.

A. McMichael, of the James Robertson Co., Toronto, is in Winnipeg this week consulting with the western house.

Geo. Caverhill, Montreal, of Caverhill, Learmont & Co., Montreal and Winnipeg, is in Winnipeg this week consulting with G. L. Waldon, the western manager.

Mr. James Burridge, for twenty years manager and president of the Gurney Stove and Range Co., and for four years president and manager of the Burridge Cooper Co., Winnipeg, has retired from this position and has become manager of the Mercantile Business Brokerage Co., with headquarters at Winnipeg.

Quebec.

N. Poirier, of Marieville, Que., visited Montreal recently.

Chas. Leblanc, hardware merchant, of Joliet, spent last Wednesday in Montreal.

P. O. Sacavant, of St. Chrysostome, was in Montreal this week buying supplies.

S. McClatchie, of Hemmingford, Que., paid a visit to the metropolis this week.

J. H. Bell, hardware merchant, of Mattawa, Ont., visited Montreal last Friday.

Octave Charland, plumber and tinsmith, of Nicolet, visited Montreal a few days ago.

Alex. Pilon, general merchant, of Casselman, Ont., was in Montreal on business this week.

G. A. Kohl, of B. & S. H. Thompson & Co., Limited, Montreal, is in New York for a few days.

E. R. Dorken, of Dorken Bros. & Co., cutlery importers, Montreal, is spending a few days in Toronto.

L. J. Moger, tinsmith and roofer, St. Antoine, was in Montreal this week on a purchasing expedition.

A. P. Gosselin, general merchant, of St. Alexandre, Que., was in Montreal this week purchasing goods.

Mr. McDonald, of the McDonald Manufacturing Company, Granby, was a visitor in the Royal City recently.

J. E. De Wolfe, of Halifax, formerly president of the Maritime Board of Trade, was in Montreal last Wednesday.

J. R. Terrill, of Caverhill, Learmont & Co.'s city traveling staff, Montreal, has been turned loose on his Sorel friends this week.

W. A. C. Hamilton, manager of the Toronto branch of the Consumers Cordage Company, Limited, is in Montreal for a couple of weeks.

F. O. Lewis, of Lewis Bros., Limited, Montreal, accompanied by Mrs. Lewis and Miss Mabel, sailed for England on the Cedric last week.

Edouard McGowan, of James McGowan & Son, general merchants, Ste. Martine, Que., called on some of Montreal's wholesale houses this week.

J. W. Thompson, of Frothingham & Workman's traveling staff, who makes his headquarters in Ottawa, dropped in on the house in Montreal last week.

T. H. Newman, of Caverhill, Learmont & Co., Montreal, is representing the local trade at the convention of the National Hardware Association in Washington, D.C.

Aubrey Spencer, son of J. W. Spencer, head of the firm of John Spencer & Sons, Limited, Newcastle, Eng., the famous boiler plate manufacturers, was a visitor in Montreal this week.

Frothingham & Workman, Limited, Montreal, lost one of their most promising assistants by the death of Mr. Frank McEvilla last week. The deceased, who was but twenty-three years of age, was employed in the heavy goods department of the firm.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Horseshoes have advanced.

Wire Nails show a slight advance.

Bar Iron is up another five cents.

Lead Pipe discount is now 25%.

Merchant Steel — Several advances are reported.

Pig Iron has advanced in several grades.

Sheet Zinc is now quoted: In casks, 7¼c.; sheet, 8c.

Old Rubbers are now commanding from 7¼c. to 7½c.

TORONTO.

Iron Pipe—Most dealers have advanced prices.

Enamelware — Prices have been withdrawn, and an increase is imminent. Closets have already gone up.

Brass Goods — Several lines of valves and compression work are now quoted at lower discounts.

Linseed Oil — Most dealers have advanced prices one cent.

Crude Oil—Canadian Crude is quoted 2 cents higher.

Horseshoes—All sizes of steel horseshoes have advanced.

Pig Lead—An advance of 15 cents per 100 lbs. is reported.

Bar Iron—Radnor has advanced 50 cents, and Londonderry is strengthening.

Old Rubbers—Prices have advanced another quarter cent.

WINNIPEG.

Harvest Tools—Discounts for next season are 60 and 5 per cent.

Cartridges—Dominion military discount now 20 per cent., formerly 15 per cent.

Manila Rope, 7-16 and larger, price advanced ½c. per lb.

Iron Pipe—Prices have advanced.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 10, 1905.

A BRISK awakening in the trade has resulted from the broken weather of the past few days. This is not so apparent from city sales as from increased orders coming in from the country districts. All travelers are sending in good sized orders and indeed some of the local firms are being taxed to their utmost capacity to keep up with the great volume of business.

Horseshoes have been advanced during the week as will be seen in the appended lists. Wire nails are also higher, though our figures, $2.10 to $2.20 per keg will cover this advance. Bar iron is also up another five cents, these advances representing the only important price changes of the week.

Axes—There is no change in condition. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Demand is good. Prices are as follows: Axe handles No. 3, $1.25; No. 2, $1.50; No. 1; $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Trade is very brisk. Nearly all standard makes being sold rapidly. Our quotations are as follows: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—There is a fairly active trade at unchanged prices. Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—Business is active. Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—The demand is normal for the season. Prices unchanged: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—Prices have not yet been changed, though this is expected to occur before long. We quote as follows: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—Prices have been advanced, though this is still covered by our quotations: $2.10 to $2.20 per keg, f.o.b. Montreal.

Horse Shoes—The change in horse shoe prices is one of the features of this week's trade. We quote: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4: No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60. Toeweight, all sizes, 1 to 4, $6.85. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—The principal lines now selling are hockey sticks and skates. Ammunition, however, is still going out well. We quote as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Conditions are quite unchanged. Business is very satisfactory, and prices are unchanged.

Cordage—The market continues very steady. No changes have taken place in prices.

Cement and Firebrick—Local dealers are busy filling jobbing orders. There are no inquiries for large lots, however. Local trade continues fair. The quantity of firebrick moving is very large. We quote as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags; $2.05 in barrels in round lots.

Coil Chain— We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Skates—Orders are increasingly large. We still quote: From 25c. to $2.50, according to quality.

Sleigh Bells—The change in weather has greatly stiffened the demand. We quote prices as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—This promises to be a very popular hardware line this year. Prices vary from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, November 10, 1905.

SNOW flurries and storms presaging the coming of winter have done considerable towards encouraging trade in winter goods and instructions to ship booked orders are being received by jobbers daily. Axes and handles

are going out in large quantities as are also skates and hockey sticks. Dealers are also ordering holiday goods liberally. The volume of cutlery and plated goods being ordered for immediate shipment is quite large. Sorting orders being received include many building lines as well as such winter requirements as weather strip and building paper.

Advances have been made on various lines of steel horseshoes, the new figures being quoted below. Trade in both horse shoes and horse nails is very brisk, while horse blankets and sleigh bells are also in fair demand.

Bolts and nuts have not advanced as yet, but the steadily advancing prices on bar and pig iron in outside markets as well as the advances made in United States recently on bolts and nuts indicate an early rise on the local market.

Lawn mower prices continue unsettled and dealers are securing fair concessions over last figures by booking orders early.

Axes and Handles—This is one of the most active lines and the volume is increasing steadily.

Cutlery and Silverware—Orders for holiday goods are very large and many sorting orders are being given.

Sporting Goods—Shotguns and ammunition are still being called for.

Lawn Mowers—Dealers who are placing orders now are getting the benefit of shaded prices.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chain is being included in most orders being placed. Our quotations are: 1-4 inch, $6.50 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Manufacturers are rushing to make shipments of goods ordered. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Trade continues inactive at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire—There is little being done. Prices are unchanged.

Wire Nails—Talk of advance in outside markets has quickened trade locally somewhat.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths' orders are very satisfactory and shipments are large.

Horseshoes—All sizes of steel horseshoes have advanced. Trade is very brisk. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—Snowfalls in many districts have quickened business and orders to ship skates and hockey sticks are plentiful.

Screws—The market is very firm.

Rivets and Burrs—There is a possibility of higher prices and trade is active.

Bolts and Nuts—Quotations are very strong, but no advance has been made as yet.

Cordage—Quotations continue as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; Standard, 9 1-2c. Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-play, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is still considerable cement being sold for foundations and inside cellar work. Prices are steady. For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—A larger trade is reported. Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Shipments are very large. Prices continue firm and unchanged.

Hides, Tallow, Skins and Wool— The hide market is showing more settled conditions, and good trade is being done at present prices. Arrivals are coming in plentifully but on account of no stocks being on hand, are found only sufficient for immediate requirements. A feature of importance is the strong quotations on the Chicago market. Prices have advanced during past two weeks rapidly, and are several points higher, and ruling firm at that. Some dealers have made contracts in advance as far ahead as February next, at present advanced prices, evidently believing these prices will rule. There is no apparent reason for this, the only explanation being the prosperous condition of things generally, and the consequent incentive to retail trade, which brings active demand, regardless of cost. We quote:

Hides, inspected, No. 1 per lb.	0 11½	
" " " 2 "	0 10½	
Country hides, flat, per lb.	0 10	0 10½
Calf skins, No. 1, selected	0 13	
" " No. 2	0 11	
Lamb skins, best city slaughter	1 05	
Deer skins, green	0 12	
" dry	0 22	
Moose hides, green	0 07	
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

At a meeting of the Georgian Bay Power Co., held at Eugenia Falls recently, an estimate was submitted by a well-known hydraulic engineer to the effect that the minimum amount of power available would be about 2,400 horse power. The construction of the plant will be proceeded with at once.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, November 10, 1905.

ALL metals are firmer than ever this week. Several changes have taken place in market quotations, all of them showing an advance.

Pig iron is again one of the features of an advancing market. Several grades have been forced up during the week and others cannot be stocked at the present time and prices on them have consequently been withdrawn. The lateness of the season renders it impossible to expect many more additions to local stocks before the close of navigation. Indeed, it may be said that all the pig iron which will be received in Montreal this year is now on its way.

Tin, after easing up a trifle, recovered its strong tone and is now very firm at the same price as last week. A big buying movement on the other side created a shortage in New York which boosted prices again.

Sheet zinc has been advanced and spelter, too, has acquired considerable strength, though prices are unchanged.

Canada Plates—Prices this week underwent no change. The market is firm at the following prices: 52's, $2.50; 60's, $2.55; 75's, $2.60; full polished, $3.60; galvanized 52's, $4.00; 60's, $4.25.

Copper—Copper is very stiff. There is a big scarcity in the market yet and this week's tone is higher. We are quoting: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—Tin is very stiff this week. Our prices remain as before. 36 1-2c. to 37c. per pound.

Pig Lead—Importers have been forced to meet another advance at the hands of the producers. The following prices are considered very low for imported pig: $3.90 to $4.00 per hundred lbs.

Boiler Tubes—We quote: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Some further advances are noted this week. Our quotations are:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$19.50 to $20.00	"	"
Glengarnock	21.25	delivered	Montreal.
Gartsherrie	21.25	"	"
Carnbroe	21.25	"	"
Carron No. 1	22 50	"	"
" (special)	21.50	"	"
Summerlee No. 1	21.50	"	"
Clarence No. 1	19 50	"	"
" No. 3	19 00	"	"
No. 1, Cleveland	19.00	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per

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Road Paving Bricks and Blocks.

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Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc

lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—Some further advances have been made during the week. We quote: Sleigh shoes, $2.07 1-2, tire, $2.22 1-2; spring, $2.75; toecalk, $2.77 1-2; machinery iron finish, $2.17 1-2; reeled machinery steel, $2.75; mild, $2.07 1-2 and upwards; rivet, $2.07 1-2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Prices are very firm as given below. These are the rock bottom quotations at the present time. We quote: Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—The advances quoted last week are held firm. We still quote as follows: 28 gauge, $2.25; 26 gauge, $2.20; 22-24 gauge, $2.15; 19-20 gauge, $2.15; 8-10 gauge, 2.30.

Antimony—No further decline has occurred. It is very difficult even yet, to get this metal. We still quote: 14 1-4 to 14 1-2c. for Cookson's.

Tin Plates—The heavy demand in foreign markets is helping the Canadian trade, which is remarkably strong. We quote: Cokes, $3.75; charcoal, $4.00.

Terne Plates—Our prices are, $6.75.

Ingot Zinc—The tone of spelter is much higher this week, though we do not change our prices. We are still quoting: 6 3-4 to 7c.

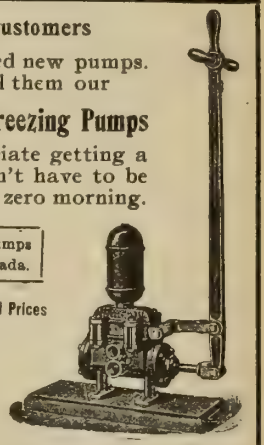
Sheet Zinc—We are quoting an advance this week. Ruling prices are: In casks, 7 3-4c.; sheet, 8c.

Bar Iron—Another advance has taken place this week. We are now quoting $1.97 1-2 f.o.b., Montreal.

Old Material—Cast iron is in good demand, but there is little change to note in the demand of the rolling mills for wrought scrap. Old lead still maintains its high figure, in some cases commanding as high as 3c. Scrap copper and brass are still in good demand and prices are firm as last reported. Stocks in old rubbers are low and conditions are uncertain. The Boston Bulletin reports that dealers there are at a loss to know how to quote. Prices locally have advanced slightly: We quote: Copper wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 3-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

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OPEN HEARTH STEEL

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, November 10, 1905.

PIG lead has made another advance during the past week being now quoted at the high figure of $4.25 per hundred pounds, the producers having forced importers to revise their figures. With the exception of certain lines of pig iron this has been the only change since our last report. Radnor pig iron is now quoted at $31.50 at the furnace, while Londonderry is also commanding higher figures in some cases. Our quotations on Londonderry are considered as low as it could be put.

Business is very lively in all lines, the firm prices seeming to have little effect on the volume of business being done. There is a strong temptation for dealers to sell some stock bought at low figures some months ago rather than quoting their customers figures warranted by the present high markets. This accounts to some extent for the wide variations occasionally found in prices quoted on large orders

Pig Iron—Radnor has been advanced 50c. and Londonderry is very firm at prices quoted. Business is active. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 50
Londonderry, at furnace	16 50 to 17 00

Bar Iron—The market holds strong and conditions are unchanged. We quote $1.95 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—Prices have fluctuated but are again strong.

Tin Plates— Demand is active with prices very firm.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—The price of pig lead has been advanced. The demand continues quite active. We quote: Pig lead, $4.25 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—Trade is quieter and prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Stocks are scarce and prices very stiff. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—Prices are holding steady with stocks in hand light.

Old Material—Trade is more active with old iron, lead, copper and brass all in strong demand. Old rubbers and mixed rags are also stronger. Dealers' buying prices are as follows: Heavy copper and wire, 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—There is little change in this market, prices being steady and a good trade being done. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, November 7, 1905.

OCTOBER will go down in the history of the iron industry for record breaking. The monthly statistics of the Iron Age show that there were produced by the anthracite and coke furnaces of the United States 2,053,127 tons of pig iron, which compares with the previous achievement of 1,963,717 tons in May. These figures do not include the output of charcoal pig, which may be estimated at about 30,000 tons a month. The steel companies produced 1,370,960 tons in October, as compared with 1,287,438 tons in May. Of this October product the United States Steel Corporation has 950,752 tons.

The Carnegie Steel Co. in October broke 78 past records of production at its furnaces and mills, not counting turn and day records which would greatly add to the number. Thus the Edgar Thompson rail mill made in October 83,568 tons of steel rails.

How enormous the output of the steel works is is proved by the record of the plants of the United States Steel Corporation, which in October produced 1,172,951 gross tons of ingots.

The pig iron markets throughout the country are exceedingly firm, and the conviction seems to be gaining ground that further advances are inevitable. Production, however, is at an enormous rate, our statistics showing that on the 1st instant coke and anthracite furnaces having a capacity of 460,000 tons weekly were in operation.

It is understood that the Bessemer association has shown little disposition to meet the requirement of the steel corporation for an option on 15,000 tons of pig iron monthly for the first quarter of the year, the total quantity of association iron available for that period being only 57,000 tons. There are reports of further sales of basic iron in the eastern markets, but much of these appear to have been made some time since.

There has been some heavy buying of forge, foundry and malleable iron in New York State from Albany and Troy westward, the bulk of it going to Buffalo, furnaces, which have again advanced their prices to the basis of $17 at furnace for No. 2.

Southern furnaces are now squarely on the basis of $14 for No. 2 foundry at Birmingham, but have made only moderate sales lately, being heavily booked.

The demand continues heavy, considering the enormous purchases made during the past two months. Among the large interests which are again in the market may be noted the cast iron pipe industry.

Moderate sales of steel rails are reported, with some further heavy contracting in sight. Light rails have again advanced $1 per ton and spikes are higher.

Plate makers are again urging the necessity for higher official prices, and this may come at an early date. The demand for sheets is good, but prices show no improvement. In the tin plate trade the leading interest has opposed an advance.

The pressure for deliveries in the structural trade is enormous. Two contracts for buildings for Chicago, calling for about 15,000 tons, were let during the week.

In the merchant pipe trade the most interesting feature is an inquiry for 600 miles of 6-inch pipe for an oil line from Kansas City to St. Louis.

LONDON METAL MARKETS.

From Metal Market Report, November 8, 1905.

Pig Iron — Cleveland warrants are quoted at 51s. 9d, and Glasgow standard warrants at 50s. 9d, making prices as compared with last week 10 1-2d lower for Cleveland warrants and 1s. 3d lower for standard warrants.

Tin—Spot tin opened firm at £150 10s., futures at £149 17s. 6d, and after sales of 80 tons of spot and 240 tons of futures closed steady at £150 10s. for spot and £149 17s. 6d for futures, making price as compared with last week, £1 10s. higher on spot and £1 10s. higher on futures.

Copper—Spot copper opened firm at £72 12s. 6d, futures £71 12s. 6d, and after sales of 300 tons of spot and 900 tons of futures closed firm at £72 15s., for spot and £71 15s. for futures, making price as compared with last week, £1 5s. higher on spot and £1 5s. higher on futures.

Lead—The market closed at £15 1s. 3d, making price as compared with last week, £2 2s. 6d higher.

Spelter—The market closed at £28 7s. 6d, making price as compared with last week 2s. 6d higher.

The Dominion Government has issued a report on asbestos in Canada, in which it says this country has become master of the field of export. The United States has so far been the largest buyer, while England, Germany, France and Italy, and lately Russia, buy large quantities of the crude and some of the better classes of fibre. The industry began in 1880, when the value of exports was $24,700. In 1904 the output had increased to $1,154,566.

The Stanley Works, New Britain, Conn., manufacturing builders' hardware, will erect a new machine shop.

British Columbia Trade News

Vancouver, B.C., Nov. 3, 1905.

SUMMARIZING the freight shipments handled down the Yukon during the season just closed, the White Pass Railway Co., in a report, states that in all 23,385 tons of freight left White Horse in steamers bound down river. For Tanana and other points below Dawson 4,648 tons of freight, 422 head of cattle, 721 sheep, 23 horses, and 150 hogs were shipped, while for points between White Horse and Dawson 824 tons of freight were delivered.

* * *

The C.P.R.'s new line from Yahk, on the Crow's Nest Pass, south to Spokane, is being rushed to completion as quickly as 1,500 men can work, and the contractors would put on more men if they could get them. The new line has not been located right into Spokane yet, but the survey work is keeping ahead of construction. On the docks at Fort William at the present time are 17,000 tons of steel rails, the bulk of the requirements for the new line. These were delivered under contract to be on the dock before the close of navigation, and as soon as the rush of grain deliveries from the wheat fields of the Canadian west has slacked off the company will begin moving the steel west, as work can go on practically all Winter.

* * *

Supplementing their operations on the Spence's Bridge-Nicola branch, the C.P.R. is already at work to carry their southwestern line into the Similkameen district from the Midway terminus. This will practically parallel the line the Great Northern has been busy building all Summer into the district, and the extension of the Midway and Nicola lines will complete the C.P.R.'s circuit through the Similkameen, making the short line from the Kootenay to the coast, via Grand Forks, and Greenwood from Robson.

Interesting accounts have come to hand of clashes between the men of the rival companies at a point where the Great Northern is to cross the C.P.R. branch not far from Midway, where the Great Northern was working eastward on the new grade. The C.P.R.'s line west of Midway had been staked years ago on practically the same right of way sought to be used by the Great Northern, and they started in to grade west from Midway, to prevent the Great Northern getting the line. A clash was avoided when the rival squads met only by the fact that the C.P.R. had a much superior number of men.

* * *

A great deal of interest is being taken in the many rich strikes of quartz on the Canadian side of Portland Canal this Summer. So many prospectors have been in the field this Summer that a great deal of new ground has been covered. As the new strikes are close to the portion of the international boundary being delimited since the recent award, the parties of surveyors sent out by the Government have been in a position to see what has been discovered, and they endorse previous reports as to the extent and value of the finds.

The narrow waterway leading up to Skagway is very likely to be the scene of a mining boom of some dimensions and great activity next season, many Americans, as usual, having got in on the "ground floor" with no one under them.

* * *

Vancouver city has now concluded a contract with the B. C. Electric Co. renewing its street lighting contract for ten years, on a much reduced basis. Hitherto the rate has been $93 for open arc lights, but new type lamps are to be installed and the rate is to be $38 per year. The company offered to allow the contract to commence now, instead of next June, when the old contract terminates, the saving thus effected being over $15,000. Mayor Buscombe strongly opposed the contract, though it can be abrogated in a year any time. He made a strong campaign for a municipal plant, and failing that a contract from the Electric Co. to give substantial reductions in the incandescent rates charged in the city. The company has, however, promised to make these reductions next April, when their waterpower plant shall have been running a year. The electric company also announces great extensions of its lines through the rural districts surrounding the two cities of Vancouver and New Westminster, making light and power available to hundreds of small farmers and ranchers.

* * *

A very serious fire on the night of October 30 practically made a clean sweep of the B. C. Wire and Nail Co.'s plant on the water front. The loss is almost $100,000 with but $18,000 insurance. All the stock of finished product and raw material on hand, as well as the buildings and plant were destroyed. No cause has been discovered, though it is suggested that imperfect insulation of some electric wires may have been the cause. The plant was operated by electric power. The management express their intention of rebuilding, and also announce that having saved their books, and having sufficient money in hand, they wish all accounts in at once so that they can settle up before starting afresh. The plant was only completed this season, and had begun to work up a very good trade. They brought the raw material—the black rods—from England, and the drawing, nail-making and galvanizing were all done here.

Progressive dealers should impress upon their trade the advantage of using "Impervia" Wired Glass Windows with fusible links, in hollow metal sash and frames, which are proof against any fire, and obviate the necessity of fireproof shutters, otherwise demanded by the insurance companies.

"Impervia" Wired Glass Windows equipped with our patented automatic closing and locking device are held open by a chain, in which is a soft, fusible link that melts at a very low degree of heat, releasing the sash, which instantly closes and locks itself.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

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"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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COMMERCIAL TRAVELERS' OFFICERS.

The quarterly meeting of the Dominion Commercial Travelers' Mutual Benefit Society was held in Montreal last Saturday, with the president, Mr. Alex. A. Murphy, in the chair.

A most satisfactory report was read, showing an increase in the membership, and also an increase in the reserve fund.

The nomination of officers for the ensuing year was then proceeded with, resulting in the election of the following geotlemen by acclamation: President, J. S. N. Dougall; vice-president, Richard Booth; treasurer, Chas. Gurd; trustees, David Watson, E. H. Copeland, Max. Murdock, J. F. L. Dubreuil, and J. N. Christie.

The newly appointed president, Mr. Dougall, retires this year from the presidency of the Dominion Commercial Travelers' Association, having filled that office for the past two years.

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Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Nov. 10, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

COLDER weather is stimulating trade in some lines of general hardware. Heavy goods are still being rushed in by the lake and rail routes and the demand for such lines is brisk. Collections are still showing a marked improvement.

There are not many price changes this week. Iron pipe has been advanced and new prices will be found below. Manila cordage has been marked up 1-2 cent per pound. Two or three other small changes will be noted.

Game Traps—This is the season for brisk selling of game traps. Prices are quoted as follows:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—Wholesale prices are steady at the following figures:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Prices are steady. We quote:

Barbed wire, 100 lb		$3 00
Plain galvanized	6 to 8	3 39
"	9	2 50 2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		3 00
Staples		3 50
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—As noted last week, iron shoes have been advanced 10 cents and steel shoes 15 cents. We now quote as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	4 90
No. 2 and larger	4 65

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Immense quantities of wire nails are being hurried in before the close of navgation. The price has been steady since the decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz.	9 00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits—Discounts on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges—The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Brush hooks are in some re-

quest at present. Prices are quoted as follows:

Brush hooks, heavy, per doz.....$8.75
Grass " per doz. 1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Boval Canadian, per doz..... $30.05
R. B, per doz..... 34.07

Files—The discount on "Arcade" files is now 75 per cent. We quote as follows:

" Arcade " ..... 75 p.c.
" Black Diamond" ..... 60 p.c.
" Nicholson's " .... 62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred.....	65c.
Pure fibre, plain	60c.
" " tarred.....	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned. ..... 70 and 10 p.c.
" " plain..... 75 and 2½ p.c.
" pieced..... 30 p.c.
Japanned ware .....37½ p.c.
Enamelled ware, white..... 45 p.c.
" Famous..... 50 p.c.
" Imperial.....50 and 10 p.c.

Cordage—Manila has been advanced 1-2c. per pound. Prices are now quoted as follows:

Rope, sisal, 7-16 and larger, basis.....	11 25
Manila, 7-16 and larger, basis.....	15 75
Lathyarn.....	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge.....	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam...	$3 00	$4 20
28 " "V" crimp.....	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square....	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " " ...	2 40	3 60

(Large sheets 28 in. x 6 ft. in.)

	Painted	Galvanized
28 gauge.....	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red 3 10

Ammunition, Etc.—The discount on "Dominion" military cartridges has been increased to 20 per cent. We quote as follows:

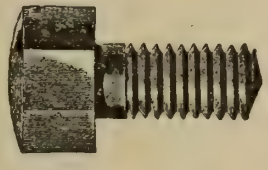
Ammunition, cartridges, Dominion R.F. 50 and 5 p.c.
Dominion, C.F., pistol..... 20 p.c.
" military.... ..... 20 p.c.
Ammunition, cartridges, American R.F. 33⅓ p.c.
C.F. pistol..... 5 p.c.
C.F. military.....10 p.c. advance.

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited
WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING
USED ALL OVER THE WORLD.
Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.
SEND FOR SAMPLES.
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited
Manufacturers of
Set and Cap Screws, Special Milled Work, Engine Bolts, Etc. Cold Punched Nuts of every variety of Shape.
INGERSOLL ONT.

Established 30 Years. Quality Tells.
We have seven factories producing daily 120,000 Files and Rasps, which are distributed throughout the four quarters of the Globe, and the excellent reputation which our Files maintain is the result of many years experience, and the expenditure of a large amount of money in designing the most elaborate machinery and tools for producing our INCREMENT CUT FILES, in all sizes and shapes, for all purposes.
We manufacture several Brands at our Dominion Works, all of which are warranted for their excellent cutting quality.
Sold by all prominent hardware and mill supply merchants.
NICHOLSON FILE COMPANY
Dominion Works, PORT HOPE, ONT.

Loaded shells:

Dominion Eley's and Kynoch's soft, 12 gauge.	
black	16 50
chilled, 12 gauge.....	17 50
soft, 10 gauge.....	19 50
chilled, 10 gauge	20 50

Shot, Ordinary, per 100 lb	6 25
Chilled	7
Powder, E.F., keg, Hamilton.....	4 7
F.F.G, Dupont's.....	5 00

Iron and Steel—Prices are steady at the advances in bar iron, sleigh shoe and

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words each insertion,	1 year		$30 00
" " "	6 months		17 00
" " "	3 months		10 00
50 " "	1 year		17 00
" " "	6 months		10 00
25 " "	1 year		10 00

FOR SALE.

HARDWARE and Stove business; town 4,000; one opposition; best reasons. Box 293, HARDWARE AND METAL, Toronto. [45]

ONE No. 3 Warrington Steel Pile Driver, length, 8 feet; diameter of cylinder, 8 inches; normal stroke, 30 inches; weight of striking parts, 1,800 lbs.; total weight, 3,800 lbs; distance between jaws, 18 inches; width of jaws, 6¼ inches; fitted with patent end base; interchangeable; complete with all fittings and steam hose. This hammer has been used but two weeks by a private concern (to hustle work delayed by contractor) which has no further use for it. It is practically as good as new. Box 285, HARDWARE AND METAL, Toronto. [45]

VALUABLE Canadian patent for a very useful pocket tool; cost one cent to manufacture; retails for 10c.; half a million sold in the States. For particulars or interview address Perry, Box 397, Norwich, Conn. [45]

HARDWARE, Stove and Tinware business. Stock about $3,000. Owner going west. Box 290, HARDWARE AND METAL, Toronto. [46]

AGENCIES WANTED.

MANUFACTURERS' AGENT desires correspondence with manufacturers of hardware specialties who want live intelligent representation in Western Canada. Address P.O. Box 702, Winnipeg, Man. [47]

TRAVELLER WANTED.

FOR German hardware and cutlery import house. Apply to F. W. Lamplough & Co., Montreal. [45]

SITUATION WANTED.

WANTED—By young man with 20 years' experience in hardware business, position as traveller or head salesman, between now and 1st January, 1906. Best of references. Address Box 291, HARDWARE AND METAL, Toronto. [45]

HARDWARE CLERK; practical experience 6 years; knowledge of office work; highest references guaranteed; ability and character; would accept a responsible and permanent position; West preferred. Box 292, HARDWARE AND METAL. [45]

FOR SALE.

OLD ESTABLISHED HARDWARE BUSINESS in one of the best Manitoba towns; first-class wheat district; good stock and buildings; paying trade; suitable terms; a fine opportunity for anyone wishing to go into the business. For information apply to **The J. H. Ashdown Hardware Co., Limited, Winnipeg, Man.** [46]

spring steel noted in last issue. We now quote as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—We quote again at the advance noted last week:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge,	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—There has been a sharp advance and the price is now $8.50 for cask lots and $9.00 for broken lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe— There have been some sharp advances in iron pipe and prices are now quoted as follows:

Black iron pipe, ⅛ inch	
" ¼ "	2 55
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— Prices are still quoted as follows:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 74-76	27c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine—Prices are steady this week at former quotations which were as follows:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls	o 02½	
" " in kegs	o 02¾	
Turpentine, pure, in barrels	1 04	
Less than barrel lots	1 09	
Linseed oil, raw	o 57	
Boiled	o 60	

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

Nova Scotia Trade News

Halifax, N.S., Nov. 8.

THERE is practically a panic in the metal markets in Halifax at the present time. The stocks held by the jobbers are nearly all cleaned up. The demand for sheet lead and sheet iron and sheet zinc at this season of the year is always good, but at the present time the demand is greater than ever before. This shortage will greatly retard trade. One of the leading hardwaremen of this city to-day informed your correspondent that he could dispose of all the sheet lead and zinc available at 8½ cents per pound. The jobbers here hold very little stock, and what they have on hand they could have disposed of ten times over, but they are holding on to it, and only supplying the most urgent demands of their best customers. The dealers do not care about taking the risk of importing at the present prices, though some have placed orders by cable, even at the advanced prices. The plumbing trade in particular is suffering as a result of the condition of the market. Trade and collections continue good and the jobbers are kept busy filling orders. The manufacturers have notified the jobbers of an advance of 10 cents per keg on wire nails. The jobbers have not made any increase so far. They are still selling nails at $2.25 per keg base.

The run on roofing materials is unusually good. Good sales are reported of 2 and 3-ply roofing, tarred felt and tarred sheathing.

W. G. Robertson, M. O. Crowell and W. H. Stevens, of this city, who were at St. John, N.B., last week attending a meeting of the executive of the Maritime Hardware Association, have returned home. Reports from the delegates who attended the recent meeting of the Canadian Hardware Association held at Toronto were received and tariff matters discussed. The most important business was the revision of the price list. The matter of price has been causing much concern for several months past, but it is now thought the matter is settled. The revised list will probably be issued to the jobbers next week.

The work of excavating for the new foundry at Glace Bay for the Dominion Coal Co. has been commenced. The building will be 90x100, about twice the size of the present foundry. The new building will be of brick, with steel frames, and will cost $25,000. It is expected that the building will be completed inside of three months. The capacity of the foundry will be ten tons per day.

It is reported that Alex. Moxham, who was manager of the steel works at Sydney, is to take over the control of the Colonial Copper Co.'s works and mines at Cape D'Or. An engineer in the interest of Mr. Moxham is now at Cape D'Or, making an examination of the mine, and Mr. Moxham and a number of his associates are expected short-

ly. A short time ago a number of the men were discharged, but it now looks as if work will soon start with renewed energy.

The Dominion Coal Co., it is stated, have secured a big contract from the Boston & Maine Railway Co. for the delivery of 75,000 tons of coal during the coming Winter. The delivery of the coal will begin about the first of December next, and will be continued at the rate of 15,000 tons per month until the whole contract is delivered.

TARIFF COMMISSION AT WORK.

THE Tariff Commission, under the presidency of Hon. W. S. Fielding, has been sitting in Montreal during the present week, and delegations representing many different lines of trade have been heard.

From a hardware standpoint, the most interesting session was that of last Tuesday, when requisitions were presented by representatives of several manufacturing interests, nearly all of whom asked for higher protection.

At the opening of the inquiry Tuesday morning, C. C. Ballantyne, president of the Canadian Manufacturers' Association, extended a cordial welcome to the commissioners, and intimated that some of the sections were not yet ready with their cases, but an arrangement could probably be made whereby those who were not ready would be allowed to present their requisitions at some later time, at any convenient point. The interests whose cases were not yet prepared for the presentation included the iron and steel industries, the paint and varnish manufacturers, and the boot and shoe manufacturers.

A strong plea was made for higher protection by the Dominion Wire Mfg. Co. Montreal Rolling Mills, and Peck Rolling Mills, manufacturers of wire nails, asked that no change be made in the present duty of 3-5c. per pound, unless the Government decided to put a duty on wire rods, in which case they would ask that such duty be added to the present protection on wire nails.

Mr. J. C. McCormack, president of the Dominion Wire Mfg. Co., pointed out that in barbed and galvanized wire the United States Steel Co. had a practical monopoly of the Canadian market, and that Canada, directly or indirectly, was losing a trade which is worth $2,000,000 per annum. Mr. McCormack gave a number of interesting statistics, showing that during the fiscal year ending last June, Canadian imports of galvanized wire amounted to 16,692 tons, valued at $658,000, while barbed wire to the amount of 20,579 tons, and valued at $892,000, came into the country. Of this, 93 per cent. of the galvanized, and 86 per cent. of the barbed wire, came from the United States, while the balance was manufactured in England or on the continent. Before the removal of the duty between ten and twelve thousand tons of barbed wire were consumed in Canada, while, last year, about 22,000 tons were used, only about 2,000 tons being manufactured in Canada. Mr. McCormack therefore asked that a specific duty of 50c. per hundred pounds, or not less than 20 per cent., be put on galvanized and barbed wire. This would put the Canadian manufacturers of wire on an equal footing, and would give the Canadian steel manufacturers an opportunity to supply to Canadian wire manufacturers no less than 40,000 tons of wire rod per year. This would mean an additional output of one million dollars a year to the mills of the country.

Replying to Hon. Mr. Paterson, Mr. McCormack said that the only galvanized and barbed wire manufactured by them was for consumption on Montreal Island. When they wished wire for the country at large they were obliged to purchase from Cleveland, and take a profit as commission merchants.

For Decrease on Steel Tubing.

Mr. John Millen, of John Millen & Sons, hardware merchants, who deal extensively in steel tubing, pointed out that mechanical steel tubing should enter Canada at 10 per cent., the same as bicycle tubing, instead of at 35 per cent., the present duty. This tubing is not made in Canada, and it forms the raw material for a number of manufactured articles which are either on the free list, or subject only to a very low rate of duty. Mr. Millen suggested that boiler tubing pay 5 per cent., and bicycle and mechanical tubing 10 per cent., instead of 35 per cent. He did not think the mechanical steel tubing, which was coming more and more into use, would be manufactured in Canada for a long time to come.

No Change for Rolling Mills.

Mr. J. R. Kinghorn, representing the Montreal Rolling Mills and Peck Rolling Mills, asked that no change be made in the present tariff respecting rolled iron and steel angles, as present conditions are satisfactory. An interesting point to develop during Mr. Kinghorn's examination was the fact that the Canadian mills can no longer supply steel billets for the market, owing to the great demand for steel rails. Consequently the rolling mills are compelled to purchase abroad.

Steel Works are Heard.

The Montreal Steel Works were represented by Messrs. J. R. Wilson and K. W. Blackwell, who complained about certain changes which had recently been made in the tariff. That is, a duty of seven dollars per ton has been put on steel rails, and there has been no corresponding increase on the manufactured article. The Montreal Steel Works, it may be explained, are large manufacturers of steel castings and railway construction material. By reason of this duty it is difficult to compete with the manufacturer in the United States, who gets his rails at so much less than Canadians are compelled to pay. A private statement covering the ground of the arguments and giving the relative cost of the articles here and in the United States, was presented to the commission for their perusal. In conclusion Mr. Blackwell stated that they would like the duty to be increased from 30 to 35 per cent. ad valorem, which was not an exorbitant request, considering that the company employed 900 hands in Montreal alone.

On Wednesday the commission dealt with the tobacco interests and the various branches of dry goods. On Thursday on the invitation of His Excellency the Governor-General, the commission were present at the dinner in honor of the King's Birthday. The sessions were resumed on Friday.

AN UNNECESSARY WASTE.

NOT long ago a well known Canadian company requested Hardware and Metal to use the word limited after its name whenever it appeared in any issue of the paper. The request was complied with at the time, but in looking up the number of times where the word is used in the ordinary course of events it is found that there is a tremendous waste in using the word where it appears to be altogether unnecessary. In the department of industrial gossip in a recent issue the word limited appears thirty times in an ordinary page of reading matter, fully five lines being occupied in merely complying with a form. This is not the only waste, however, as there is the expense of making the dies, setting the type, etc. By leaving out the word the editor will have less labor to perform and will be able to insert a larger amount of news matter in the page than by complying with the ordinary form of using the word wherever the name of the firm appears. According to the law under which companies are registered, companies are compelled to use the word limited after their name in all official documents, in all advertisements and on all printed matter bearing the company's name. Where the word "company" is abbreviated the word "limited" must be spelled out, but where the word "company" is spelled out, "limited" can be abbreviated.

As it is necessary for an individual to know when he is doing business with a concern composed of a number of individuals whose liability is limited to the amount of their investment in the company's stock, it would seem to be a wise precaution to enforce the regulation calling for the use of the word wherever the company's name appears officially. In the U. S., however, where a larger number of companies are incorporated than in Canada, "limited" is not used to nearly so great an extent as in this country. There does not seem, therefore, the necessity for using the word in the ordinary course of newspaper writings, and Hardware and Metal will substitute commonsense for form in its reading columns in future, considering that this policy might well be adopted by other papers.

Builders' hardware figured in Canada's imports for the past year to the extent of $658,338.

* * *

The American life insurance agents are about the only ones who are not looking forward to a good Winter's business.

The agreement of the German wire-rope syndicate will expire at the end of the year, and the sale of ropes for 1906 has already been set free for the open market. It is, however, not impossible that a fresh understanding may be arrived at.

PAINT, OIL AND BRUSH TRADES

SHERWIN-WILLIAMS BANQUET.

ONE of the most successful of the twenty-five annual conventions of the Sherwin-Williams Co. was brought to a close Friday night by an enjoyable banquet at the Windsor Hotel, Montreal. About 225 guests sat down to the tables, which were arranged in the beautiful main dining room of the hotel. The decorations were elaborate, the feature being a huge transparent globe suspended from the central dome, and made to represent the company's famous "Cover the Earth" sign.

Mr. C. C. Ballantyne, manager of the Canadian division, was chairman for the evening, and proposed the only two toasts, "The King" and "President Roosevelt," both of which were greeted with enthusiasm.

After these toasts had been honored the president, Mr. H. A. Sherwin, was called upon. He said, in part, that he considered himself more than ordinarily fortunate to have lived to see the company, which he had started in a small way, grow to such proportions. The success of the Sherwin-Williams Co. he generously attributed to the loyal staff of officers by whom he was surrounded. He hoped that still many years of co-operation were before them.

F. D. Monk, M.P., paid a great tribute to the industrial enterprise of the United States, where, alone, were companies who could afford such spectacles as the one there presented. Canadians were glad to see American capital come into their country to assist in its development. Speaking as a public man, he would, however, assure the gentlemen present that Canada had no ambition to attain a political union with the nation to the south. Mr. Monk spoke a fitting eulogy of C. C. Ballantyne, the manager of the Canadian division of the company, whose unanimous election to the presidency of the Canadian Manufacturers' Association at a moment when most important interests were at stake, attested his reputation for business ability. In conclusion, Mr. Monk expressed the hope that the United States and Canada would work together like brothers, in the interests of this great continent, the future of which is so bright.

Acting-Mayor Clearihue was then called upon and expressed his pleasure at the presence of the Sherwin-Williams representatives in the city of Montreal, which was destined by reason of favored position to become one of the greatest cities on the continent.

Rev. Dr. Johnston, of the American Presbyterian Church, made a most happy speech, in which he said that co-operation, rather than competition, was what was wanted in the business world. Dr. Johnston referred to his old acquaintance with Mr. Cottingham, the general manager of the company, in Cleveland. Mr. Cottingham, by the way, is still a Canadian, as, in spite of a number of years' residence in the United States, he has never taken out his naturalization papers, remaining true to the land of his birth.

During the evening solos by Mr. Duquette, and recitations by Mr. McLaughlin, together with the Sherwin-Williams topical songs, helped to enliven the proceedings.

A feature of the banquet was the fact that the lady spectators in the gallery remained throughout the evening, taking a lively interest in the proceedings. Among the ladies in the gallery were Mrs. H. A. Sherwin, wife of the president of the company; Mrs. S. P. Fenn, Cleveland; Mrs. J. A. Garson, London; Mrs. Dixon Cottingham, Mrs. C. C. Ballantyne, Mrs. Yuille, Mrs. Trenholme, Mrs. Porter, and Miss Stevenson.

The gathering broke up by singing the national anthems of the British Empire and United States, and the special train carried away most of the delegates on Saturday afternoon.

CANADIAN OIL WELLS.

Robert Whitehead, an English oil expert with long experience in Siberia, is in Canada looking over the oil fields in Alberta. He represents an English syndicate, which owns 2,000 acres near Pincher Creek, Alberta.

The Great Northern Oil & Gas. Co.'s new oil well at Manitowaning, Manitoulin Island, gushed fully 15 feet in the air after a depth of 450 feet had been attained. Fourteen barrels were pumped in 20 minutes. The oil is said to be of very superior quality.

ANTI-TRUST AGITATION.

Owing to the high prices of turpentine from the Southern States, there is a strong movement developing in Great Britain favoring the purchase of turpentine produced in Canada and India in preference to the United States article. The British Government may be asked to make an appropriation to develop the industry in India.

The Couse-Rougie Co., doing a hardware and glassware business in Sarnia, have dissolved. Messrs. A. and N. B. Rougie will continue the hardware business and Mr. Couse the glassware branch.

Imperial Turps.

We do not claim it is pure Southern Turpentine, but we do know it is safe to use, and does not contain any injurious properties. This is more than we would like to say about some of the so called PURE in the market at present.

Manufactured only by

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

JAP VARNISH IN PENNY LEVER CANS

Suitable for all general purposes and so valuable to have in stock. It's wise to be equipped for various kinds of trade and to have on hand an article the merit of which you can vouch for. "The Excellence of our Product the first consideration"—that is our motto. Try JAP VARNISH and see if it is not a trade-bringer. It has that reputation.

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With Plated Rust Proof and Guarded Springs
"The Latest and Best."
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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
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The GROVE CHEMICAL CO., Limited
Appley Bridge, Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter.

GET THE HABIT

of dropping us a card a few days before you start for Montreal or Toronto on a business trip telling us where you are going to stay. We want to print it in the "Buyers in Town" department before you arrive.

SCHROEDER & STADLEMANN
OBERLAHNSTEIN, A/M RHINE, GERMANY

ESTABLISHED 1862

MANUFACTURERS OF
TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc

SPECIALTY

YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.

ALL'S WELL THAT'S PAINTED WELL

To get the **results** for your **customers** you **must carry** the **paints** and **varnishes** which you **know by experience** will **give** them. On those results **depends** your **trade.** Sell **unsatisfactory** goods and you receive **unsatisfactory** patronage.

"Island City" Brand

Paints and Varnishes have **that** "something" about them that **pleases** the **user.** Call it **quality,** call it **merit,** call it anything you like. The fact remains that the "something" is there.

HOW DOES YOUR STOCK STAND?

P. D. DODS & CO.
Toronto, Montreal, Vancouver, Winnipeg

Harping The Same Old Tune

regarding the merits of

ANCHOR LIQUID HOUSE PAINTS



TRADE MARK

still continues to increase their sale. These are the Paints in which **the only WHITE LEAD used,** is

BRANDRAM'S B. B. GENUINE

the world's standard for the last **187 Years.**



Manufactured by

HENDERSON & POTTS, Limited

HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED

MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 2, 1905.

PAINT markets for the past week have been remarkable for the good sized Fall orders which have been received and as usual everyone is in a hurry to get them shipped before Winter rates come into force. Some orders for shipment by boat are already too late, as the particular boat specified tooted her last whistle for the season in Montreal harbor last week.

Price changes are few and unimportant, but firmness is evidenced on all sides. There is no doubt whatever that the heavy demand will be a powerful factor in maintaining the present figures.

One of the features of the week has been the extraordinary call for putty, vermillions and varnishes.

Conditions in linseed oil are about the same as before. Stocks are ample so that there is no immediate prospect of the Canadian market going up in sympathy with the strength in England.

Turpentine — The predicted advance has not yet materialized. The market is firm at the following figures: Single barrel, 98c. per gallon. Two barrels or over, 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Prices are steady, but as stocks are ample, no advance is looked for just now. Our quotations are as follows: Raw, one to four barrels, 45c.; five to nine barrels, 44c.; boiled, one to four barrels, 48c.; five to nine barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—We quote: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc — Prices are firmly held as follows: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc—(Ground in oil) — We give the following prices: 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—There has been an extraordinary demand for this article during the past week. We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—We give the following prices: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—In spite of a very strong and advancing market, it is likely that local jobbers will continue throughout the Winter to sell at the following prices. We quote: Genuine red lead in casks $4.50; in 100-lb. kegs $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—We quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—Our quotations are as follows: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Our prices are from $1.20 to $1.40 per gallon.

Castor Oil—Large quantities are moving. We give prices: From 7 1-2c. to 8 1-2c., according to lot.

Refined Petroleum—Market conditions remain without change. There is a good brisk demand, and the turnover is improving with each week. We quote: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Nov. 10, 1905.

LINSEED oil has been advanced by some dealers as predicted last week. In England oil continues very firm while on the local market the mills at Baden have been forced to practically discontinue crushing owing to the difficulties of transporting seed from the Northwest. Large shipments have been held up at Sarnia owing to shortage of cars on the railroad but the blockade is being relieved somewhat and more oil will be on the market in a short time. These conditions have resulted in an advance of one cent by most dealers, but as stated before, some are still selling at the old figures.

Turpentine is slightly weaker on the markets in the south, but the conditions locally remain the same. The high prices have practically shut off the sales of turpentine dealers carrying very light stocks and small buyers purchasing only what is absolutely necessary. The volume of trade is therefore very small.

Shipments of petroleum have been very large owing to the near approach of the closing of navigation. Merchants in the back districts have been laying in stocks to carry them over until next spring and shippers have, therefore, been kept very busy. Penn. crude holds firm at the recent advances while Canadian crude has

strengthened considerably and is now quoted 2c. higher.

General business is very satisfactory for the middle of November, considerable white lead being sold while the trade in putty is exceptionally large. Glass is firm at the advances made recently.

White Lead—Ex Toronto, pure white, $5.55; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c. to 48c.; boiled, 50c. to 51c.; 5 to 9 barrels, raw, 46c. to 47c.; boiled, 49c. to 50c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum— Dealers in the back districts have been laying in their Winter supplies and shipments have been large. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Canadian crude has advanced 2c. Pennsylvania crude holds firm at the price listed. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

Pittsburg manufacturers are likely to accept an invitation recently given them to pay a visit to Toronto and other Canadian points.

MONTREAL WINDOW GLASS.

Ships plying between this port and England and Belgium are now making their last trips to Canada for the season. It is not known how much glass these vessels will bring, but it is a sure thing that all this city will have to carry local jobbers through the Winter is now on the ocean. One thousand boxes of window glass ex Leyland liner's stranded vessel Virginian were sold at auction, Thursday afternoon, but even if the glass were in first class shape it couldn't relieve the situation to any great extent. We do not advance our prices this week, but are assured that our figures are much firmer than ever. It is impossible to get closer quotations than those given below: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

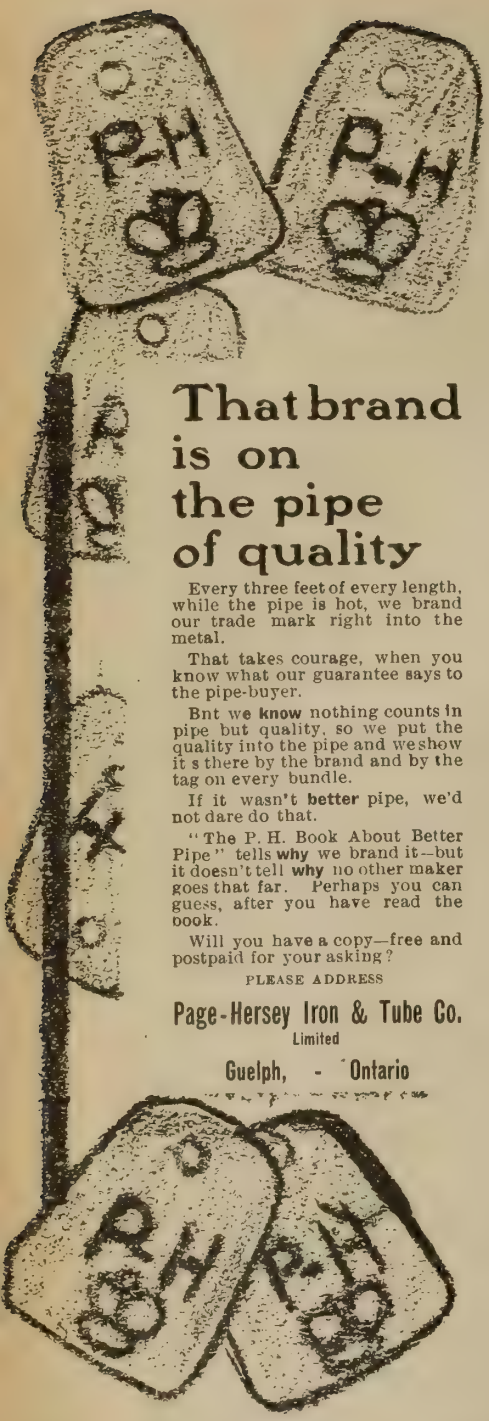
ORIGIN OF SHELLAC.

FEW people know that lac, from which shellac is manufactured, is an incrustation left on the branches of certain trees by insects in India. All Indian Provinces produce it, but principally the Central Provinces, Bengal and Assam. In other districts local dealers use if for making rings, beads, bracelets, and other ornaments, and also for wood lacquer work. The lac is collected by the jungle tribes, who break off branches on which it is deposited. In this form it is called stick lac. Manufacturers of shellac and button lac buy large quantities of it in this form and put it through the processes which prepare it for commerce. The United Kingdom and the United States are two great markets for it. Shellac has been used in electrical works and in making gramophone records of late, and, as the demand has exceeded the supply, the price is considerably higher.

FOREIGN LINSEED MARKET.

Despite the low prices of flax seed in England, as compared with the quotations of last July, the London market is still above an import basis for American seed. Shipments from India so far this year have been only about two-thirds of what they were a year ago. The light stocks would seemingly indicate higher prices, but while the market is strengthening somewhat, quotations are still about 10 per cent. lower than in July. With decreased supplies available in India, an export movement from America may develop.

AN UNPRECEDENTED RUSH OF FALL ORDERS PRECLUDES THE "WRITING UP" OF THE CANADA PAINT COMPANY'S WEEKLY CHANGE OF ADVERTISEMENT. ALL REQUISITIONS WILL, HOWEVER, BE WELL TAKEN CARE OF AND PROMPTLY SHIPPED.



That brand is on the pipe of quality

Every three feet of every length, while the pipe is hot, we brand our trade mark right into the metal.

That takes courage, when you know what our guarantee says to the pipe-buyer.

Bnt we **know** nothing counts in pipe but quality, so we put the quality into the pipe and we show it s there by the brand and by the tag on every bundle.

If it wasn't **better** pipe, we'd not dare do that.

"The P. H. Book About Better Pipe" tells **why** we brand it—but it doesn't tell **why** no other maker goes that far. Perhaps you can guess, after you have read the book.

Will you have a copy—free and postpaid for your asking?

PLEASE ADDRESS

Page-Hersey Iron & Tube Co.
Limited
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Iron Roof Cresting
Finials
Iron Fencing

DENNIS WIRE AND IRON CO.
Send for Catalogue. LONDON, ONT

When you answer an advertisement mention this paper.

INDUSTRIAL GOSSIP.

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

REPRESENTATIVES of a syndicate of American steel manufacturers are negotiating with the Fort William Board of Trade regarding inducements for the erection of a steel finishing mill, employing not less than 200 men at Fort William.

A large creosoting plant is to be established at Dartmouth, N.S.

John Wilson, Collingwood, will erect a pork packing plant in Edmonton.

J. S. Emerson, Vancouver, is building a new saw mill at Greenway Sound.

The Winnipeg Paint Co., Winnipeg, will erect a branch factory in Edmonton.

The Wolverine Cedar Lumber Co., Menominee, Mich., will erect mills at Spanish Mills.

The Canadian Flax Cordage Co. are negotiating with the town of Berlin for a factory site.

A representative of a Detroit company manufacturing rattan furniture has been looking for a site at Sarnia.

The Dominion Coal Co. has commenced work on a new building to be used as a foundry at Glace Bay. The cost will be over $25,000.

A match factory is to be established at Sarnia. The factory will be in connection with the Cleveland-Sarnia mills. It will give employment to 100 or more hands.

The Vinning Machine Co., manufacturers of concrete block machines, have located at Niagara Falls, and are installing machinery in a factory building they have secured.

The Russell Electric & Hydraulic Co., recently held a meeting at Chatham, N. B., and decided to undertake the manufacture of a new roller bearing invented by W. H. Russell.

Raymond, Alberta, is installing a water supply tank of 10,000 gallons capacity, operated by an air motor pumper. The outfit is being suplied by the Devlin-Tyrrell Co., of Winnipeg.

Messrs. Whalen & Bowman have closed an agreement with the town of Fort William in return for certain inducements, they have agreed to build a large machine shop and dry dock, employing fifty men.

The Dominion Coal Co. will apply to the Tariff Commission to protect the soft coal industry against British coal which is brought out as ballast and entered at a very low duty under the preferential agreement.

The lumber districts along the northern branches of the Rouge River, Que., are quiet this year, as the big lumber companies are cutting their wood only in the lower parts. This is rather seriously affecting the hardware trade in the upper districts.

The Canada Saw Co. are removing their factory into a larger premises at Ottawa. The statement that the company intend to remove from Ottawa is



THERE is a prominent feature in the sky of nearly every Canadian city and town just now, and that is smoke.

Where the "PEASE" is used it is not so noticeable. That is why the Pease

ECONOMY HOT-WATER BOILER

is so popular in Toronto and Winnipeg.

If you haven't sent in your orders to us as yet, post them at once and we will see that goods are started to you the same day as order is received.

PEASE FOUNDRY CO,, Limited
TORONTO

PEASE - WALDON CO., Limited
WINNIPEG

denied. The company intends to enlarge its factories in Toronto and St. John during the coming year.

Application is to be made to Parliament at its next session for an Act to incorporate the Buffalo, Niagara and Toronto Railway Company, with power to construct a railroad from Niagara-on-the-Lake to St. Catharines and Port Colborne. It is also to touch at Fort Erie.

Work has begun in grading the roadbed for the new railway between Three Rivers and Shawinigan Falls. The chief engineer in charge of the construction is Mr. Ross McRae, who is assisted by Mr. Burrell of Burrell's Siding. It is expected that the track will be laid as soon as the frost leaves the ground in the Spring.

The Manitoba Iron Works, Limited, of Winnipeg, have completed the water tower contracted for with the town of Portage la Prairie and Engineer Chipman has passed same as entirely satisfactory. This is the largest contract of the kind yet undertaken in Western Canada.

The Improved Match Co., Limited, is the name of a new enterprise that has been established by a number of prominent Montreal business men, with a capital of between $75,000 and $100,000. The company has purchased a large brick factory at Drummondville, where the works will be situated.

The Vancouver Nail Factory has been destroyed by fire, the loss being estimated at $100,000. The building had been erected against the Vancouver Engineering Works, and the exertions of the firemen were concentrated on one spot for the purpose of saving this big plant, which they ultimately did. The factory will be rebuilt.

The Dominion Coal Co. intend to instal quite an extensive electrical plant at their No. 2 colliery, near Sydney. The Canadian Westinghouse Company are the successful tenderers. Up to the present the company have been utilizing steam and compressed air, but it has been found that electrical transmission would be more economical and altogether an improvement.

The Hamilton Bridge Co. have secured the contract for the structural steel work for the new plant of the American Glass Co., at Cayuga. Before deciding to build at Cayuga the company had representatives make a thorough test of the sands available and the natural gas supply. The company has agreed to employ 400 men when the works commence operations next year and this number will likely be increased to 1,000.

The Australian Comptroller of Trade has notified the Canadian Department of Trade and Commerce that inland freight is added to the value for duty purposes only in the case of goods subject to an ad valorem duty. Goods entering at specific duties are exempt from the regulation. Last year less than one-half of the Canadian imports into Australia were subject to an valorem duty. It is argued, therefore, that the new Australian customs regulation will not affect Canada very seriously.

The Dominion Iron & Steel Co. has started on a 5,000-ton rail order for the Temiskaming Railway. Fifteen hun-

Pedlar Talks

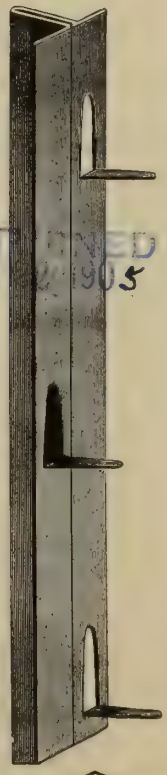
"KEEPING EVERLASTINGLY AT IT BRINGS SUCCESS"

No. 29. OSHAWA, ONT. Nov. 11, 1905

Pedlar's Steel Solid Partition Stud



Top Socket





Bottom Socket

THREE GREAT SELLERS

Fireproof Partitions, etc., are an absolute necessity. Builders are realizing this fact and turning to our **Fireproof Partition Stud, Sheet Steel Furring Strip, Perfect Metal Lath.**

We are offering these goods at a fair price. No reason for any Hardwareman missing the trade. Just a matter of getting in a stock.

Write to one of our offices for full particulars, and also ask about our **Ceiling, Roofing, Covering, Siding,** etc.

Write to-day.

Pedlar's Sheet Steel Furring Strip



Pedlar's Steel Studs
For Hollow Fireproof Partitions.



The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

QUICK ACTION

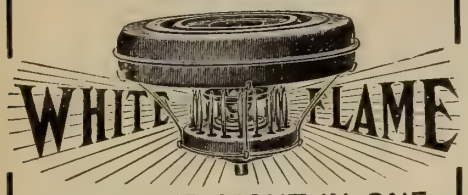
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to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE

AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug, 12, page 59; Aug. 19, page 58; Sept. 30, page 72; Nov. 4, page 14, or send for Catalogue.

WALTER GROSE, MONTREAL } Sales Agent for the Dominion

One Step in Advance

In the matter of processes we are one step in advance of "other makers."

THE HAMILTON RIFLE

MODEL No. 23

proves this. It is a marvellously cheap rifle and yet it is **efficient** and **reliable**—absolutely so. No complicated mechanism. All working parts interchangeable. No other rifle has a barrel just like **The Hamilton Rifle.** No other rifle can begin to compare with it in the matter of price—a very important matter.

You could sell **Hamilton Rifles** as well as other Hardwaremen. Won't you ask your Jobber about **Model No. 23?**

THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**

dred tons of the I.C.R.'s 25,000-ton order have already been completed. The Dominion Steel Co. is reported to be arranging with the Nova Scotia Steel Co. for the exploration of submarine areas at Wabana. The N. S. Co. own areas lying outside those of the Dominion Co., and a slope will be driven down through from their present workings, which it is hoped will prove the existence of large and valuable bodies of ore in the areas of both companies.

Ground has been broken for the Atikokan Iron Co.'s new blast furnace at Port Arthur, Minn., and work on it will be rushed as fast as possible. The company's new equipment is being sent to Port Arthur as fast as it can be secured, and it is evidently the intention of the promoters to lose as little time as possible. They are said to be watching the test of electric smelting at the Soo with great interest, and if it proves a success there, it will probably be tried at the Atikokan properties. The experiment at the Soo is being conducted by the Canadian Government at an expense of about $15,000, and under the direction of Dr. P. L. T. Heroult, technical director of the French Electro-Metallurgical Society. The new blast furnaces will handle ore from the Atikokan range, and will have an annual capacity of something like 60,000 tons of foundry and Bessemer iron. It will be equipped with three Roberts stoves and will have a stack seventy-five feet high. A battery of coke ovens will be constructed near the furnace.

All the leading Canadian iron and steel companies have decided to petition the Tariff Commissioners that the maximum protection should be continued for different classes of iron and steel. While different committees have been appointed to prepare statements dealing with special classes, it is certain that the Government will be asked to extend the present sliding scale of bounties, in order that they should not run out in 1907. The main reason for this is that the bounties were given to enable the companies to get on their feet but for a considerable period both the Dominion Iron and Steel, and the Lake Superior Corporations, owing to their financial troubles, were unable to take proper advantage of the bonus bounties. One of the largest Canadian steel interests, stated that while the companies were doing fairly well at present, it could hardly be said they could meet outside competition. The industry was now in a fair way to becoming one of the greatest in the country, but Government assistance would be needed for quite a little time.

Companies Incorporated.

The corporate name of Canadian Ladder Co. has been changed to Robinson & Turner Mfg. Co.

The Great West Wire Fence Co., Winnipeg, share capital $100,000; purpose, to manufacture wire fencing. The directors are T. Black, W. A. Morkill, W. L. Belyea, W. M. Andrews, and C. W. Bradshaw, all of Winnipeg.

The Fleming Aerial Ladder Co., Toronto, share capital $100,000; purpose, to manufacture and deal in ladders and hoists. The directors are Thomas Wylie, George Henry Townsley, and Robert Fleming, all of Toronto.

The International Mfg. & Supply Co., Windsor, share capital $40,000; purpose, to make, construct, use and vend to others certain inventions. The directors are Leonard Walter Ashley, Walter Bong and Samuel Keal Peck, all of Windsor.

The James Robertson Co. have secured a charter in New Brunswick to carry on their plumbing supply business in the Maritime Provinces. The capital stock is $70,000, and the incorporators are J. H. M. Robertson, C. M. Robertson, A. M. McMichael, Jas Robertson, and A. Robertson, all of Montreal.

Canada Carb-ox Co., Winnipeg, share capital $30,000; purpose, to manufacture and sell the carb-ox system of smoke consuming apparatus. The incorporators are James Stuart, Jacob Nichols Yeomans, William Stephenson, all of Winnipeg, and Joseph Weller Hays, Chicago; and John Graham, of Winnipeg.

The Water Supply Co., Montreal, share capital $40,000; purpose, to promote and organize companies for the supply of water, gas and electric light. The incorporators are Maurice Rousseau, Montmagny, Que.; Arthur Eugene Brunet, William John White, Lacasse Rousseau, and Arthur William Patrick Buchanan, all of Montreal.

Business Changes

Ontario.

John P. Armstrong, blacksmith, London, has sold out.

Jacob Hessenauer, blacksmith, Port Elgin, lost by fire.

Wm. Wyatt & Son, stoves and tinware, London, have sold out.

Patrick Lynch, blacksmith, Dacre, has been succeeded by F. Woodhouse.

A. Dawson, hardware merchant, Fort William, has sold out to S. Marlatt & Co.

Quebec.

Gougeon & Cote, hardware, Montreal (Verdun), registered.

Joseph Sarrazin & Fils, hardware merchants, Montreal, registered.

Mrs. Joseph Lafrance registered with Parent, Gaudais & Cie., plumbers, Sherbrooke.

There was a meeting of the creditors of Guenette Freres on November 6th. A. Lamarche curator.

Western Canada.

R. P. Sutherland, blacksmith, Grenfell, has been succeeded by James Dunn.

J. E. Tourigny, agricultural implements, Sintaluta, is giving up business.

G. W. Wickens, hardware merchant, Cayley, has sold out to Stinson & Smith.

Mutch & Hewitson, agricultural implements, Lumsden, have sold out to J. S. Wright.

A bailiff's sale was held of the property of George F. Rawles, plumber, Winnipeg.

Blythe & Clements, hardware merchants, Creelman, have succeeded Blythe & Wilson.

John Burnett, late agricultural implements, Sperling, has assigned to J. H. Haverson.

The stock of the estate of W. R. Johnson, grocer and hardware merchant, Winnipeg, has been sold.

The Bellamy Co., agricultural implements, Fort Saskatchewan, have been succeeded by W. M. Armstrong.

George Balfour, agricultural implements, Wolseley, is to be succeeded by Robert J. Campbell, December 1st.

CAPEWELL HORSE NAIL EXPANSION.

One of the important industries of St. John, N.B., was transferred last week, when the Capewell Horse Nail Company, of Hartford, Conn., obtained control of the Maritime Nail Works.

The Capewell Horse Nail Company is one of the largest of its kind in America, controlling perhaps a half of the trade in the United States. They are also anxious to get a grip on the Canadian trade, but as the tariff prevents their sending goods into the country so as to compete with domestic producers, they recently located a factory in Toronto and have now purchased a controlling interest in the Maritime Nail Works.

The Maritime Nail Works Co., Limited, were organized in 1895, with a capital of $50,000. They employ one hundred men and have always been a paying investment.

LONDON'S NEW LORD MAYOR.

LAST month saw the installation of a new lord mayor in London, England, in the person of Alderman Walter Vaughan Morgan, the senior member of the firm of Morgan Bros., proprietors of the Ironmonger, the leading organ of the hardware and ironmongers' trade in Great Britain. Sir John Power, the retiring lord mayor, was also associated with the hardware trade.

Lord Mayor Elect Morgan is of Welsh descent, having been born in 1831. In 1855 he joined five of his brothers in establishing the firm of Morgan Bros., merchants and bankers, and originating the business of the Morgan Crucible Co., of Battersea. It will be seen, therefore, that in addition to being honored by election as lord mayor, Mr. Morgan also celebrates the fiftieth anniversary of the establishment of his firm this year. In 1859 the firm commenced the publication of the Ironmonger, later establishing the Chemist and Druggist, these being two of the earliest trades newspapers established in any country.

A NEW BUSINESS.

The Canada Smelting Co., Limited, have attracted attention by their enterprise lately, and they certainly deserve more than a passing reference for their babbitt metal, and more especially for the variety of lines handled, including phosphor tin, needle metal, type metal, plumbers' and tinners' solder and white metal mixtures. The firm is controlled by Mr. McClure, formerly of the Syracuse Smelting Co., Limited, and he has a reputation in the trade.

Their premises are located at the corner of Brennan and Ann streets, Montreal, and their possibilities must be guaged entirely by their influential connection and excellent facilities to do work.

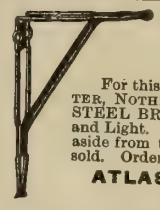
MUNRO WIRE WORKS EXTENDING.

An extensive addition to their Winnipeg factory is being made by the Munro Wire Works. A new building of brick and stone is being erected on the site adjoining the factory, and in a few weeks the firm will have 12,000 additional feet of floor space. In all they will have 30,000 feet of floor space, and one of the finest manufacturing concerns in the west. Special attention will be paid to the manufacture of railway, farm and hog fencing.

A city store has branched out and has a "house tool" department. The window is attractive to every man. It contains wrenches, tack hammers, tack pullers, pliers, gimlets, saws, hammers, squares, etc.—all the ordinary tools that a man is likely to want around the home. Why don't you have a table devoted to these?

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.
Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
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Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works
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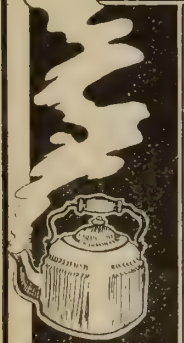
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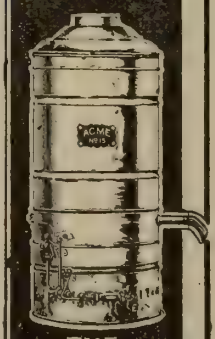
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Try an Instantaneous Water Heater. They give hot water at a minimum cost.

They're neat and durable, at the same time heat up the bath room when in use.

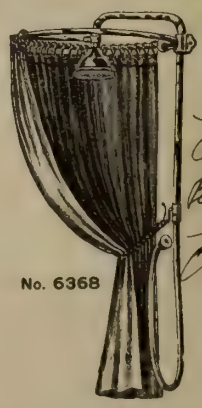
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PLUMBERS' SUPPLIES

We have the simplest and most efficient machine for testing plumbing. Write for booklet.



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To Down Cut Book 43. Page 4

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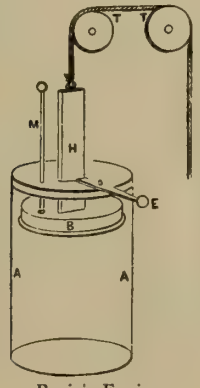
THE HARNESSING OF STEAM

By J. B. BERRYMAN, in Valve World.

(Continued from last week.)

Second Period.

IT will be noticed that up to the time of Savery a steam-engine, in the modern sense, had not been developed. The water elevators of Worcester and Savery would be called by us "apparatus," or "appliances," but the true engine, capable of transmitting the force of steam directly to a resistance to be overcome, had not, up to the year 1700, been produced. In order to follow each link in the chain of development it will be necessary to go back to 1678, at which time Jean Hautefeuille, of France, proposed a gunpowder engine, in which the pressure of the gases of explosion were to drive a piston in a cylinder. This, so far as is known, was the first time the idea of a moving piston in a heat engine was advanced, and the suggestion materially advanced the future development of the steam engine. The idea was further elaborated by Huyghens, who built a gas engine, the explosive agency being gunpowder. The explosion of the powder drove the air out of a cylinder, under a piston which was open to the atmosphere on one side. When the products of combustion cooled a partial vacuum was formed, and the atmospheric pressure drove down the piston, which, through the medium of a cord and pulley, performed a certain amount of work. Huyghen's explosive engine was further developed by Denis Papin, who had been assistant to the inventor in Paris. Papin abandoned gunpowder as a source of power, and raised the piston by steam power, afterwards permitting the steam to condense, so that the pressure of the atmosphere forced the piston down. This was the first steam engine with a piston, and the first piston steam engine in which condensation was used to secure a vacuum.

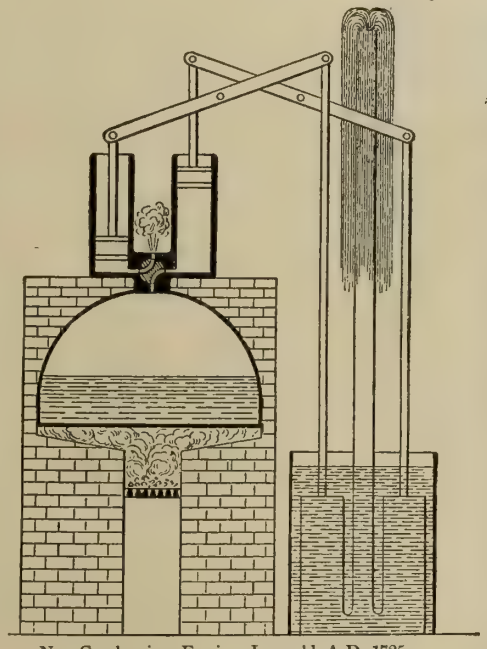


Papin's Engine.

Papin's Engine.

The illustration shows the crude form of this early attempt. A small quantity of water was placed at the bottom of the cylinder, A, a fire was built beneath it the bottom being made of very thin metal, and the steam formed raised the piston, B, to the top where the latch, E, engaging a notch in the piston rod, H, held it up until the operator was ready for the down stroke. The fire being drawn the steam condensed, the latch was disengaged and the atmospheric pressure produced another stroke. The piston speed was about one stroke per minute.

In 1705 Newcomen, a blacksmith of Dartmouth, England, assisted by John Calley, a glazier, made the piston engine a practical success by separating the boiler from the cylinder, and using



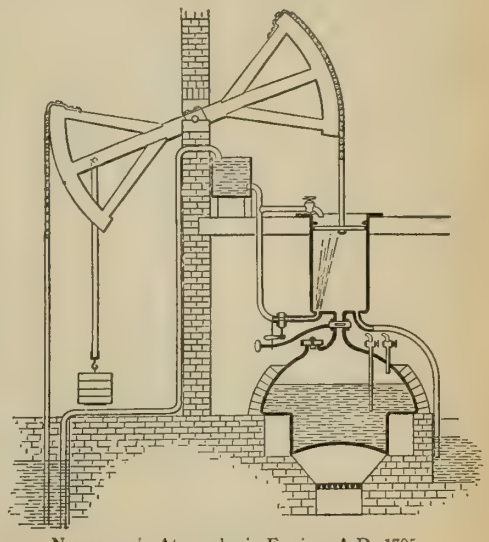
Non-Condensing Engine, Leupold, A.D. 1725.

artificial means of condensation, as Savery had previously done. The Newcomen engine was, in fact, a development from the experiments of Papin and Savery, but Newcomen was the first man to combine previously known elements so as to produce practical results.

Newcomen's Atmospheric Engine, 1705.

The illustration makes the operation of this engine sufficiently plain. It will be noticed that the steam was condensed by a jet of cold water. In the first engine condensation was effected by cooling the outside of the cylinder, but some leakage of water past the piston accidentally showed the advantage of a jet of injection water, and this plan was substituted for surface condensation in all subsequent machines.

The original engines were probably not automatic, but an old print of an engine erected in 1712 shows a kind of automatic gear. The story goes that in 1713 a boy—one Humphrey Potter—be-



Newcomen's Atmospheric Engine, A.D. 1705.

coming weary of opening and closing valves on an engine he attended, the duty being one which would natutally pall upon a youthful mind, made the machine automatic by attaching the various valves, or cocks, to the walking beam by means of cords and levers. The Newcomen engine was later improved in mechanical details by Henry Beighton and John Smeaton, and continued to be the standard pumping engine until the time of Watt. It was, owing principally to the alternate heating and cooling of the cylinder, a vast consumer of fuel, but this did not prevent a large number being used, mainly for pumping water from mines. In 1767 Smeaton reported 57 engines at work near Newcastle alone, aggregating 1,200 horsepower.

In 1725 a high pressure, non-condensing engine was described by Leupold in his "Threatrum Machinarum," which was probably the first of its kind. The following illustration is sufficiently clear.

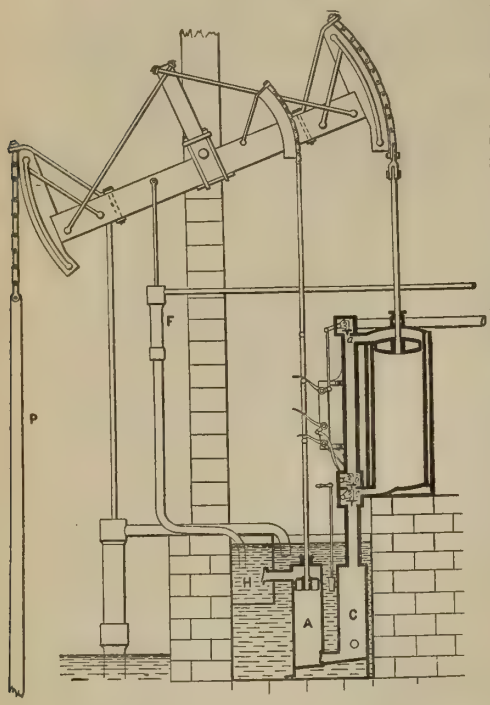
Leupold Non-Condensing Engine.

The machine does not appear to have been developed commercially, the reason being, no doubt, that with the knowledge of boiler-making and piping then available, and the utter lack of suitable materials, a machine could not be constructed to work safely under a comparatively high pressure.

James Watt.

The steam engine had been slowly developed to a point where it could be used commercially for the purpose of pumping water, but its small power, in comparison with the size of the parts and the extraordinary consumption of fuel, limited its field of usefulness. It remained for James Watt to elucidate the correct principles of steam engineer-

ing, and so improve upon the mechanism of the engine itself that it could be widely utilized as a prime mover, and become the most potent element in the industrial development of the world.

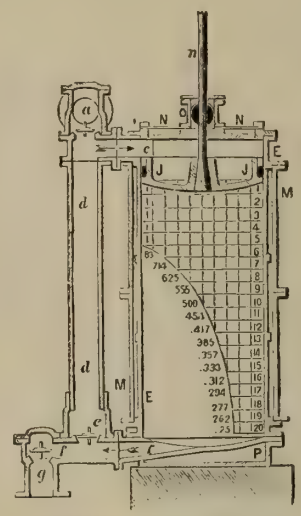


Watt's Single-Acting Engine, A.D. 1769.

Space will not permit an extended biography, but a few facts bearing upon his early life and training will be of interest. Watt was born at Greenock, a small Scotch village, January 19, 1736. His grandfather, Thomas Watt, was a well-known mathematician and schoolmaster. His father was a prominent citizen of Greenock, and at various times was chief magistrate and treasurer of the town. James Watt was a bright boy, but so delicate in health that he was unable to attend school regularly or apply himself to study, and consequently his early education was given him principally by his parents, who were people of intelligence. At about fourteen years of age he commenced to forge ahead in the village school, excelling in mathematics. During his spare time he made many ingenious pieces of mechanism, among other things a barrel-organ, and showed marked ability with tools, working both in wood and metal. At the age of eighteen he was sent to Glasgow to learn the trade of a mathematical instrument maker, but soon went to London, where he worked for John Morgan at instrument making for a year, when his health failed and he had to return home.

The following year he again went to Glasgow with the intention of opening a shop, but the guilds, or trades unions, would not permit him to do so, and Dr. Dick, of the University of Glasgow, came to his aid and gave him employment at the university, repairing and overhauling the scientific apparatus belonging to the college. There he remained nearly four years, making philosophical experiments and manufacturing musical instruments. In order to make himself more familiar with the science of acoustics he studied German and Italian. Watt also studied chemistry, assisted by Dr. Black, who was then engaged in making researches which resulted in the discovery of "latent heat."

At this time it was proposed that he repair the model Newcomen engine in the college collection, and this led him to make a study of the few treatises then existing on steam, and to become familiar with what had already been accomplished in the way of its application to useful work. After putting the engine in working order he commenced to experiment with it in 1764, and was struck with the waste of steam due to the alternate chilling and heating of the cylinder. He saw that the remedy was to keep the cylinder as hot as the steam which entered it, and as this was impossible with a condensing jet of cold water in the cylinder itself, he added to the engine an entirely new feature—a separate condenser — into which the steam should be allowed to escape to be then condensed by a jet, or external application of water. To preserve the vacuum, he added an air pump to remove from the condenser the water of condensation and whatever air there might be. His next step was to steam-jacket the cylinder, bringing the piston rod out through a stuffing box, and allowing steam, instead of air, to press



Expansion of Steam by Watt.

upon the upper surface of the piston. These improvements were patented in 1769.

Watt's Single-Acting Engine, 1769.

The illustration is an example of this period. The engine is still single-acting, and although the top of the piston is closed and steam is admitted above the piston, this was only done to keep the cylinder warm, the steam merely taking the place of the atmospheric pressure, and it is the lower end of the cylinder only which is put in communication with the condenser. There are three valves, the steam valve, a, the equilibrium valve, b, and the exhaust valve, c. At the commencement of the down stroke c is opened to produce a vacuum below the piston, and a opens to admit steam. At the end of the down stroke a and c are shut and b is opened. This puts both sides of the piston in equilibrium, and the piston is pulled up by the weight of the pump rod, p.

In 1781 Watt obtained a patent for the so-called "Sun and Planet" wheel method of making the engine give continuous revolving motion to a shaft provided with a fly-wheel. The crank and connecting rod was a device well known at that time, through being used on the foot lathe, but the application of the crank to a steam engine had already been patented by one Pickard, so that Watt could not use it until the expiration of the patented term.

In 1782 another patent was issued to Watt, covering principles of great importance. The patent included :

1st. The expansion of steam and six methods of applying the principle and equalizing the expansive power.

2nd. The double-acting steam engine, in which the steam acts on each side of the piston alternately, the opposite side being in communication with the condenser.

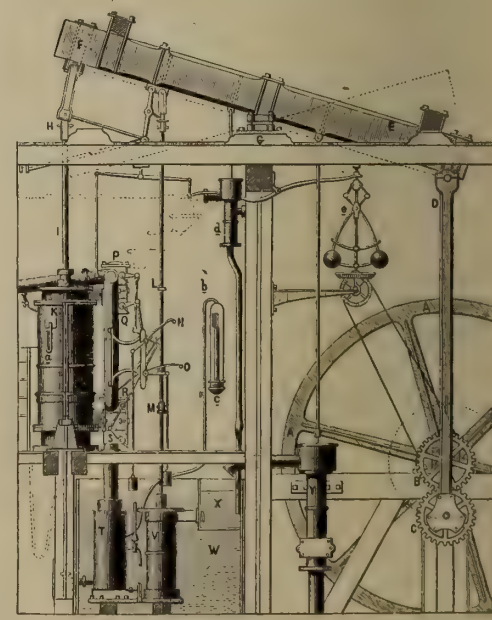
3rd. The doubled, or coupled, steam engine—two engines capable of working together, or independently.

4th. The use of a rack on the piston rod, working into a sector on the end of the beam, thus securing a perfect rectilinear motion of the rod.

5th. A rotary engine, or "steam wheel."

Watt studied and developed the working of steam expansion, and suggested a cut-off at quarter stroke as being the most economical, and in a communication to Dr. Small illustrated the idea by a sketch similar to the following :

Among the other inventions of Watt were the water gauge, steam engine indicator, ball governor, the poppet valve with beveled seat, throttle valve, similar to our present butterfly valve, cross head and guides, for engine piston rods, a steam hammer, and the revolution counter. This remarkable man left the steam engine a complete machine, and while countless investigators have added to our scientific knowledge, ingenious mechanics working with better material and tools have refined and developed, still the engine of to-day embodies all the essential features of the machines which his intellect created.



Watt's Engine, 1781.

James Watt died August 19, 1819, in the eighty-third year of his life, and a monument was erected to his memory in Westminster Abbey, upon which there is engraved the following noble epitaph :

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On the Canadian market more than twenty years—Company incorporated in 1885.

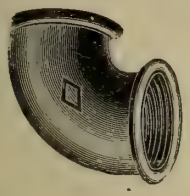
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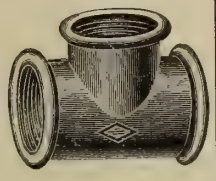
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See that stock is complete in all colors. Short any one shade might mean loss of sale and possible loss of customer.

Order this fall. Spring dating. "Do it now" from jobber, or direct from The Old Reliable

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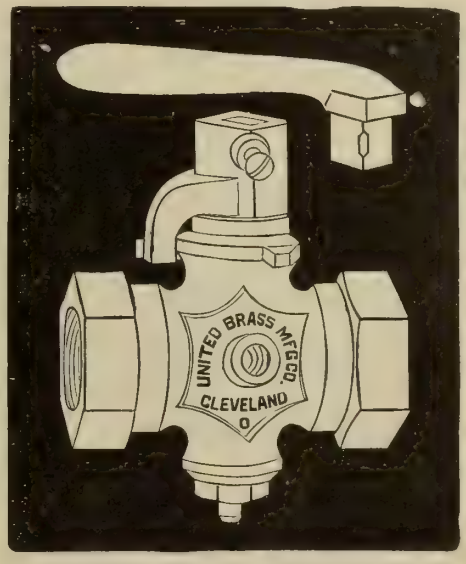
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their gratitude,

THE KING,

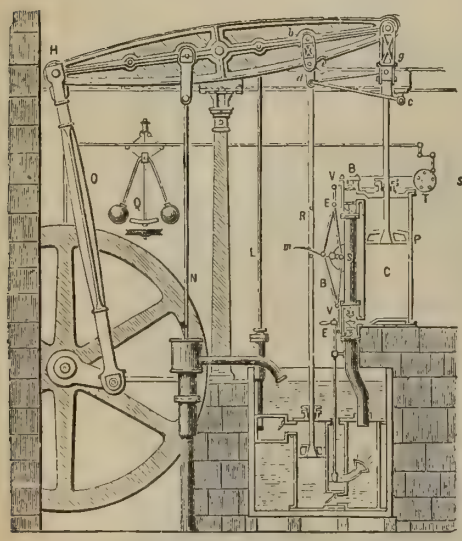
his Ministers, and many of the nobles
and commoners of the realm,
raised this monument to

JAMES WATT,

Who, directing the force of an original
genius, early exercised in philoso-
phic research, to the improvement of

THE STEAM ENGINE,

enlarged the resources of his country,
increased the power of man, and
rose to an eminent place
among the most illustrious followers of
science and the real benefactors
of the world.
Born at Greenock, MDCCXXXVI.
Died at Heathfield, in Staffordshire,
MDCCCXIX.



Boulton & Watt's Double-Acting Engine, A.D. 1784

NOT AN AGNOSTIC.

NOT long ago a certain clergyman from the west was called to a church in Jersey City. Soon after his arrival the divine's wife made the usual visits to the members of the parish. One of these, a plumber's wife, was asked by the good lady whether the family were regular churchgoers, whereupon the wife of the plumber replied that, while she and her children were attendants at divine service quite regularly, her husband was not.

"Dear me," said the minister's wife, "that's too bad. Does your husband never go to church?"

"Well, I wouldn't say that he never went," was the reply. "Occasionally Will goes to the Unitarian, now and then to the Methodist, and I have known him to attend the Catholic church."

A look of perplexity came to the face of the visitor. "Perhaps your husband is an agnostic," suggested she.

"Not at all," hastily answered the other; "he's a plumber. When there is nothing for him to do at one church there is very likely something for him at one of the others."

PLUMBERS' CASES IN COURT

KALEIDOSCOPIC changes in the situation of the law cases in which Toronto master plumbers and plumbing supply men are interested make it difficult to keep track of where the prosecution is really at. The conspiracy charge against certain members of the Master Plumbers' Association and the Journeymen Plumbers' Union came up for its adjourned hearing this week but no evidence was taken and another week's adjournment was made. In the meantime, however, the Attorney-General's Department has taken the matter in hand and Crown Prosecutor DuVernet has practically taken the matter away from the Police Court and brought it before the Criminal Assizes. One effect of this is understood to be that if convictions are secured the penalties are more likely to be in the nature of fines than imprisonment.

* * *

In addition to the Crashley case, traversed from the last assizes, three other indictments for conspiracy have been made, all these being brought before the Grand Jury on Wednesday, the jury returning true bills in every case. The trials will commence immediately but it will be impossible to report them in this week's issue.

In the first indictment the Master Plumbers' and Steamfitters' Co-operative Association and the Central Supply Association of Canada are charged with conspiring and combining to limit the supply of commodities and to restrain trade. Then James J. McKittrick, Joseph Harrison, J. H. Wilson, Frederick Armstrong and William Mansell, the incorporators of the former organization, and the Master Plumbers' and Steamfitters' Association are alleged to have "unlawfully, fraudulently and deceitfully conspired and agreed" to defraud persons requiring work done for them, by arranging in secret at what price the work should be done for, and by causing to be delivered to such persons by plumbers, members of the association, false tenders for doing the work. The third bill deals with the alleged arrangement between masters and men. It charges individuals mentioned in the former charge with conspiring with William Bush, James Richards, A. McBain, Peter McCann and John Priestly to prevent plumbers and steamfitters, workmen or journeymen, working for any firm except members of the Master Plumbers' Association. Lastly, Richard Crashley is indicted for uniting with the Master Plumbers' Association to restrain competition and limit supply.

The witnesses in the cases will be: James B. Berridge, Oliver Brock, Alfred Brock, Thomas G. Barrington, John Kilgour, James N. Hayden, S. J. Grier, Thomas Head, Edward Currie, W. H. Meredith, Frank J. Nixon, George W. Guest, Wm. Porter, Richard Begley, Walter Hurst, James Hurst, James Sherlock, William J. Storey and George F. Watson.

* * *

"Every person who is in any way implicated will be proceeded against," said Mr. DuVernet. "It does not matter whether it be an individual or a corporation. The Police Court has no power in the matter, and all that the magistrate can do is to send the case on to the Assize Court. I do not want the case held over until the Assizes next year, and I am working hard every night to get the matter through. I shall proceed against any or every individual member of the association, as well as the association itself, if I find the evidence warrants such a course."

Judge Clute in giving the case to the Grand Jury said the mere uniting together for an unlawful act would be sufficient to constitute a conspiracy. The Criminal Code considered it an indictable offence and an individual was liable to a fine not exceeding $4,000 or two years' imprisonment, or a corporation to a fine of $10,000 and not less than $1,000 for conspiracy with any person, railway, steamship or transportation company

(a) To unduly limit facilities for transportation, producing, manufacturing, storing or dealing in any article or commodity which may be a subject of trade or commerce.

(b) To restrain or injure trade or commerce in relation to any such article or commodity.

(c) To unduly prevent or limit the manufacture of any such article.

(d) To unduly prevent or lessen competition in production or sale of a commodity.

The bringing of the cases before the Assizes will facilitate the settlement of the dispute, rather than allowing it to drag on in the Police Court for months before coming up for trial. Valuable time will thus be saved the witnesses and the accused, days having already been lost by many in waiting for an opportunity to give evidence.

So far the majority of those concerned in the charges have wisely left the talking to be done by outsiders. The association's side has not yet been heard, in consequence, and the public are likely to hear much in the evidence presented which will show the absurdity of much of the talk that has been going on in the newspapers.

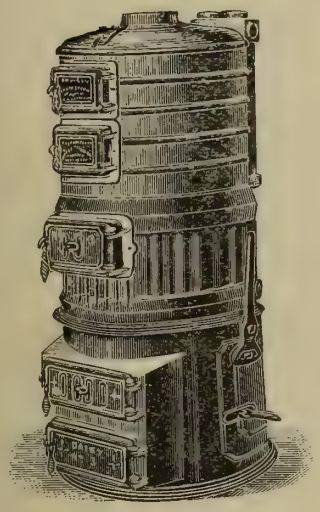
In their effort to secure evidence the Crown officials have visited the offices of the Supply Association, the Master Plumbers' Association and the union during the past week. The minute books of the various organizations have been taken as well as a card index system belonging to the masters' organization.

* * *

Amongst the many foolish articles appearing in the sensational daily newspapers, one published in last Saturday's Toronto Telegram was certainly the limit in its absurdity. The writer built up a very good-looking straw man and proceeded to tear him to pieces in a most scientific manner. Figures were juggled with in a most amusing manner, the number of master plumbers in the association being given as 130, the average business done as $20,000 yearly, the 5 per cent. to the association as $130,000 yearly, 15 per cent. overcharge on all business being added to this amounting to $390,000 yearly, the total overcharge made to the public amounting to $520,000 yearly according to the Telegram's mathematician. Another gem in the article was the statement that as the entrance fee into the Master Plumbers' Association was $100 and as there were over 100 members there was over $100,000 in the treasury. The Telegram had the plumbers wallowing in wealth,

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

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1,000 HARDWARE CLERKS

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This is an excellent opportunity to make money, as every business men will see it is to his best interests to subscribe. Call his attention to the following facts and secure his subscription:

THE BUSINESS MAGAZINE is designed to aid the busy man in his reading.

Hundreds of excellent magazines are being published, containing many articles the modern business man should read.

He has not time to read and cull from them the timely, interesting, entertaining and helpful articles he needs; we do that for him.

THE BUSINESS MAGAZINE contains each month a varied and carefully selected series of articles from the best magazines of the world.

In addition to this, the magazine will contain three other strong features:

A very complete list or index of the other important articles of the month and where they are to be found, but for which there is not room in the current issue of THE BUSINESS MAGAZINE.

A list of new books of special interest to business men.

And as the number of magazines in Canada from which extracts can be made is small, one or two interesting original articles on Canadian men and affairs will be published.

Annual subscription Two Dollars.

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MONTREAL TORONTO WINNIPEG LONDON, ENG.

"NONE SO BLIND AS THOSE WHO WON'T SEE!"

If you refuse to "see" our proposition and take advantage of it—
The blame is your own entirely.

Here again we state, as plainly as possible:—

You exhibit a line of NATURO CLOSETS in your showroom and explain their good features to your customers—
That's all you have to do.
We do extensive advertising
Refer all inquiries to you
Furnish descriptive literature.



The NATURO Closet

does the rest, bringing you a large volume of business.

The NATURO Company

C. H Muckenhirn, President.

Salem, N.J.

but the article doesn't jibe with the facts at all and if a few more of these articles were published public sympathy would soon be switched back to the association.

* * *

Peculiar as it may seem, a large percentage of the master plumbers welcome this investigation. They are being held up as robbers by the general public, whereas they are not making any more than the legitimate profit made by other tradesmen and necessary to secure a living and pay accounts falling due. Indeed, in some cases master plumbers have been unable to get along without hiring themselves out as journeymen to other master plumbers. These men are believers in organization and knowing they have done nothing to merit public censure are desirous of seeing the matter fully threshed out at the earliest opportunity.

* * *

It is impossible to predict what the outcome of the legal action will be and Hardware and Metal will not indulge in any predictions. Certain it is, however, that the talk of holding back jobs will not result in the gain to builders that the newspapers claim it will. The higher price of materials and of labor is responsible for increased prices in the plumbing trades just as it has brought about higher prices in other branches of industry.

LONG DISTANCE HEATING PLANT.

A LONG-DISTANCE steam heating plant, where the source of heat and the place of consumption are 2½ kilometers distant, has been completed in the Eglfing Sanatorium, in Upper Bavaria. The steam conduits are arranged in a concrete tunnel, the walls of which are lined with an asphalt coating, which in connection with a cork slab vault minimizes the loss of heat by radiation. The pit is sufficiently wide to allow a man to stand and walk within it. It is lighted at intervals from above by daylight, and by small electric lights during the night. A novel substance consisting of charred silk threads has been used to surround the conduits and protect them against heat losses. The steam entering the conduit at 159 degrees C. was found to have a temperature of 152 deg. after covering the 2½ kilometers distance. The buildings themselves are heated by hot water, the steam serving only to heat the water boilers by means of coils. The plant is provided largely with electrical long-distance signaling apparatus, so as to allow of its being controlled and adjusted from the boiler house. Thirty pavilions and six administration buildings have been connected to this extensive plant, the cost of installation of which, including the tunnel, was about 250,000 marks.

ARTIFICIAL RAIN.

The Lake Shore Railroad is testing an apparatus invented by one of its engineers and designed to cool the air in the trains, and at the same time rid it of dust and other impurities.

The new cooling apparatus consists of a sort of huge atomizer, so constructed that at stated intervals gusts of cool and moist air, coming directly from a freezing plant, will be blown through the cars. This method is considered superior to the electric fan, which merely stirs the dust-laden and vitiated air.

The air which is blown out by this atomizer is drawn in from the outside, filtered, and is then circulated around the pipes in the refrigerating plant. At the same time it is moistened by the mingling of fine sprays of pure water. The moistening of the air is one of the most important features of the apparatus. It is claimed that the moisture collects the dust particles and precipitates them.

PLUMBING GOSSIP.

Contracts have been secured by the Taylor-Forbes Co. to install Sovereign radiators in the new McClary Mfg. Co.'s building on King street west, Toronto, and also in the re-modeled National Hotel at the corner of King and Sherbourne streets, Toronto. Sovereign radiators are increasing in popularity wherever they are known.

The Canada Foundry Co. have been awarded the tender for 8 and 12-inch valves for the high pressure fire system for the city of Toronto, and M. & L. Samuel Benjamin & Co. got the tender for the 20-inch valves.

The following notice has been printed in the Montreal papers: "From Monday, the 13th of November instant, and each second Monday thereafter, until otherwise ordered, between the hours of 2 and 5 o'clock in the afternoon, there will be held examinations for master and journeymen plumbers, at the health office, in the city hall.—J. E. Dore, chairman."

E. A. Chamberlain, Los Angeles, Cal., has a recent invention which is an improvement in that class of acetylene gas generators in which means are provided for automatically regulating the supply of water to the carbide in accordance with the pressure of gas required. There is no liability of overheating the apparatus, and it can be easily and quickly cleaned and recharged with carbide and water.

The James Morrison Brass Mfg. Co., Toronto, have negotiated a 999 year lease of the block of land lying at the southeast corner of Adelaide and York streets. This property has a frontage on York street from Adelaide to Pearl, and extends back 204 feet to a lane. The agreement for lease which has been signed by the company provides that for the first twenty-one years an annual rental of $5,000 shall be paid, and upon the expiration of that term arbitrators shall make a new adjustment. The company intend erecting a large factory on the site, but plans are yet in a crude state. The present factory has been outgrown.

Some amusement was caused in London, Eng., recently, when it was discovered that there was a leakage from one of the underground electric cables, and that persons standing or walking near the spot received a shock. Two horses brought to a standstill near the place were rendered so restive that they had to be removed, whilst a donkey danced about excitedly until it got beyond the affected area.

DAMAGES AGAINST UNIONS.

A LAW case which in some respects is very similar to the phase of the present plumbers' difficulty in Toronto, referring to the right of union men to boycott an employer in preference to other employers, is that of the suit of the Metallic Roofing Company against the Sheet Metal Workers' Union. The case is of interest to plumbers because J. B. Reeves, an ex-member of the Toronto Master Plumbers' Association, has charged members of the Journeymen Plumbers' Union with conspiracy for attempting to prevent union men from working in his shop.

The Metallic Roofing Company is suing the Amalgamated Sheet Metal Workers' Union for damages to the extent of $10,000. In 1902 an agreement was drawn up by Local Union No. 30 of the Amalgamated Sheet Metal Workers' International Association. The main clause of the agreement was "That no non-union workman should be employed by the company unless the union was unable to supply union men." This agreement was signed by all metal-working firms except the Metallic Roofing Company. An ultimatum was finally sent on August 4th, 1902, to the company, in the shape of a letter, which gave them till 12 o'clock (noon) on August 7th to comply with the request and sign the agreement. This the company refused to do, and the union called out the men who were employed by the company and passed a resolution against the establishment.

The Metallic Roofing Company claimed that great damage was done their business by intimidating letters and malicious statements. Both workmen and customers were approached by the union men. The case was fought through the courts for three years, a verdict for $7,500 damages being finally granted the company by the Civil Jury Assize Court. The following questions were put to the jury and answered by them, the verdict being brought in after one hour's conclave:

1. Were the workmen of the plaintiff company wrongfully and maliciously coerced to leave its employment by the defendants or any of them?

Answer—Yes.

2. If you answer the above question in the affirmative, state which of the defendants induced them?

Answer—By motion of Local Union No. 30, endorsed by the International Association, the parent society.

3. Did the defendants conspire by threats or intimidation to induce the plaintiff's customers, who would otherwise have dealt with the plaintiffs, to refrain from dealing with them and did they in consequence refrain?

Answer—Yes.

4. Did any of the plaintiff's workmen who were members of the union vote for the resolution to call out the union workmen from plaintiff's shops?

Answer—We cannot tell from the evidence.

5. If you answer in the affirmative can you say how many of them voted for such resolution?

Answer—Cannot answer.

6. If you find the plaintiffs are entitled to recover damages by reason of the defendants' acts, at what sum do you assess such damages?

Answer—$7,500.

Phone No.
Parkdale 1809

Post Office and Telegraph Address
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The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



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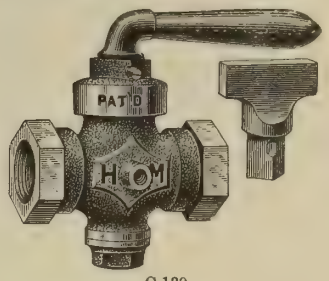
in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

MUELLER GROUND KEY WORK

No. 49 STOP AND WASTE COCK



C-139

If the plug of a stop cock hasn't efficient protection dirt may lodge around it and work down the side, causing trouble.

In Mueller Stop Cocks the cap fits close around the plug, effectually preventing dirt from lodging about it. No trouble is experienced with them from this cause.

Mueller Stop Cocks are made in solid handle, socket head and patent cap patterns and in all styles of pipe connection. The cock illustrated is the patent cap pattern, iron pipe style.

Each cock is carefully inspected and assembled, is given a 200-pound hydraulic pressure test as near like actual service use as possible, bears the Muller trade mark and is *unconditionally guaranteed.*

We also make compression work and fuller work for plumbers' use. Catalogs upon application.

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Buy the Best.



HERCULES

Sash Cord.

Star Brand Cotton Rope
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For Sale by all Wholesale Dealers.

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Every Canadian who wishes to trade successfully with the Old Country should read

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(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)

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OUR NEW LINE

FOR 1906

STEAM WHISTLES, PLAIN BRASS LUBRICATORS
CYLINDER COCKS, RADIATOR VENTS

No Side Track for the Penberthy Special

LOADED with the best-finished Brass Goods on the Market.
CARRIED to Every Civilized Nation on the Globe.
USED by Every Intelligent Engineer. Look for the Trade Mark.

"GET TO KNOW IT"

PENBERTHY INJECTOR CO., LIMITED WINDSOR ONT.

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 10, 1905.

GREAT activity is manifest in plumbing circles, contracts of good size being numerous. Many residences which are not quite completed, are being boarded up to enable plumbing operations to be carried on. Soil pipe and fittings are required in large quantities to meet these conditions with the result that there is a great run on the goods named. Producers are meeting the demand satisfactorily, but there is, nevertheless, great firmness in the market.

As we foresaw in our last issue, lead pipe has been forced up in response to the strength in pig lead, which has held remarkably firm, at the highest price reached in over a year. The discount on lead pipe is now twenty-five per cent. only.

The scarcity in iron pipe has become more acute than ever and there is scarcely a size in which it is not difficult to cover the orders on hand. This scarcity has not as yet, however, advanced the prices any higher than those quoted a couple of weeks ago.

Iron pipe fittings are also still feeling the scarcity which was noted previously, a fact which tends to firmer price conditions.

Range Boilers—Business is normal and at unchanged prices. We quote: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The strength of pig lead has finally compelled manufacturers and jobbers to advance prices on pipe. We quote as follows: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe—The scarcity in iron pipe is becoming quite serious. Nearly all sizes are now affected. Our prices however, are unchanged. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50: 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.; 1-2 inch, 72 per cent.; 3-4 inch, and upwards, 74 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Iron Pipe Fittings—With a brisk demand and a rather short supply prices are firming. We quote: Discounts on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Soil Pipe and Fittings—Orders are unusually heavy this week. There are many jobs on hand which require these goods. Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—Market is unchanged. Our prices still are: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, November 10, 1905.

ADVANCES predicted in previous issues have materialized, we being able to report some this week while others will not be announced for a few days. Brass goods show several changes, and lead pipe has also been moved up. Some houses are also quoting higher on sheet lead. Prices have been withdrawn on Canadian enamelware and some lines of closets have been advanced already.

Several dealers have advanced their iron pipe quotations in response to the manufacturers' advance reported last week, but some continue to sell at the old figures.

Business continues active and large shipments of goods are being made. Soil pipe and fittings are increasing in activity owing to the rush of work before frost. Heating goods are also particularly active, the low prices of pipe, etc., having induced some heavy buying.

Lead Pipe—The expected advance has been made, lead pipe being now quoted at a straight discount of 25 per cent. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 per cent.

Soil Pipe and Fittings—Buying is very active owing to the rush of opening the ground before it is frozen up. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Several dealers are still selling at the cut prices, but the market is firmer and the advanced quotations given below are ruling prices. We quote: as follows: Black, 1-4 inch, $2.09; 3-8 inch, $2.09; 1-2 inch, $2.38; 3-4 inch, $2.99; 1 inch, $4.29; 1 1-4 inch, $5.85; 1 1-2 inch, $7.02; 2 inch, $9.36; 2 1-2 inch, $15.75; 3 inch, $30.50; galvanized 1-4 inch, $2.92; 3-8 inch, $3.08; 1-2 inch, $3.53; 3-4 inch, $4.14; 1 inch, $5.94; 1 1-4 inch, $8.10; 1 1-2 inch, $9.72; 2 inch, $12.96; 2 1-2 inch, $23.00; 3 inch, $30.

Iron Pipe Fittings—Prices are firmer, but a large trade is being done. We quote as follows: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Demand for boilers is very brisk as many contracts are being completed. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Higher prices for solder as lead and tin are both jumping upward. We quote: Bar solder, half-and-half, guaranteed, 19 1-2c.; refined, 18 1-4c., and wiping at 17 1-2c.

Enameled Ware—Advances are reported on certain lines of closets while the Standard Ideal Sanitary Co. have withdrawn their quotations on Canadian ware preparatory to an advance.

THE GLASS PLUMBER.

Attention is called in the Technical World to the fact that the introduction of the vacuum-tube light has brought into existence a new trade—that of "glass plumbing." The glass tubes, in which the light is produced by an electric current flowing through a gaseous conductor, are an inch and three-quarters in diameter, and are put up in lengths of about eight and a half feet, and hermetically sealed in situ. For the purpose of this work a new set of glass blower's instruments has been devised, including cutting tools, blowers and hand torches, and experts perform the necessary operations with surprising rapidity.

McLean, Holt & Co., St. John, will erect a stove foundry to cost about $10,000.

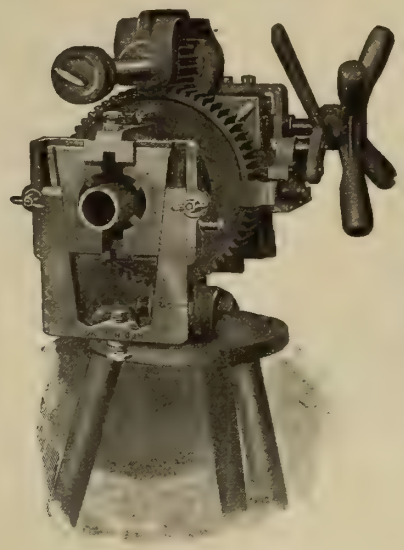
RAMSAY'S ALUMINUM PAINT

The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

Ramsay's Aluminum is right Aluminum.

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Est. 1842 MONTREAL PAINT MAKERS



½"—2"

"Solid Adjustable" Die Machine

Ask for Catalog J.

More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

Simplicity and Durability.

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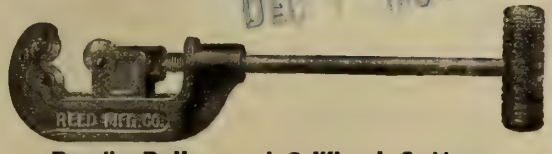
16 Sheppard St., TORONTO, CAN.

PIPE TOOLS

We make a specialty of Pipe and Steam Fitters' Tools.

HOW IS YOUR STOCK?

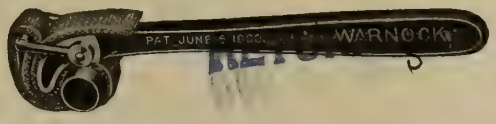




Reed's Roller and 3-Wheel Cutters.



Westcott Adjustable Pipe Wrenches.



Warnock Wrenches for Brass and Copper Pipe.

Vises of all Kinds.



PARTS Carried in Stock.

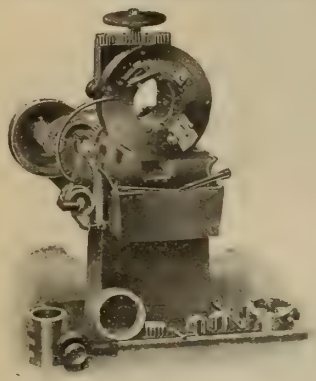


THE CANADIAN FAIRBANKS CO., Limited

MONTREAL TORONTO WINNIPEG VANCOUVER

RETURNED DEC 7 1905 To Montreal Office Cut Book 44 Page 26

MERRELL COMBINED HAND AND POWER MACHINES



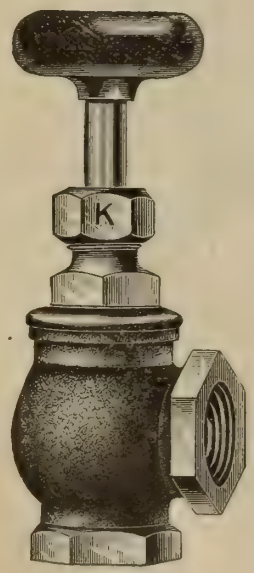
No. 9½ cuts and threads pipe 2½ to 8 inches, inclusive. No. 11½ cuts and threads pipe 4 to 12 inches, inclusive. The chasers are six in number for No. 9½, and eight in number for No. 11½. The vise is self-centreing and is actuated by a rack and pinion to feed the pipe to the chasers. These machines are the only ones on the market that will cut and thread eight and twelve-inch pipe, when used as a hand machine, with ease and to the satisfaction of the operator.

WRITE FOR CATALOGUE.

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Standard and Jenkin Disc Radiator Valves

are perfectly constructed, and of beautiful design. Like all "Kerr" specialties, strictly high-grade.

The KERR ENGINE CO., Limited

Manufacturers

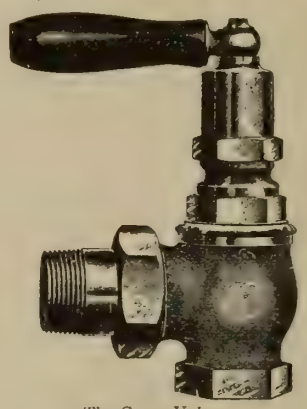
WALKERVILLE, ONT., CANADA

NEW RADIATOR VALVE.

USERS of radiator valves will welcome the Crane self-packing, quick-opening steam radiator valve illustrated on this page. The self-packing feature precludes possibility of these valves leaking at the stuffing boxes, thus saving from ruin expensive carpets and rugs, and the spotting of fine oiled, hardwood floors, and the general annoyance caused by leaky stuffing boxes. By a special device placed in the stuffing boxes of these valves the packing is automatically kept tight and will last for years without renewal. The device is simple, consisting only of a vulcanized washer, located in the top of stuffing box and kept in position by spring compression, which fully compensates for the wear on washer.

These valves open and close by turning the lever handle one-half turn. To open, turn to the left; to close, turn to the right.

The quick opening and closing feature will no doubt be appreciated by users



The Crane Valve.

who have operated old style radiator valves. The lever handle can be operated by the foot as well as by the hand.

The construction of these valves is such that when closed the discs bear on the seats very tightly, and the valve is locked in place until released. The bonnets are interchangeable with the bonnets of Crane regular radiator valves. The user may at any time equip his old valves with these new and important improvements.

These valves have artistically designed proportions and add much to the appearance of a nicely furnished apartment, by their symmetrical proportions and general rich appearance.

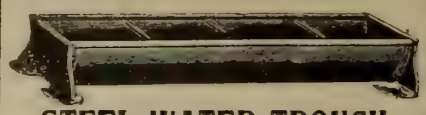
The lever handles are made from cherry wood, painted a deep rich black color which contrasts with the nickle plated trimmings of the valves. Prices and further information will be furnished by the manufacturers, Crane Co., Chicago.

McLachlin Bros. are negotiating for a contract to operate the water works machinery at Arnprior, by electric power. They have in view the erection of a large dam on the Madawaska River.

* * *

The Town Council of North Toronto have appointed a committee to secure information as to the cost of installing an incandescent electric light plant. The intention is to submit a by-law to the ratepayers in January.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co. Limited**

TWEED, Ontario

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,

13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL

29 Melinda Street TORONTO

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT **GALVANIZING** ONT. WIND ENGINE & PUMP CO. LIMITED. TORONTO, ONT.



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.

182 Adelaide Street West

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO

LOOSE-LEAF SYSTEMS — CRAIN — OTTAWA, ONT.

LEDGERS LEDGERS

This is the time of year when business men generally have to balance up their old Ledgers and open up new ones. Why not be up to-date and adopt a system that will do away with this obnoxious system of opening up new books ? Our

STOCK LOOSE LEAF LEDGERS

are the acme of perfection in a High-Grade Low-Priced Ledger Outfit.

CHEAPER THAN BOUND BOOKS

Sheets are carried regularly in stock and may be purchased at any time.

Write for catalogue E which gives full information.

The Rolla L. Crain Co.
Ottawa, Canada Limited

TORONTO OFFICE, - 18 Toronto St.
MONTREAL OFFICE, - 74 Alliance Bldg.

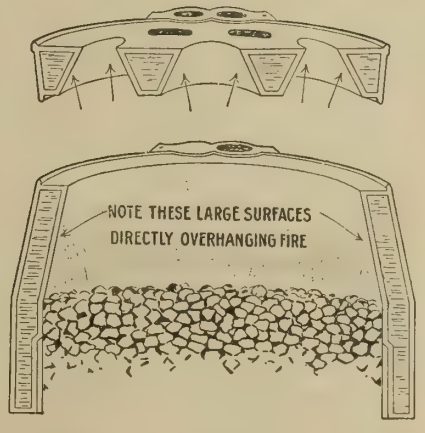
BUSINESS SUCCESS

simply means satisfied customers. One dissatisfied customer spells slower business. A few means commercial disaster.

THE OXFORD HEATING SYSTEM

is the most perfect, economic and durable. Progressive dealers like our products because they yield a big margin of profit and please customers so well that they bring other customers right along all the time.

THE OXFORD HOT WATER BOILER



is so immensely superior to all others that it needs only to be explained to effect a sale.

It is scientifically and economically perfect. The upper walls of the fire-pot are sloped inward—overhanging the fire. The heat direct from the fire sharply impinges against the overhanging surfaces—does not pass by them as is the case with vertical walls. The double-sized first water section with bell-shaped flues add further to the heating capacity, which is greater by far than that of any other boiler made, according to amount of fuel consumed.

In our method of construction we completely obviate the use of gaskets or washers by making all connections with **Our Oxford Steel Push Nipple.**

The Oxford Hot Water Boiler has many apparent points of superiority, but the big fundamental one is that it gives your customers the utmost satisfaction and increases your volume of business.

Oxford Steam and Hot Water Radiators

never leak because every joint is a metal to metal one made by the Oxford Steel Push Nipples, doing away entirely with gaskets and washers. With the Oxford Boiler, they make the most satisfactory Heating System and one you can recommend without fear of future complaint.

Send for the Gurney Oxford Book of Steam and Hot Water Heating Apparatus.

WE also manufacture cast iron and steel plate ranges, gas stoves, ranges and heaters, hotel ranges, warm air furnaces and all kinds of cooking and heating apparatus, plumbers' supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 129
The Gurney Standard Metal Co., Limited, Calgary, Alta.

We make Electric Fixtures, Sockets, and Cut-Outs

Munderloh & Co

Electrical Supplies of all kinds. MONTREAL.

BUILDING AND CONSTRUCTION

BUILDING NOTES.

A new railway station is to be erected at Charlottetown, P.E.I.

Mrs. Dr. Johnson is to erect a double house, to cost $4,500, at Sarnia.

W. H. Fogwell is constructing a $2,000 brick residence in Hamilton.

Thomas Graham is erecting a new hotel building at Riversdale, Sask.

The Imperial Bank is to erect a branch building at St. Catharines.

The Bank of Montreal are to erect a branch building at Lunenburg, N.S.

David Gibb, Vancouver, has purchased a site and will erect a $30,000 hotel.

The Bank of Commerce are to erect a new branch building at Woodstock, Ont.

Thomas Allan, Hamilton, has secured a permit to erect nine houses, to cost $14,600.

Baeubier & Smythe, of Brandon, are erecting the New Empire Hotel at Saskatoon.

A. B. Jackson, St. Catharines, has purchased a site and proposes to erect two stores.

It is understood that a new theatre is to be erected in Toronto during the coming year.

It is announced that a new theatre building will be constructed in Brantford shortly.

The Norton Mfg. Co., Hamilton, are to erect a $10,000 brick addition to their factory.

The Fairchild Co. have purchased a site for a large warehouse, to be erected at Regina.

Contracts have been let for the construction of a new general hospital at Niagara Falls.

The First Baptist congregation, Vancouver, are preparing plans for a new $35,000 church.

The Church of England will erect two churches in the Hopewell Hill parish, N. B., shortly.

Construction work has commenced on the new $600,000 factory of the Plymouth Cordage Co., Welland.

Smith Bros. & Wilson, Lethbridge, have been awarded the contract for the new C.P.R. depot at that place.

The Dominion Government are to erect a modern emigration and detention hospital at Quebec, to cost $60,000.

The Ontario Portland Cement Co., of Brantford, are making very large shipments of cement from their works near Paris.

The construction work has commenced on the factory to be erected by the Manning Wood Fibre Co., at Owen Sound.

The Emanuel Congregational Church trustees, Montreal, have purchased a site and will erect a $100,000 structure next Spring.

The new factory of the H. K. Wampole Co., Perth, Ont., is nearing completion, and will be ready for occupancy about February 1st.

The Dominion Government has purchased a site for a new examining warehouse for the Customs Department in Winnipeg. The land was owned by Mackenzie and Mann, and they received $88,125 for it. The building will be erected next Summer.

The Roebling Construction Co., of New York and Buffalo, contractors for the fireproofing of the McGill Union building, Montreal, have placed their order for lathing, furring, etc., to be used in that edifice, with the Pedlar People of the same city.

C. J. Hurt recently disposed of the Carberry, Manitoba, flour mills, to an American syndicate represented by Bruce Howard, of Minneapolis. The purchasers, it is said, intend to establish a string of mills throughout the west and manufacture for the export trade.

F. F. Powell & Co., Montreal, have received a contract from R. E. T. Pringle & Co., of the same city, for roofing the buildings of the Simplex Railway Appliance Co., at Bluebonnets. The same firm are also supplying upwards of four hundred sheet copper doors for the Grosvener Flats, Guy street, Montreal.

Building operations in Montreal during October show that 131 permits for new buildings were issued at a cost of $559 049. Permits for alterations numbered 29, and the amount involved was $80,374. This made a total amount invested in building operations last month of $675,423. The increase over the corresponding month of last year was $399,393.

For the fortnight ending October 31 92 building permits were issued in Toronto, the cost being $525,000. In the list there are about 150 dwelling houses, a postoffice at Yonge and Charles street costing $90,000; a factory on Jarvis street, to cost $15,000; a bank on Queen street east and Grant street, costing $25,000; a dwelling house on St. George street for Mrs. George Gooderham, to cost $20,000.

In the matter of the rapid steel construction, the United States still is in the lead, as demonstrated in a fifteen storey building in William street, New York. In twenty-five days the great steel skeleton was ready for the stone facings, and in six weeks later the building, complete, was filled with tenants. In this building are express elevators which are run 1,500 feet in a minute, or at the rate of a mile in a little more than three minutes.

The use of concrete in building construction is growing so rapidly that bricklayers are taking alarm lest they lose their commanding position in the building trades. Several influences are co-operating to accelerate the growth of the use of concrete. On the one hand are the high cost of wood, brick, stone, and the skilled labor required to put these materials in place, while, on the other hand, are the cheapening of cement and increased familiarity with its adaptability in building construction. Some authorities go so far as to say that as concrete grows more familiar to architects and contractors the wooden house will disappear even from the countryside, wood being displaced by a material more durable, readily capable of artistic treatment, and much safer against fire from exterior causes.

Building done in London this season will amount to $400,000 or $500,00, but owing to the inefficient system of granting permits only 156 documents were issued from the engineer's office since January 1, and these totalled only $322,000. D. H. Howden & Co. are erecting a warehouse on York street that will cost $50,000; then there is the new Bank of Commerce building, $35,000 or $40,000; the Dennis Wire & Iron Works building, costing $20,000; Geo. Belton's planing mill, $15,000; new stores building, Carling's Heights, $30,000; St. Andrew's Sunday school, $18,000, and Adelaide street church enlargement, $16,000. Chalmer's Church congregation contemplated a $12,000 or $15,000 edifice, and the new street railway offices in the east end will cost about $5,000. Added to these structures are a number of residences and other buildings that will easily bring the total outlay up to $500,000.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

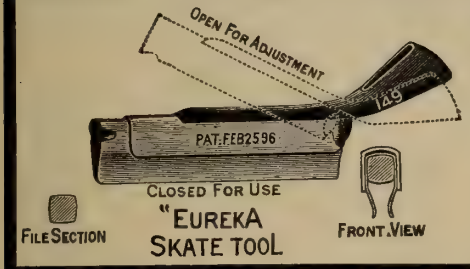
Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

J.C.M.

Galvanized Sheets for Corrugating are best. Submit your enquiries by mail or cable to

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND



EUREKA SKATE SHARPENERS

Simple, Quickly Adjusted and Accurate.
Will Sharpen any Skates.

Place your Orders Now, Before the Rush

Ask your Dealer or Jobber or write for Green Book

SMITH & HEMENWAY CO.
296 Broadway, New York. Dept. 149
Canadian Sample Room:
215 Coristine Bldg., Montreal, Can.

HARDENED AND TEMPERED

SPRINGS

Send Specifications to ANY SHAPE.

The WALLACE BARNES CO., BRISTOL, Conn.
NEW CATALOG JUST ISSUED.

The most light for the least money

C. G. E. INCANDESCENT LAMPS

LONG LIFE EFFICIENCY RELIABILITY

Write for prices and quantity discounts.

CANADIAN GENERAL ELECTRIC CO., LIMITED
HEAD OFFICE: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

TIN PLATES

"ELYN" "LYDBROOK" "GRAFTON"

I can supply these famous brands at Lowest prices.

Write for prices and ascertain.

J. A. HENDERSON, Agent for **T. W. & J. WALKER,**
Board of Trade Bldg., MONTREAL. WOLVERHAMPTON.

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

Don't Forget the Name...
NEWMAN'S INVINCIBLE FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED
5 5 5
YEARS YEARS YEARS
5 5 5
GUARANTEED



At the Same Price

Isn't it Best to use the Kind that are

GUARANTEED
FOR
5 YEARS 5 YEARS 5
BY
GLAUBER, CLEVELAND, OHIO, U.S.A.

Sold on Merit Every Time

That's the case with our

"BLACK DIAMOND"

READY ROOFING
WRAPPING PAPER



BUILDING PAPER
SHEATHING

TARRED FELTS

If you want to prove it, send along a trial order.
"CYCLONE" and "JOLIETTE" brands of SHEATHING are favorites, and certainly should be part of your stock.

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Nov. 10, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Roller Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 97½	1 95
Forged iron "	2 17½	2 05
Refined " "	2 32½	2 05
Horseshoe iron "	2 32½	....
Hoop steel, 1½ to 3 in. base	....	2 75
Sleigh shoe steel "	2 07½	....
Tire steel	2 22½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality, best warranted	....	0 18
"I" " warranted	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
16 gauge	2 35	2 30
18 "	2 25	2 40
20 to 24 gauge	2 20	2 50
26 "	2 25	2 65
28 "	2 30	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 75
All bright	3 75
Galvanized Canada Plates, 52 sheets	4 00

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 75
26 "	3 60	4 00
28 "	3 85	4 25

Apollo.

10¾ oz	4 25
28 gauge (American gauge)	4 00
26 "	3 75
24 "	3 65

	Comet Bell.	Queen's Head.
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 60
26 "	3 60	3 85
28 "	3 85	4 10

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lbs	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	17 25	17 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	23 00
Plain, 14 oz	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 50	7 25
Part casks	7 75	7 50

LEAD.

Imported Pig, per 100 lb	4 25
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c 'is. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality	Special
4 and 4½ ft. 3 in. rolled rim	$18 00	16 00
5 feet "	19 00	17 00
5½ " "	20 50	18 50
6 " "	23 25	21 25
Plate E II		
4½ feet 2½ in.	16 75	14 75
5 " 2½ "	17 50	15 50
5½ " 2½ "	19 00	17 00
Plate 123 E, lavatories 1st quality		8 90
" 123 E, " 2nd "		7 50
" 127 E, " 1st "		5 70
" 127 E, " 2nd "		4 80
" 128 E, " 1st "		5 60
" 128 E, " 2nd "		4 70
" 129 E, " 1st "		5 40
" 129 E, " 2nd "		4 50
Sinks 18 x 30 in flat rim, A quality		2 45
" " " " B "		2 00

IRON PIPE.

Black pipe—	Per 100 feet.
¼ inch	1 90
⅜ "	2 09
½ "	2 09
¾ "	2 38
1 "	2 99
Black pipe—	Per 100 feet.
1 inch	4 29
1¼ "	5 85
1½ "	7 02
2 "	9 36
Galvanized pipe—	
¼ inch	2 92
⅜ "	3 08
½ "	3 53
¾ "	4 14
1 "	5 94
1¼ "	8 10
1½ "	9 72
2 "	12 96

Lead Pipe discount 25 per cent.

Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over, an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 and 10 per cent.
Standard Globe, Angle and Check Valves, discount 70 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 75 and 5 per cent.

No. 1 compression bath cock net	1 75
No. 4 " "	1 75
No .7 Fuller's	2 10
No. 4½ " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 65 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND LADIES' SCISSORS

Fully Warranted



Our Eastern Pattern Ladies' Scissors. This is an exceptional scissor, adapted for clean-cutting work where stiffness of blade is required. Hand forged from finest steel. Ask for discounts.

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

In 5-gal. lots.	Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal.		assorted $2.50.
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35 3 00

House.

American, per lb.	0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	$ 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.
Button's imitation per doz. 5 00 9 00
man " 0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80
Canadian pitcher spout	1 40

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
"	"	4 00
"	"	5 25
"	"	6 75
6 "	"	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Size United Inches.	Window. Box Price. Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2% 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ½-inch	per gross	....	8 00
Rope, ⅝ "	"	....	12 00
Rope, ¾ to ⅞-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web		....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		0 22	0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz			4 40
" " 2, "			4 85
Barrel, Underhill			5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	....	4 50
12 in. up	"	....	3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	....	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	....	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.		4 50
No. 3, "Wright's"	"		8 50
Ordinary, with O burner	"		4 00
Dashboard, cold blast	"		9 00
No. 0	"		5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes	....	2 50

Woodyatt ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ..per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	...	7 80
" "	"	...	9 60

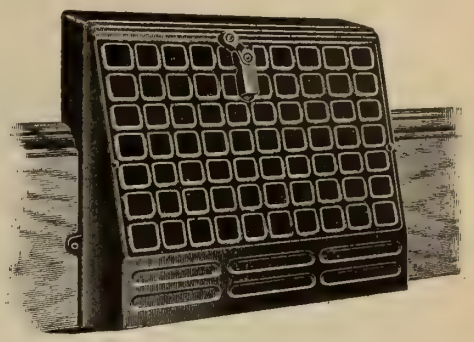
PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers

HART & COOLEY CO.,
NEW BRITAIN, Conn., U.S.A.



H. & C. No. 100

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros.' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ¼ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete.....each 0 75 2 75
" frame only.....each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Glaziers' points	5
Double pointed tacks, papers..	90 and 5
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Listton's, discount 10 per cent.
German .....per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 0 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3.25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80 No. 19, $... All prices per 1000 ft. measure F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 ...	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

High Carbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

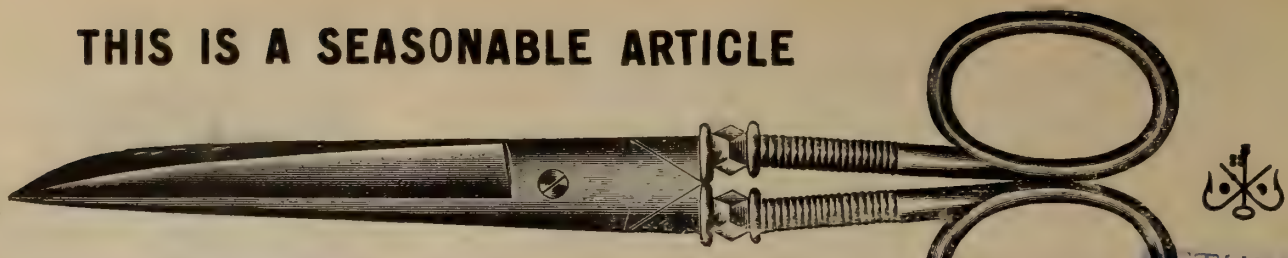
Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

THIS IS A SEASONABLE ARTICLE

A★1



We are this week illustrating a splendid selling Christmas line. But the cut gives you no idea of its quality. The steel that goes into these scissors is tempered by a special process known only to the manufacturers of **FISH HOOKS**. Every stage in the making which turns the rough steel into the finished article is supervised by skilful mechanics. We absolutely guarantee **FISH HOOKS** to be without a peer on the market, at the price we can quote you. Write us at once. The time is short.

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are good holiday souvenirs and live sellers the whole year. Are made well and are made out of good material. That is why we guarantee every one that we put out. When ordering Cork Screws try **Walkers**.

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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Munderloh & Co., Montreal.
Sayer Electric Co., Montreal.

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London Fence Machine Co., London.

Files and Rasps.
Barnett Co., G. & H., Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.
Grose, Walter, Montreal.

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Bradstreet Co.
British America Assurance Co., Toronto.
Confederation Life Ass., Toronto.
Metropolitan Bank, Toronto.
Western Assurance Co., Toronto.

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Scarf Co., Brantford, Ont .
Sterne, G. F., & Son, Brantford.

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Caverhill, Learmont & Co., Montreal.
Claybrough & Johnstone, Birmingham, Eng.
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Hamilton Rifle Co., Plymouth, Mich.
Harrington & Richardson Arms Co., Worcester, Mass.
Hobbs Hardware Co., London, Ont.
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Walter, E. F., & Co., Montreal.

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Rochester Lamp Co., Toronto.

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Gurney, Tilden Co., Hamilton, Ont.
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Welsh Tinplate and Metal Stamping Co., Llanelly, Wales.

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Canadian Rubber Co. of Montreal.

Horseshoes and Nails.
Canada Horse Nail Co., Montreal.
Montreal Rolling Mills Co., Montreal.
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Cluff, R. J., & Co., Toronto.
Gurney Foundry Co., Toronto.

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Dana Mfg. Co., Cincinnati, Ohio.
North Bros. Mfg. Co., Philadelphia, Pa.

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Erie Specialty Co., Erie, Pa.
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Penberthy Injector Co., Windsor, Ont.

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Waggoner Ladder Co., London, Ont.

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Ontario Lantern Co., Hamilton, Ont.
Wright, E. T., & Co., Hamilton.

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Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.

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Crain, Rolla L., Co., Ottawa.

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Batty Stove and Hardware Co., Toronto.

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Jenking, A. C., & Co., Montreal.
Rogers, Herbert & Co., London, Eng.
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Turnbull & Henderson, Vancouver, B.C.

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Canada Iron Furnace Co., Midland, Ont.
Canada Metal Co., Toronto .
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David. R. Sullivan, Montreal.
Deseronto Iron Co., Deseronto, Ont.
Emerson & Fisher, St. John, N.B.
Frothingham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson., W., Pontardawe, Wales.
Henderson, J. A., Montreal.
Ironside, Son & Co., London, Eng.
Jackson, C. F., & Co., Vancouver, B.C.
Johnston, Rd., Clapham & Morris, Manchester, Eng.
Kemp Mfg. Co., Toronto
Leslie, A. C., & Co., Montreal.
Lewis, Samuel, & Co., Dudley, Eng.
London Rolling Mills Co., London, Ont.
Lysaght, John, Bristol, Eng.
Montreal Rolling Mills Co., Montreal.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
Portland Rolling Mills St. John, N.B.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Stairs, Son & Morrow, Halifax, N.S.
Summers, John. & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

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Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

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Oakey, John, & Sons, London, Eng.

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Eagle Cooperage Works, Circleville, O.

Milk Cans and Trimmings.
Davidson, Thos., Mfg. Co., Montreal.
Kemp Mfg. Co., Toronto.
McClary Mfg. Co., London, Ont.
Wright, E. T., & Co., Hamilton, Ont.

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Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

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Berry Bros., Detroit and Walkerville.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Fenner, Fred., & Co., London, Eng.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works Windsor, Ont.
St. George, H. E., London, Ont.
Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

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Greening, B., Wire Co., Hamilton.

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Borden Co., Warren, Ohio.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co , Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co., Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Stairs, Son & Morrow, Halifax, N.S.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Toronto Foundry Co., Toronto
20th Century Mfg. Co , New York.
United Brass Mfg. Co., Cleveland, Ohio.
Utica Drop Forge & Tool Co., New York.

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Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Imperial Cement Co., Owen Sound.
Thompson, B. & S. H. & Co., Montreal.

Poultry Netting.
Greening, B., Wire Co., Hamilton, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E C., & Co., Indianapolis, Ind.
Caverhill, Learmont & Co., Montreal.
Lewis Bros., Montreal.
Shurly & Dietrich Galt Ont.
Spear & Jackson, Sheffield, Eng,

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co., Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.
Weeton, G., Mfg. Co., Toronto.

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Fisher, A. D., Co., Toronto.
Starr Mfg. Co., Dartmouth, N.S.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

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Mackenzie Bros., Winnipeg.

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Canadian Heating & Ventilating Co., Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Clare Bros., & Co , Preston, Ont.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
James & Reid, Perth, Ont.
Kemp Mfg. Co. Toronto.
McClary Mfg. Co. London.
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Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Perfection Safety Furnace Pipe Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Stewart, Jas., Mfg. Co , Woodstock, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

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Watt & Squire, Brantford.

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Taylor-Forbes Co., Guelph, Ont.

Wholesale Hardware.
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Caverhill, Learmont & Co., Montreal.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

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Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

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American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mufg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Munro Wire Works, Winnipeg.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont
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Waggoner Ladder Co., London, Ont.

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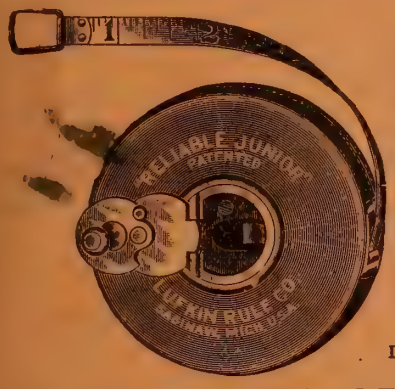
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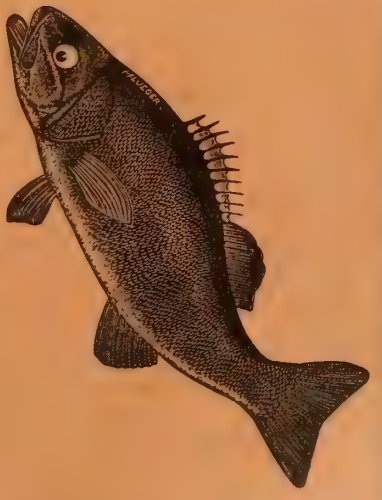
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See Classified List of Advertisements on Page 79.

TOOLS and TOOL CHESTS

RETURNED
NOV 20 1905
To Owner.
Cut Book 43
Page 37

IN 7 SIZES

No. 1

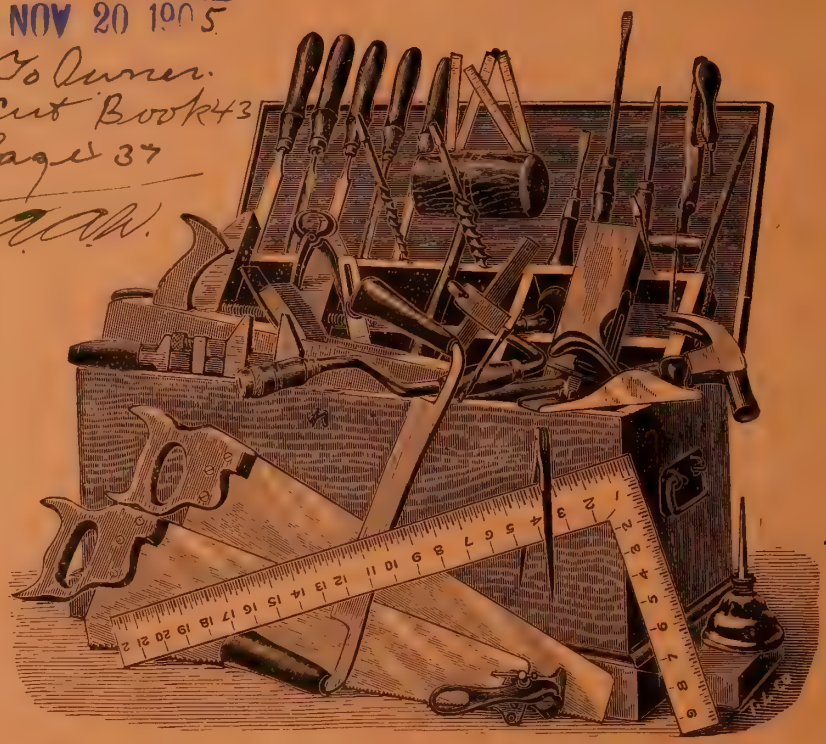
Chest 19 x 9 x 6¾.
Contains 16 tools.

No. 2

Chest 26 x 12 x 12.
Contains 24 tools.

No. 3

Chest 26 x 12 x 12.
Contains 36 tools.



No. 4

Chest 26 x 12 x 12.
Contains 43 tools.

No. 5

Chest 33 x 16 x 16.
Contains 52 tools.

No. 6

Chest 33 x 16 x 16.
Contains 58 tools.

No. 7—Tool Chest 33 x 16 x 16.
Contains 60 Tools.

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2 SIZES

No. 1—20 inches wide, 4 feet 6 inches long, 32 inches high, hardwood frame, maple top with front and tail vise, and holes for stops.

No. 2—2 feet 6 inches wide, 7 feet long, 2 feet 10 inches high, hardwood frame, maple top with front and tail vise, and holes for stops.

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Shot and Ball Cartridges

in

Smokeless and Black Powder.

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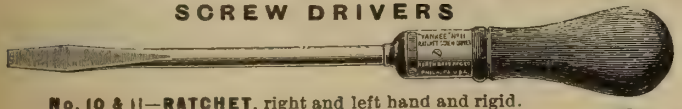
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OTTAWA, ONT.

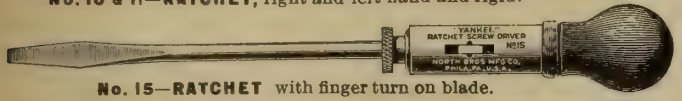
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No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET -right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " right hand only.



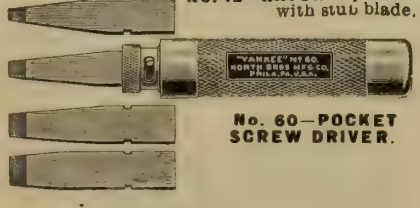
Chuck and 8 Drill Points, for spiral ratchet screw driver.



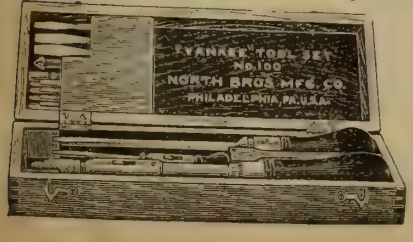
No. 12—RATCHET, with stub blade.



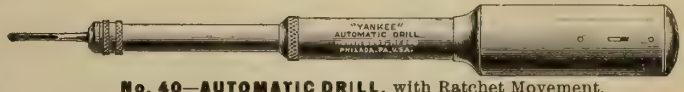
Countersink, for spiral ratchet screw driver.



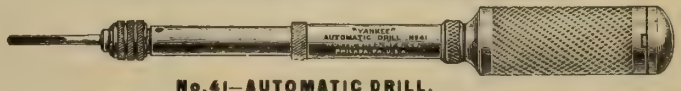
No. 60—POCKET SCREW DRIVER.



DRILLS



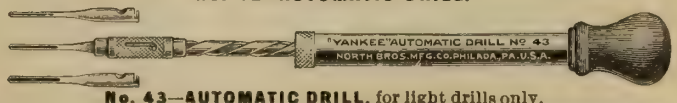
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

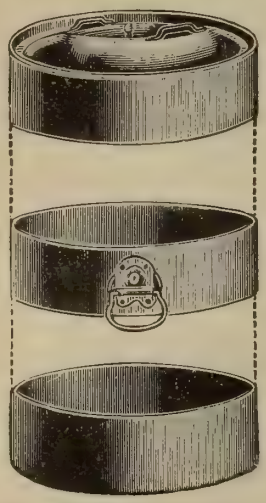
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NORTH BROS. MFG. CO.

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Davidson's Milk Can Trimmings



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"Broad Hoop" Pattern—Composed of the following: 1 Broad Hoop Bottom, 1 Cover, 1 Centre Hoop 6 inches wide, 20 gauge, 1 Broad Top Hoop, 1 pair Cover Handles, 1 pair Side Handles.

and Milk Cans with Broad Hoop Patent Roll Rim Bottoms

are in great demand and their general popularity is increasing yearly.

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Heavy Rolled Edges make our Patent Bottoms doubly durable and waggon and factory floor protectors.

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Antimony Lead Copper Zinc Tin

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QUICK SALES

AND

LARGE PROFITS

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"HURD'S" AXES

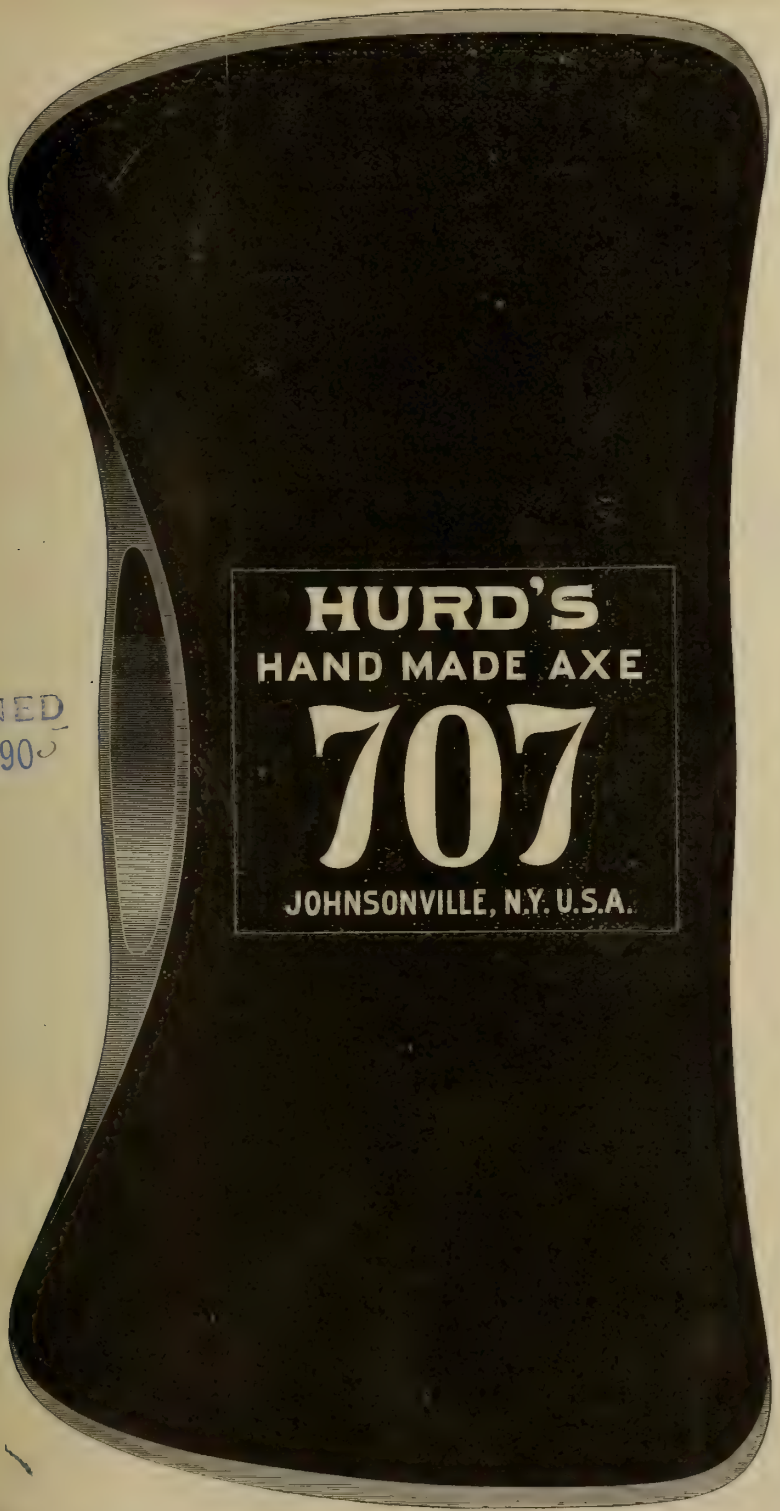
They are separately tempered by hand and have a perfect uniformity, that can never be acquired by those tempered on the cheapest collecting plan.

They excel in quality and finish, are sold at popular prices, and yet allow a good profit for the retailer.

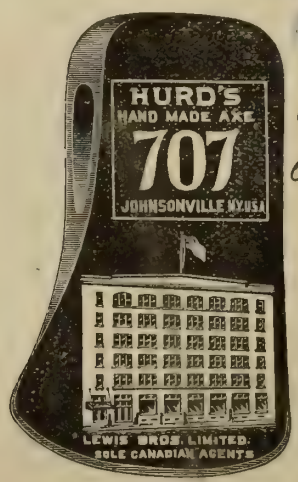
We DO NOT sell them to price-cutters.

Made in Michigan, Dayton, Three Rivers, Wedge and Half Wedge Patterns in Single and Double Bit, in Polished Solid Steel, Bronze and Charcoal Finish.

Refer to our Catalogue No. 31 for complete line.



DOUBLE BIT, MICHIGAN PATTERN, CHARCOAL FINISH, SUPERIOR QUALITY, SOLID STEEL



SINGLE BIT, MICHIGAN PATTERN, CHARCOAL FINISH, SUPERIOR QUALITY, SOLID STEEL

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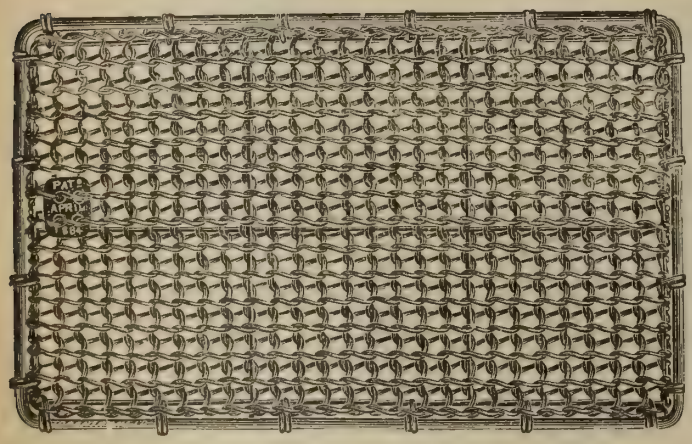
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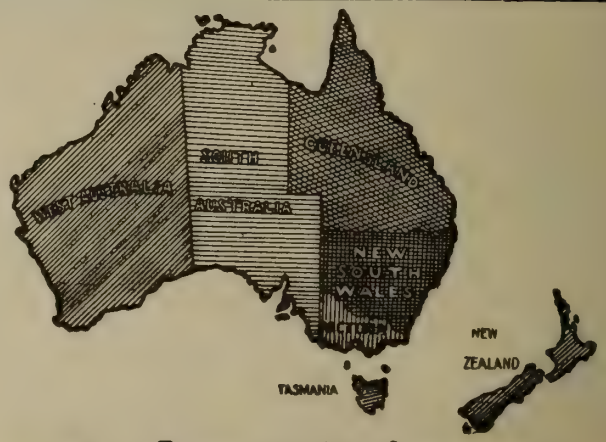
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Has been on the market for 20 years.
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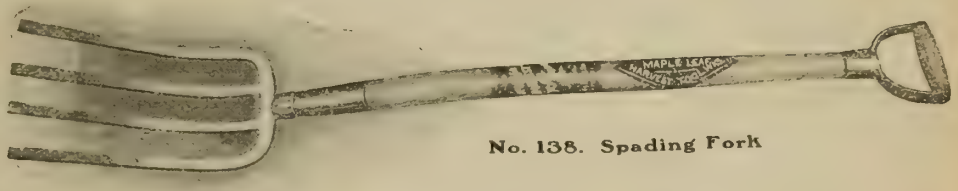
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For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



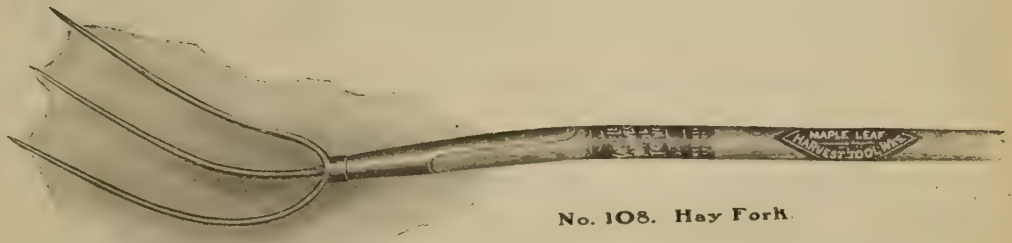
No. 122. Manure Fork.



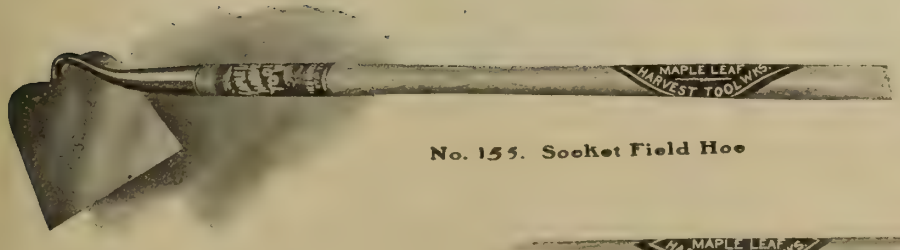
No. 138. Spading Fork



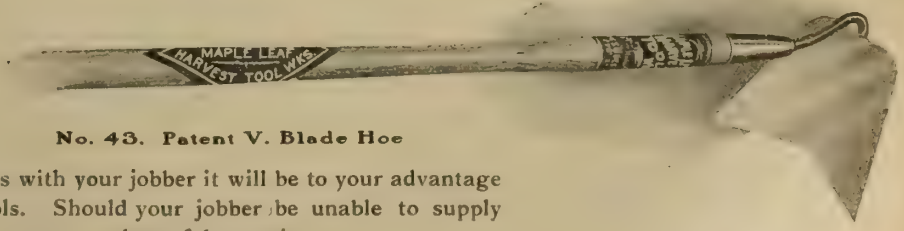
No. 243. Beet Fork.



No. 108. Hay Fork



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe

TO THE HARDWARE TRADE:—

When placing your order for harvest tools with your jobber it will be to your advantage to specify for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Pink's Lumbering Tools

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in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavy, Handles in Split Maple

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Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

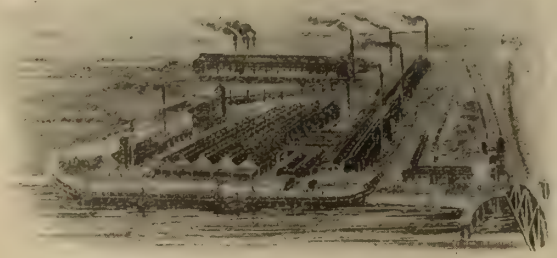
I AM AGENT FOR THE

Brazil Patent Snow Plough and Road Maker.

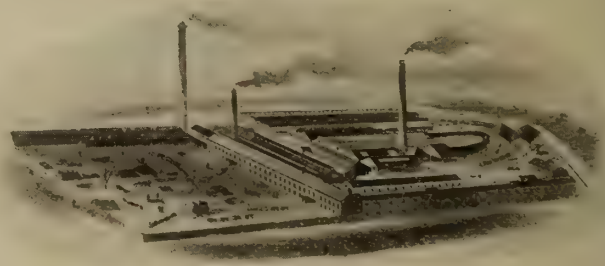
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These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



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One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

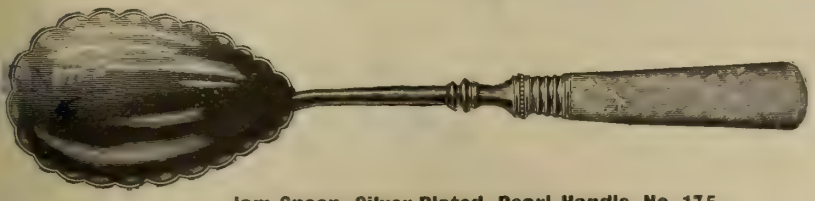
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Butter Knife, Silver Plated, Pearl Handle, No. 82



Butter Knife, Silver Plated, Pearl Handle, No. 52



Jam Spoon, Silver Plated, Pearl Handle, No. 175



Cheese Scoop, Celluloid Handle, No. 660

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The lines shown here are good value, and are a slight indication of our variety.

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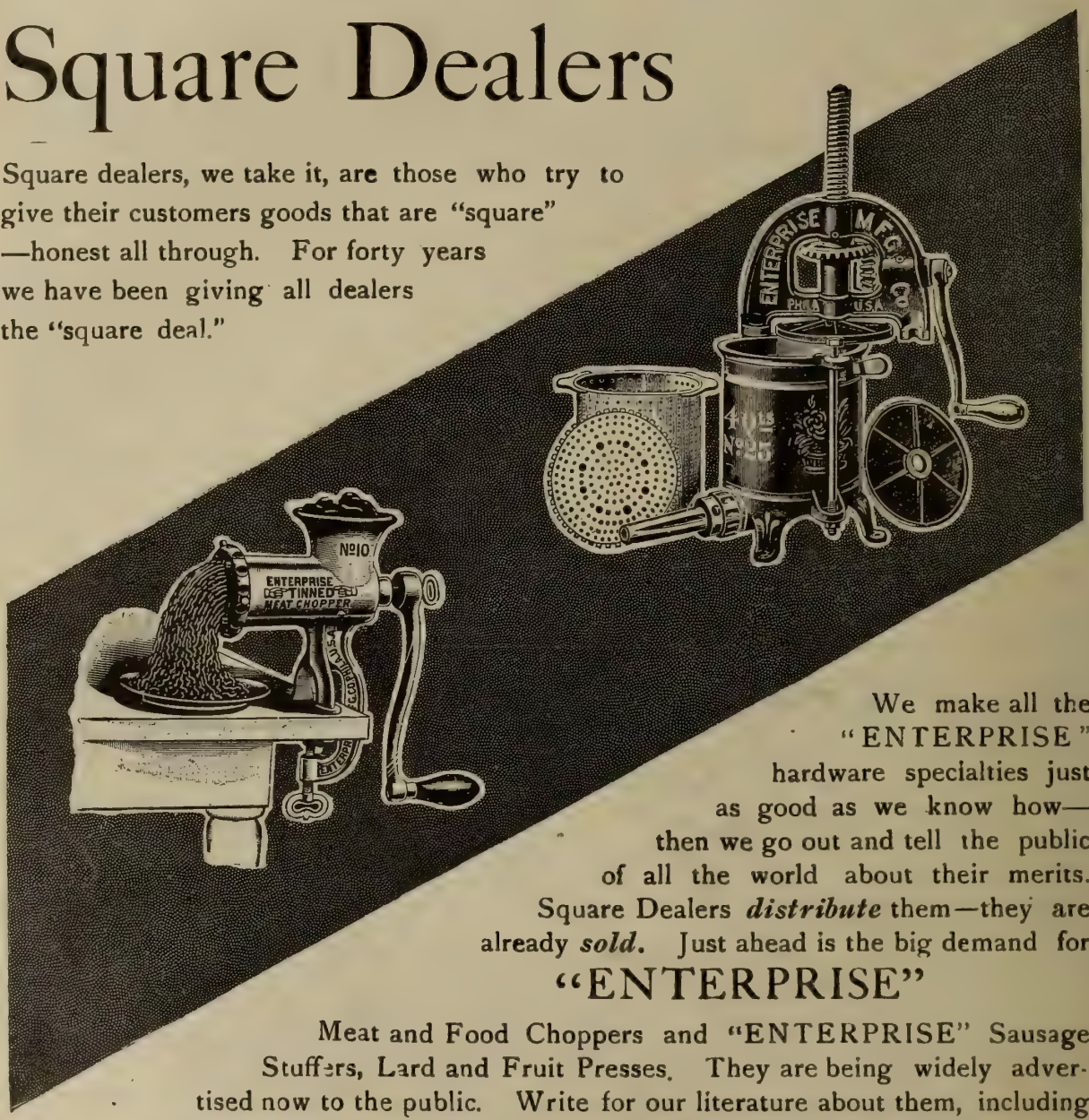
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Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square" —honest all through. For forty years we have been giving all dealers the "square deal."



We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public of all the world about their merits. Square Dealers ***distribute*** them—they are already ***sold.*** Just ahead is the big demand for

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Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

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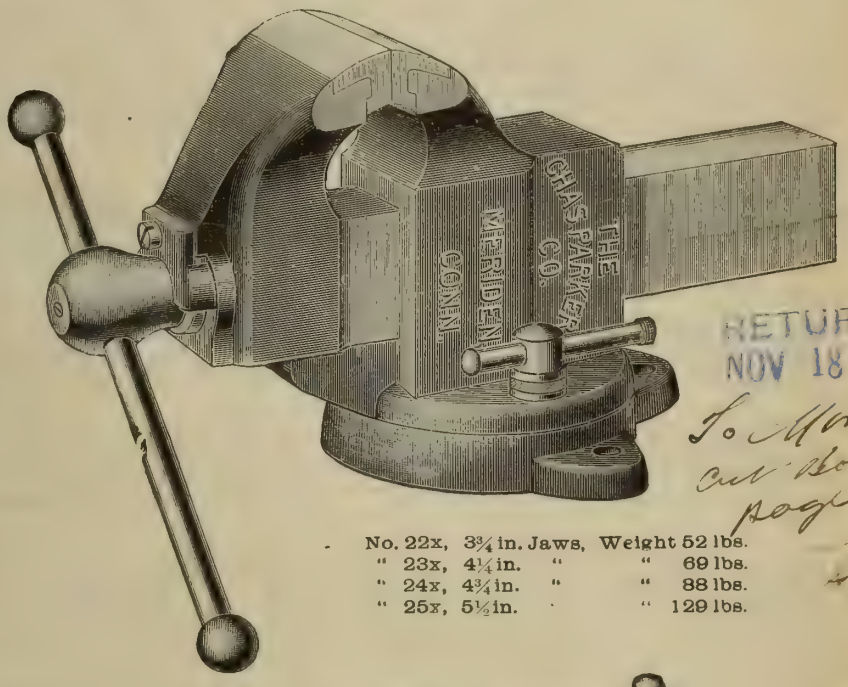
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With steel faces which are milled and fitted to the jaws.

These steel faces are renewable.

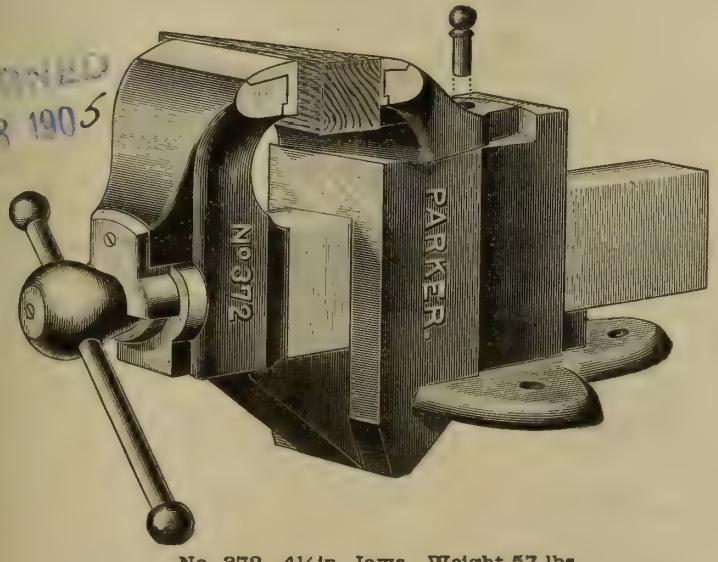
PARKER VISES outlast many other makes.

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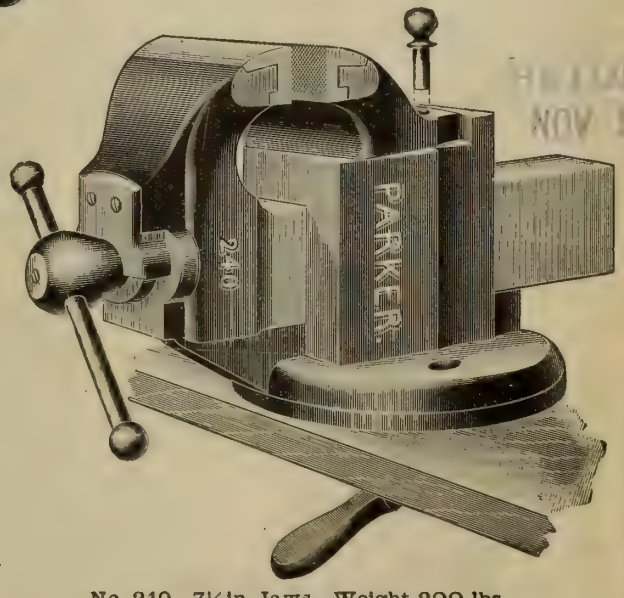


No. 22x, 3¾ in. Jaws, Weight 52 lbs.
" 23x, 4¼ in. " " 69 lbs.
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" 25x, 5½ in. " " 129 lbs.

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No. 372, 4½ in. Jaws, Weight 57 lbs.
Self-adjusting Back Jaws.



No. 240, 7½ in. Jaws, Weight 200 lbs.
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Caverhill Learmont & Co

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Warnock Tools

BEST IN THE WORLD





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LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

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Give that man a **UNION PLANE** when he asks you for a

GOOD PLANE

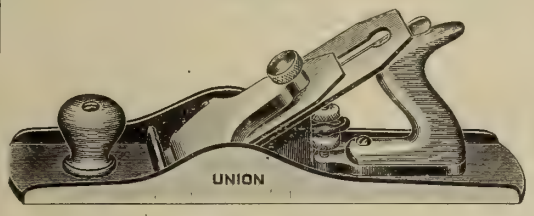
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The one with the Loc'-ing Lever adjustment and Solid Frog.

Patented.



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Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

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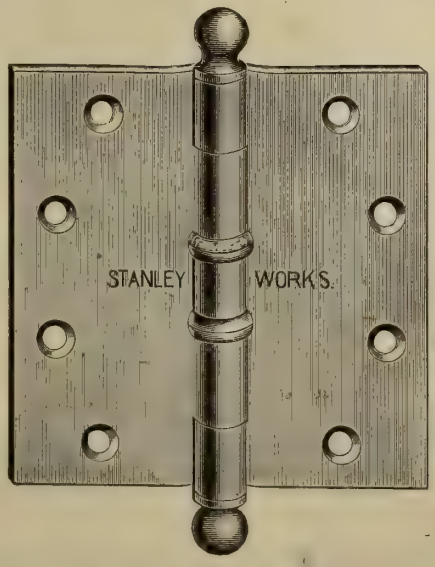
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FOR ALL THEIR IMPORTANT WORK. DEALERS SHOULD HAVE THEM IN STOCK.



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FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

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FOR SALE BY LEADING JOBBERS.

Your Trade

REQUIRES THE VERY BEST



Our Best is not the Vaunted Best of Every Newcomer

IT IS THE EARNED RECORD OF MANY YEARS

THAT is a fair argument. Think it over. Why do the thousands of customers come back again and again for our rope and cordage?

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1st —The high standard of quality in cordage has won the trade to us.

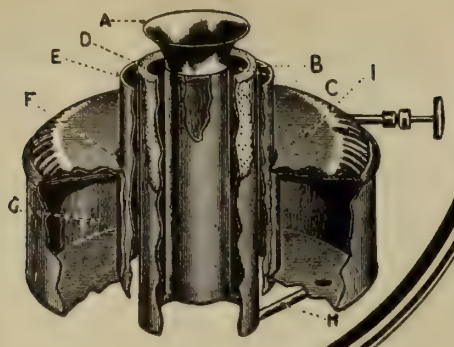
2nd —**The maintenance of the Quality in the Goods** has held and increased our trade and it is only reasonable to believe that there will be a steady continuation.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX

BRANCHES:

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A.—Flame Spreader, solid, no perforations to clog up with oily residium to smell and smoke. B.—Air Space outside of Wick Tube. C.—Air Space inside of Wick Tube. D.—Wick. E.—Outside casing to Burner. F.—Air Space between Fount and Outer Casing. G.—Fount for oil entirely seperate from Burner. H.—Feed Pipe conducting oil from Fount to Burner. I.—Shield resting on top of Fount with air space underneath.

ALUMINUM OIL HEATERS



The only Oil Heaters with a partition in the drum, forcing base-burner radiation all over, from sides, bottom and top.

The Safety Burner makes explosions impossible. Numerous air passages insure perfect combustion, so there's no smoke or smell, while a furnace for heat.

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Handsomest Oil Heaters on the market, and our prices have all competition on the run.

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MONTREAL AND TORONTO

ANNEALED WIRES

FOR BALING

HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

FLAT HEAD
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SCREWS

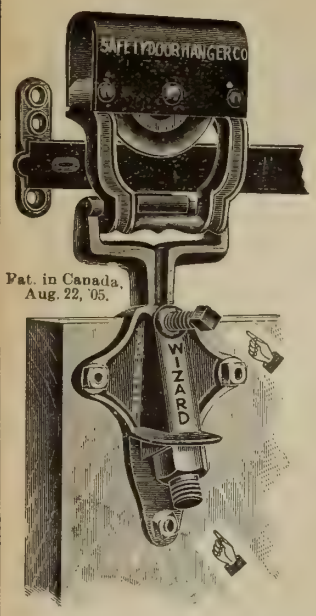
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TINNED WIRE for Mattress, Broom, Bolting and Binding

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COPPER WIRE—ALL—BRASS WIRE

MADE IN CANADA



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Rapid-Working

is what best describes

THE WIZARD ADJUSTABLE HINGE HANGER

When an ordinary hanger is used did you ever notice how time is often lost trying to get the sliding-door to hang properly ?

With ***The Wizard*** not one moment is wasted. You simply turn the hexagon nut or set-screw and then the door can be placed in the position desired.

No other hinge hanger works so quickly and so satisfactorily as ***The Wizard.***

Do you want to sell the best hanger ? Ask your jobber about ***The Wizard*** when he calls.

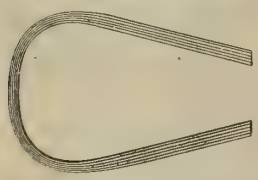
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HAMILTON, - ONTARIO

ESTABLISHED 1867

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Mfrs. of ***Hubs, Spokes, Buggy and Waggon Rims, Sleigh Runners, Shafts and Poles, etc.***



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THEY SHOOT WELL!
THEY SELL WELL!
THE PROFITS ARE RIGHT!



Sole Manufacturers—
J. P. CLABROUGH & JOHNSTONE
WORKS—
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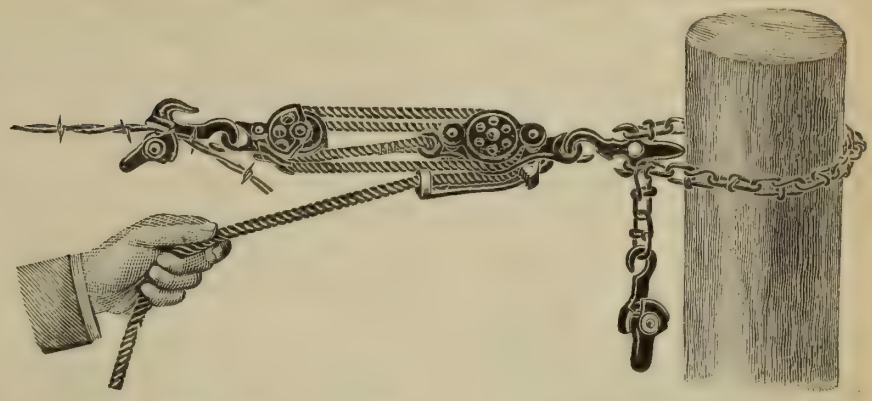
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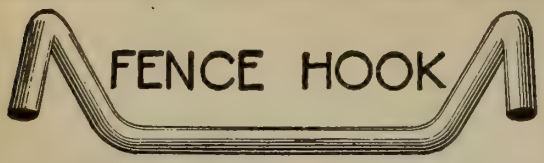
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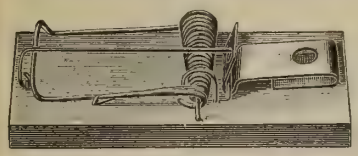
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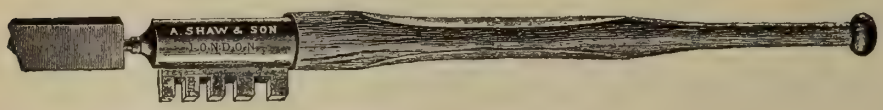
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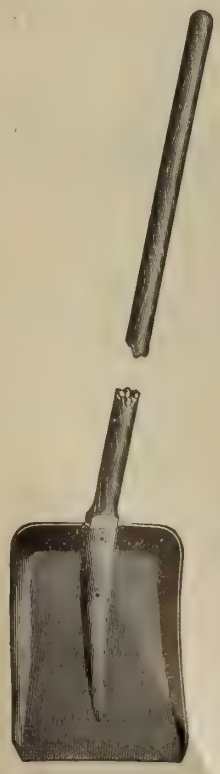
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Are the shovels that you are selling made in this manner?

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WHOLESALERS AND MANUFACTURERS

Annual Conventions of American Associations at Washington, Nov. 8, 9 and 10

THE convention of the National Hardware Association of the United States and the American Hardware Manufacturers' Association does not directly affect either the Canadian hardware trade or Canadian manufacturers, and yet in an indirect way it is of great interest, for the difficulties which these associations have to encounter are much the same as those which the Canadian trade will have to fight as Canada develops and competition becomes keener.

The four subjects to be given special prominence this year were "Catalogue Houses," "Private Brands," "Parcels Post" and "Railroad Freight Rate Legislation."

Catalogue Houses.

The first of these, "Catalogue Houses," has been discussed in Hardware and Metal several times. As yet this is not a live issue in Canada. The catalogue houses of the United States have tried hard to do business in Canada but the delay caused by getting the goods passed through the Customs Department has prevented them from getting a foothold. It was shown by reproductions from the catalogues of Sears, Roebuck & Co., and Montgomery, Ward & Co., of Chicago, that these houses sold in many cases to the consumer as cheaply as the retailer could buy, and in some cases their price was even lower than the jobber's price. The policy of wholesalers has been not to buy from any manufacturer who allows his goods to be slaughtered by catalogue houses. The result has been that each year a number of the largest manufacturing firms have announced to the jobbers that they would no longer sell to catalogue houses.

Private Brands.

But while the manufacturers expressed themselves as willing to co-operate as far as possible with the jobbers in their fight against the catalogue houses, they asked the jobbers that they sell the manufacturers' regular brands and not their own private brands. This seems to be a fair request. If the jobber objects to the manufacturer selling direct to the retail trade and thus entering into competition with him, surely the manufacturer has a right to object to the wholesaler coming into his field in offering the trade goods under a private brand and thus decreasing the sale of goods with the manufacturer's regular brand.

Parcels Post.

The opposition to the establishment of a parcels post was another blow at the catalogue house. In the address of the president, S. A. Bigelow, of Boston, and also the report of the secretary-treasurer, T. J. Fernley, of Philadelphia, there was declared the necessity of defeating all parcels post measures, this being regarded as necessary to the prosperity of hardware business as with a parcels post the big mail order houses would soon drive many jobbers out of the field.

One-Cent Letter Rate.

One-cent postage accompanied by typewritten letters was advocated. In fact the convention declared itself in favor of a general reduction of letter postal rates from two cents to one cent as soon as the Post Office Department can see its way clear without imposing too heavy an additional burden on the revenue. One of the members in speaking on this matter said:



William Vallance, of Wood, Vallance & Co., Hamilton, President Canadian Wholesale Hardware Association.

"We want a one-cent letter rate independent of any changes in magazine and periodical rates. We do not want the two things confounded. At the same time the association will not press for the reduction in the face of a big deficit. We are willing to leave that to the discretion of the Postmaster-Geoeral."

Railway Rate Legislation.

The one question which threatened to mar the harmony with which the business of the association was transacted was the matter of railway rate legislation. All were agreed that the rebate system was wrong, whether it was a rebate for private cars, private tracks or any other reason. It was easy enough to see the wrong; the difficulty was to provide a remedy.

Two resolutions were introduced looking towards establishing the attitude of the organization in regard to the position of President Roosevelt upon this matter.

E. B. Pike, of Pike, N.H., a member of the executive committee and also of the freight committee of the body, offered a resolution which if adopted will be a complete indorsement of President Roosevelt's proposition to increase the powers of the Interstate Commerce Commission. N. A. Gladding, also a member of the freight committee, offered as a substitute a resolution expressing confidence in President Roosevelt but failing to indorse the President's proposition.

Many of the delegates thought railroad freight legislation as advocated by President Roosevelt far too big a question and too important for hardware jobbers, manufacturers or any other

body of men to wrangle with and attempt to decide after only one or two days' consideration.

Mr. Pike's resolution indorsing President Roosevelt's proposition was finally carried and a copy of the resolution was ordered to be sent to the President.

Classification of Fixed Ammunition.

Another question of importance which the Hardware Association discussed was the classification by the railroads of fixed ammunition such as rifle and shot gun shells as "high explosives." The association objected strongly to this as it increases the cost of transportation and subjects the members handling ammunition to restrictions which they declare are not warranted by facts. Mr. Bigelow, the president of the association, said he had practical demonstration in a fire that occurred at his place that burning ammunition was not dangerous unless very closely confined.

The present railroad classification of ammunition with dynamite and nitroglycerine affects the insurance and storage problem with many dealers. In some cities the authorities insist on special fireproof vaults being constructed for the storage of powder and cartridges, and this the association declared both unnecessary and unfair.

Canadian Delegation.

The Canadian association was well represented. In fact, it is doubtful if there has been as large and as representative a delegation present from Canada as registered at the New Willard at Washington this year. A glance over the names will bear out this statement :

William Vallance, of Wood, Vallance & Co., Hamilton, president of the Canadian Wholesale Hardware Association.

T. H. Newman, of Caverhill, Learmont & Co., Montreal, vice-president Canadian association.

James Hardy, Toronto, secretary Canadian association.

A. J. Hardy, of Jenkins & Hardy, Toronto.

T. B. Lee, of Rice Lewis & Son, Toronto.

Thomas Dexter, of H. S. Howland & Sons, Toronto.

William Starke, of Starke Hardware Co., Montreal.



T. H. Newman, Caverhill, Learmont & Co., Montreal, Vice-President Canadian Wholesale Hardware Association.

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To C.M.A.
M. Young
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Cyrus Birge, of Canada Screw Co., Hamilton.

H. T. Hunter, Hardware and Metal.

Messrs. Vallance and Newman addressed the Hardware Association.

President Bigelow introduced Mr. William Vallance, president of the Canadian Wholesale Hardware Association, who spoke as follows :

"Mr. President and Gentlemen : It affords me a great deal of pleasure on behalf of the Canadian association to thank you for the very kind invitation extended to our members to visit you. We need counsel, have much to learn, and we know of no gathering in the world where we could learn so much as from the gathering that I see before me this morning, composed as it is of the most influential members of the trade in the United States.

"We occupy on the map not a very large space ; we are scattered ; we have



James Hardy, of Jenkins & Hardy, Toronto, Secretary-Treasurer of Canadian Wholesale Hardware Association.

not the solidity that your association has. The coast has a small association of its own. Winnipeg has one for Manitoba, and the Eastern Provinces have one for the Maritime Provinces, and our association is composed of representatives from Quebec and Ontario. We have not attained to a universal association such as you have, but we hope to progress to it, but owing to our long drawn out settlements this has not yet been attained. We come here to learn. We cannot teach you anything. We are glad of the opportunity you have afforded us. I thank you, gentlemen."

President Bigelow then introduced Mr.



Cyrus Birge, Canada Screw Co., Hamilton, ex-President Canadian Manufacturers' Association.

T. H. Newman, vice-president of the Canadian association, who said :

"Mr. Chairman and Gentlemen of the National Hardware Association : I de-

sire to confirm as strongly as I can the thanks so ably expressed by our president for the many courtesies tendered our association. We have been in existence about seven or eight years. Mr. Fernley, your able secretary-treasurer, has paid us two visits. I would like to make a statement, I don't know whether it is proper or not, but we will come no more unless some of the national association pay our association a visit. We would like to see you at our next annual meeting in October, in 1906, possibly to be held either in Toronto or Hamilton, Ontario.

"I would like to say just one or two words regarding the cordial, friendly relationship between the United States and Canada, not only in a friendly way but from a business point of view. We in Canada do as much trading with the United States—considerably larger—than we do with Breat Britain. We are so closely allied to you, the boundary line is so narrow and almost unintelligible, that our natural desires and inclinations are towards American goods, and these have become familiarized to us to a very large extent, and our factories are modeled very much on the same plans that they are in the United States and are developing rapidly.

"We in Canada seem to have turned the corner. We have a population of about six millions, progressing rapidly, with an unbounded territory and unlimited resources, and we look forward to a great future, and I think I am safe in predicting that in the next ten or fifteen years Canada will see a development undreamed of ten years ago.

"I don't think I can add anything to what Mr. Vallance has said, and you will be welcome in Canada if you come there and we will do our best to entertain you and hope to see you next October."

The question of reciprocity and trade relations was let severely alone, much to the disappointment of many of the delegates, the majority of whom are anxious to see closer trade relations existing between Canada and the United States, although it must be said their views are mostly selfish. They want reciprocity merely because they would then have a larger market.

Social Side.

With about three hundred fine-looking wives, pretty daughters, and blushing sweethearts present the social side is one of no small importance. In addressing the delegation at the White House Thursday afternoon President Roosevelt said he had always had a great deal of respect and admiration for the hardware dealer and hardware manufacturer, but now since he had met his wife he believed she was the better man.

Too much praise cannot be given the ladies for the executive ability displayed in their management of the social functions. The morning and afternoon were given over to business meetings, while each evening the ladies provided some most delightful entertainment.

With all its advantages as a convention city Washington presented one disadvantage to the two associations, and that was that the Arlington and New Willard, the headquarters of jobbers and manufacturers respectively, were a considerable distance apart and if each association attended its own meetings there was little opportunity for them to meet each other as frequently as might be desired. The social evenings arranged for by the ladies did a great deal to bridge over this difficulty.

On Thursday evening a progressive euchre party was given in the parlors of the Arlington. Some time ago word was passed to firms represented that they could send prizes for the party. They responded with alacrity and the result was a very unique and in many respects valuable collection of prizes.

There were sets of garden tools, a dozen or more floor sweepers, axes, hatchets, saws and tools of all sorts, a big bathroom scale with measuring rod attachment, sets of carvers, pearl-handled butter spreaders, children's express wagons, and in fact almost every household utensil that could be found in a hardware store.

On Thursday evening a joint meeting of the two associations was held. Addresses were delivered by Thos. P. Shonts, chairman of the Panama Canal Commission, Gifford Pinchot, chief of the Forestry Bureau, and David Williams, of the Iron Age.

On Friday evening the convention was brought to a close with the annual banquet. The speakers were Hon. Jas. R. Garfield, son of the late president of the United States, Hon. Theo. E. Burton, Hon. Oscar P. Austin and Secretary Shaw of the Treasury.

Attendance Large.

The attendance this year was by far the largest in the history of the associations. Secretary Mitchell stated the attendance was fully a 50 per cent. increase over that of any previous meeting. There were fully one thousand delegates and their ladies in attendance.

Souvenirs.

There were souvenirs of all sorts distributed by the manufacturers. Members

Let Us Push Two Good Paying Specialties for You.

We are pushing *Sherwin-Williams Buggy Paint* and *Sherwin-Williams Enamel Leather Dressing* for the benefit of our agents and dealers. If you are one of them, you know that our methods bring profit and permanent trade—if you are not, write us today for particulars of the way in which we are increasing the demand for these goods in every locality.

S-W. Buggy Paint and S-W. Enamel Leather Dressing are as steady sellers the year around as any paint specialties the dealer can put on his shelves.

S-W. Buggy Paint is an exceedingly tough and durable gloss paint, in handsome, permanent colors. All owners of vehicles have constant occasion to use it in refinishing their buggies and carriages. Its durability makes its use popular on boats, porch and lawn furniture, and other surfaces exposed to the weather.

S-W. Enamel Leather Dressing is unexcelled for refinishing carriage tops, curtains, etc. It keeps them soft and pliable and fitted to withstand the effects of rain and mud.

The honesty and efficiency that your customers find in S-W. Products bring them back for other things you sell. Can you afford to neglect such an important point in your business?

Write today to our nearest office.

THE SHERWIN-WILLIAMS CO.
LARGEST PAINT AND VARNISH MAKERS IN THE WORLD
Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St. E., Winnipeg.

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

and their wives were loaded up with all sorts of patent tape measures, hat pins, granite ware samples, watch charms, and nail clippers, till the rotundas of the hotels looked like a bargain day rush in a department store.

Pike Manufacturing Co.

The Pike Manufacturing Co., of Pike, N.H., distributed a souvenir that was at once a handy article for every man and at the same time an excellent advertisement for their assorted boxes of oil stones and scythe stones. The souvenir consisted of a small oil stone set in a rosewood box. A small booklet describes in detail the size of the assorted boxes of which they are making a specialty, a full list of what each box contains, the retail price and the price to the general public. Readers of Hardware and Metal would do well to write for one of these souvenirs, the Pike Manufacturing Co. having promised to send them free on request.

Dover Manufacturing Co.

The Dover Manufacturing Co., Canal Dover, Ohio, presented to each delegate one of their small asbestos sad irons. This is nickle plated and makes a very neat paper weight. This firm are making a very generous offer in connection with the window display of their irons and the trade should write them for full particulars.

Stanley Rule & Level Co. presented a number of delegates with a very neat folding rule, thirty-six inches in length.

Pittsburg Steel Co. had on hand a number of steel canes prettily decorated with red, white and blue ribbons.

E. C. Atkins Co., of Indianapolis, known to Canadian trade as manufacturers of saws, as usual kept "open house." Every delegate was welcomed to their suite of rooms and presented with a valuable fountain pen.

Smith & Hemenway, of New York, also gave a fountain pen with a gold nib. They also had a small watch charm which was a perfect monkey-wrench in miniature.

Peters Cartridge Co. had a very neat paper weight made out of three of their cartridges.

Winchester Arms Co. gave each of the ladies a miniature brass cartridge hat pin.

The Iver Johnson Arms Co. gave as their memento a very fine leather-bound notebook.

The Oneida Community, Limited, gave a neat little box containing three jars of their jam. Many of the delegates sampled these at the hotel and pronounced them excellent.

The National Enameling Co. distributed a small granite pail to show the fine quality and good appearance of their goods.

The United States Stamping Co. had a miniature cuspidor neatly packed in a small cardboard box.

Hopkins & Allen Arms Co. gave away neat little euchre card counters.

Philadelphia Lawn Mower Co. had on hand for general distribution a rubber date stamp.

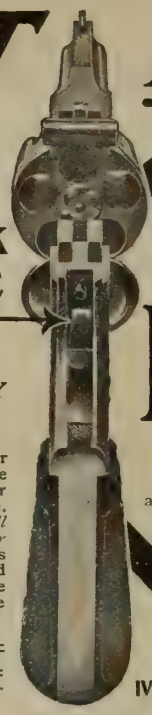
Griffin Manufacturing Co., of Erie, Pa., appealed directly to the men and distributed with a lavish hand a very fine brand of cigars.

Lawson & Sessions, of Cleveland, gave away a small nickle plated monkey-wrench.

E. I. Dupont Co., of Wilmington, had a very pretty and valuable souvenir in a watch guard of silk with a fob embossed in metal.

Boss Washing Machine Co. gave away a small emergency case containing court plaster, etc.

IT IS SAFE



LOOK HERE for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

New York Office: 99 Chambers St.

As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them, anyway—it costs you nothing. If you will ask for it, we will gladly send you our bright little booklet, 'Shots,' together with our handsome catalogue.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

TRADE MARK

This design a guarantee of quality.

Manilla Paper
SMOOTH, TOUGH, BRIGHT, CLEAN
ALL SIZES AND WEIGHTS

Fibre Paper
THE TOUGHEST OF THE TOUGH
ALMOST WATERPROOF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles hat they contain. It would assist the editor in writing the review.

Asbestology.

A NEAT little paper by the name of "Asbestology" has been prepared by the Canadian Asbestos Co., 44-48 Youville Square, Montreal. Besides giving descriptions of the merits of asbestos it gives interesting little sketches of everyday life. Readers of Hardware and Metal will be furnished with a copy on request.

Whelpley Skates.

The Whelpley Skate & Mfg. Co., Limited, St. John, N.B., have their catalogue for 1905-1906 ready for their customers. It is an extensive catalogue containing thirty-two pages and cover, and had an elaborate cover design drawn by the company's advertising manager, Mr. Fred. S. Stewart. This catalogue gives a full description of the different styles of skates manufactured by this company, and will be forwarded to any readers of this paper who mention in a letter to the company that they saw this notice.

Tortoise Heaters.

Jas. Smart. Mfg. Co., Brockville, have issued a neat little booklet of twelve pages and cover, giving description of their "Tortoise" heaters with illustrations. This booklet will be forwarded to any reader of Hardware and Metal who mentions the paper on requesting a copy of the booklet.

Iron Products.

A catalogue comprising some one hundred and ten pages and cover has been issued by F. W. Cotterill, Limited, manufacturers of bolts, nuts, screws, rivets and washers, etc., Darlaston, South Staffordshire, England. This catalogue gives full description of the different styles of goods manufactured by the company with numerous illustrations, which make it a great deal more interesting to the readers. Dealers can procure a copy of this catalogue by writing the company for same and mentioning the fact that this account was seen in Hardware and Metal.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

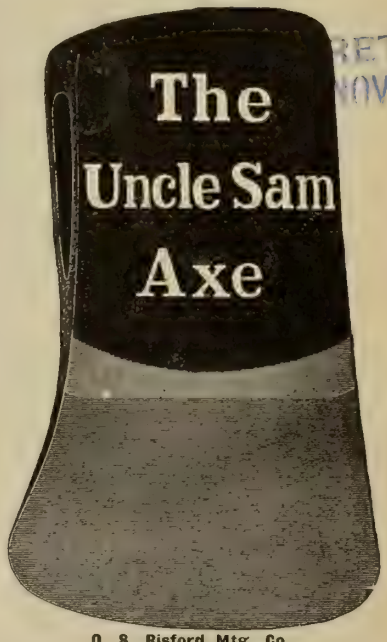
Chopping Axes, Etc.



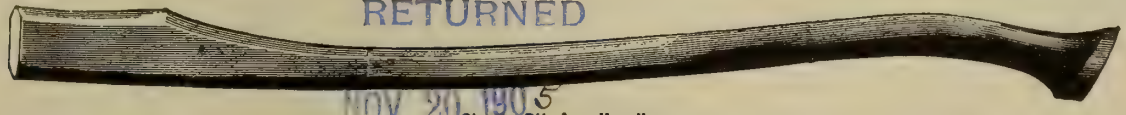
Welland Vale Mfg. Co.



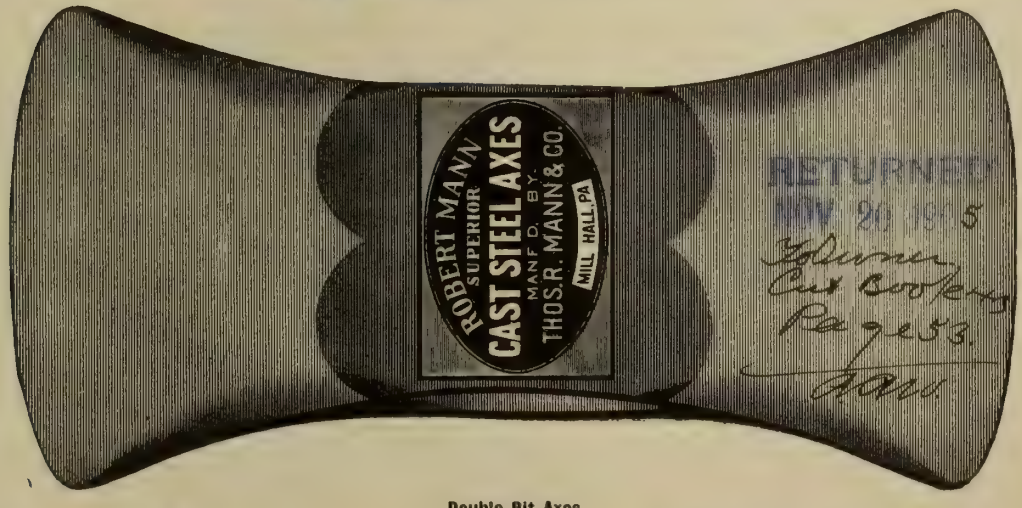
Axe Wedger



O. S. Risford Mfg. Co.



Single Bit Axe Handles



Double Bit Axes



Double Bit Axe Handles

For fuller lines see our Catalogue

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

Our prices are right

——Here is the——

"GOOD CHEER" RANGE

You Will Want

A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price

It Has a Full Sized

20-INCH OVEN

Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted



The "GOOD CHEER" KITCHEN QUEEN

THE JAMES STEWART M'F'G CO. Limited

Winnipeg, Man. **Woodstock, Ont.**

STOVES AND TINWARE

AGAINST TIN PLATE MILLS.

BEFORE the Tariff Commission, which convened at Montreal last week, the manufacturers who use as their raw material tin plate, galvanized and black sheets, were represented by J. B. Campbell, of the Acme Can Works; W. E. Ramsay, of the Pedlar Metal Roofing Co., and A. R. Withall. These gentlemen advocated a continuance of the present tariff, which is 5 per cent., recognizing, however, that the Government must have revenue.

Messrs. Withall and Campbell dwelt largely upon the possibilities of the Government placing a larger duty on tin plate from the fact that an industry for the manufacture of these is at present contemplated at Morrisburg, Ont. They contended that this industry was neither necessary nor advisable, inasmuch as it would be impossible for any one manufacturing plant, under any circumstances, to supply the market, owing to the multiplicity of qualities, gauges, and sizes required. They requested that, in case the duty was increased, the schedule on tin cans be also increased, as otherwise their industries would suffer from an unequal competition with United States manufacturers.

Mr. Ramsay presented the case of his firm, G. W. Reed & Co., F. F. Powell & Co., and other large interests in Montreal, who are probably the largest users of block and galvanized sheets in the country. His argument regarding the possibility of a Canadian concern supplying the Canadian market was the same as that of Mr. Campbell. He added, however, that those he represented were very well satisfied with the tariff as it stands to-day, mentioning the fact that within the past five months there had been installed in Montreal alone three plants to manufacture sheet steel building material. In answer to a question put by the Hon. Mr. Fielding, Mr. Ramsay stated that the amount of money invested is similar plants in 1896 had been from $40,000 to $50,000, while, in 1905, the amount was nearly a million dollars. When asked what effect a reduction of the tariff on their finished product would have, Mr. Ramsay stated that the duty of 25 per cent. already existing was a very nice thing to enjoy, but for the last six years the Canadian manufacturers had vied with one another in the endeavor to improve their product, and to-day they all manufactured a line which would hold its own in any market in the world. But if the American manufacturer, with his many advantages, should choose Canada as his dumping ground, he could flood our market with his surplus output, and consequently drive Canadian manufacturers to the wall.

Alexander Woods, of the James Robertson Co., Limited, appeared before the Commission, asking that a higher duty be placed upon sheet lead, as it was the intention of his company to manufacture here. The present duty is 26 per cent., less the British preference of 16.67 per cent. Sheet lead is manufactured from pig lead, which carried a duty from Britain of 10 per cent. net. He asked that sheet lead be classed with lead pipe and shot, that is, to bear a duty of 33 1-3 per cent., less the British preference. His mill, which expected to do some export business with Mexico, would be ready to start in a very short time.

Mr. Walter Grose, representing the Ontario Lantern & Lamp Co., of Hamilton, stated that his company had a capital of $100,000, employed 110 hands and had a pay roll of $55,000 annually. He understood that a small factory in Toronto was to ask for a duty on brass plates, and as this is the raw material largely used by his firm, he asked that if it be raised an increased duty be placed on his finished product. Mr. Grose stated that, in his opinion, it would be impossible for the brass factory alluded to to take care of the Canadian trade, which, though comparatively small, still demanded an infinite variety of grades and sizes of brass plate. Mr. Grose expressed the opinion that a duty of at least 40 per cent. would be required to put such an industry on a paying basis.

Mr. E. M. Thurber, manager of the Nicholson File Works Co., Port Hope, Ont., said that he believed there was a disposition among steel manufacturers to ask that file steel be put on the dutiable list. Files now have a duty of 30 per cent., and file steel, which is not made in Canada, is free. Mr. Thurber stated that labor in file making amounted to 60 per cent. of the value of the product, but in the United States, owing to their manufacturing quantities, the cost was 25 per cent. less than in Canada. If a duty be placed on file steel, Mr. Thurber suggested that one of from 10 to 50 cents a dozen be placed on files, in addition to 30 per cent. ad valorem.

So far as hardware interests are concerned, this closed the Commission's inquiries in Montreal.

SEASON FOR STOVE REPAIRS.

THIS is the season when people order stove repairs, says a writer in the Metal Worker, and woe to the dealer who does not have some means of keeping track of them. I have tried all sorts of methods and have finally adopted what I have found to be the cheapest thing that answers the purpose and which takes the least attention. Almost any stationery store can furnish a manifold order book, one page to remain in the book and the other page to be torn out for use as an order. By writing the order on the page to be removed with a piece of black carbon paper under it a copy is preserved in the book of the order that is sent. This is not enough. I send with the order tags with my name printed on one side and on the other side the list of repairs, which are to be tied together, and the name of the party for whom they are ordered. This makes several tags on one bundle of repairs, but it is a small matter for the repair dealer to do this work, and I have found none who has objected to doing it for me. Then when the repairs arrive by freight, or otherwise, it is a simple matter to separate the parcels and to know to whom the different parts must go. I then send a post card stating they are ready, and if I am to put them in the stove ask when it will be convenient. I have saved myself a great deal of trouble by exacting a deposit sufficient to pay for one-half the goods ordered. This induces the person who orders them to come back and get them later on and insures me against loss for the carrying charges and against the entire loss if the party never returns. Any stove dealer who will stop and think a little while can plan his own method using these simple provisions to prevent eerors and losses.

SELLING HEATERS.

HOW to get the stove trade away from the retail catalogue houses and away from the other competition is a problem that always confronts the stove man, says the Hardware Trade. It probably always will, or at least for a good many years, for there seems to be no way in which the retail catalogue houses can be put out of business, and other competition is just as permanent.

But perhaps the stove man is not so much bothered with the catalogue houses as some of his neighbors. People do not send for stoves nearly so much as they do for smaller articles. They have a wholesome fear of the freight bill, especially when they are a good distance from the mail order house.

In some sections, it is true, the catalogue house competition is fierce—particularly so on ranges and cooks. But in others the chief competition that the stove man has is his fellow merchant down the street or his neighbor in the next town. These are the people that every merchant must fight—but the fight should always be one of friendly rivalry and nothing unfair should be used in the tactics.

One of the hardwaremen in Minnesota who is noted for the number of heating stoves he sells was asked how he did it.

"I have no fixed plan to pursue year after year," said he. "I vary my campaign with the circumstances. I do a lot of advertising one way and another each year. This is something I never neglect, although different methods are used at different times.

Start Campaign Early.

"I believe in starting the stove campaign early. Some men wait until the middle of September or even later before beginning to work the heater trade. I don't. I begin in August, usually about the middle, although one year I commenced the first of the month. I think that the middle of August is a very good time to begin, on the average. For one thing, by that time you can size up the crop and tell just about how business will be. This is important

for the kind of stove sold varies with the prosperity of the trade.

"For instance, last year the rust struck our district pretty badly and money was not plentiful. As soon as I saw that I decided that the trade on high grade heaters would not be large and economy would be the watchword of the larger part of my trade. So I made my advertising along those lines. I preached the saving of fuel that my stoves would produce. I used cuts of the fire-boxes and explained how they burned less fuel than some other stoves. I also dwelt on the fact that the stoves were solidly built and would last a long time.

"I didn't advertise cheap stoves, but I did not push the highest priced line—the line with the most trimming. Also I went after repair business as hard as I could. I advertised that I could get repairs for any stove on earth and that many an old stove could be made as good as ever with a new fire-box or lining or a new door. This brought in a lot of business, too.

"That's the way I work it. Our crop was never better than it is this year. So I knew that we were in for a good Fall trade and a trade that would not stop at the price of a few more pieces of nickle on the stove. About the middle of August I sent out my first Fall advertising literature. It was a circular letter to all on my heads-of-families mailing list and called attention to the fact that it was but a short time until the heaters would have to be put up and that I would have a full line on display the 26th of the month—Saturday. I said that I had taken on a new line of heaters which were recommended very highly because of certain new features, and I should like to have the recipient call and look at the new stoves—that I would like to show him the new features, whether he needed a stove just now or not.

System in Advertising.

"An advertisement in the two local papers the same week was along the same lines. I used a cut of the new line and gave the prices for the different sizes, with a short description. I emphasized the fact that they would be on display on the 26th. This ad was repeated once and on the 26th I had a full line of the new heaters arranged down the floor, each one shining and spotless. There was no great rush—I did not expect it—but a number of persons dropped in especially to see the stoves, while many regular customers said something about them. By tactful questioning on that day and the following week the clerks and myself gathered the names of 45 people who might be in the market for a heater a little later. Any time anyone stopped to look at the stoves or inquired about them we noted the name if we knew it—if not, we soon found it out. In this way we had a pretty good list to start on and you may be sure I will keep after them until they buy or refuse. I keep up this plan of getting possible customers' names all through the season—in fact, all through the year—and place them on a card index, where a record is kept of the advertising sent them and the ultimate results.

"But to go back to the 45. To each one of them I sent a personal letter saying that I understood they might be in the market for a heating stove a little later and requesting that they call at the store as soon as possible that I might show them my new line. I called attention to the fact that by placing orders early they would have the least delay in getting just the stove wanted and that I would make terms which I was sure would be satisfactory.

"Inside of ten days I had sold two stoves as a direct result of these letters and since then I have sold three more. I expect to sell others, as it is early yet for my trade. As fast as we get names of possible purchasers all through the Fall we send out these letters and augment them with the best newspaper advertising that we know how to write together with circulars and sometimes posters.

Correspondence Helps.

"Then I write to all those to whom I sold stoves a year ago and ask how the heater behaved itself. I say that I want the stove to give satisfaction, and if it is not I should like to know it. The result of this is that I get a nice bunch of written recommendations for my stoves, which I use in various ways in advertising—always with the writers' permission, of course. In case I get a kick—which I do once in a while—I try to straighten matters out. I have gone out into the country fifteen miles to make a stove work right and found that there was a brick or two in the chimney or some other small thing. It pays, though, because when you convince the trade that you mean it when you say you will give satisfaction you have them coming your way in good shape.

"I have a good deal of retail catalogue house competition on stoves, I guess, but I have never made any special efforts towards fighting it. I just do my best and won't worry. I have, though, a low priced line of heaters and of ranges that I show to people that talk catalogue to me. I frequently can convince them that they should buy at home, but not always. I have found often that a confirmed 'catalogue fiend' is about as hard to cure as a cigarette fiend and I do not worry much if I cannot cure all of them. They only can be convinced by actual experience, and it takes a while for the experience to develop in the stove business. That is, the flaws in a stove may not crop out for a year or two, and all during that t me the purchaser thinks he has a bargain.

"In other lines than stoves the catalogue competition is another question and here I generally meet the price and take the loss if loss there is. I believe it pays. You get some good advertising by it if you don't make any actual profit."

SECURING VALVES TO CANS.

W. F. BRODERICK, Vancouver, has secured a United States patent on a new means for securing valves to cans without using solder, which is described as follows: A hollow screw projecting from and communicating with the valve-body, a shoulder or seat surrounding such screw, a hollow connecting-screw designed to engage the screw projecting from the valve-body and provided with an interrupted flange, corresponding radial interruptions in the circumference of the aperture in the vessel with which the valve is designed to communicate, and a check or stop to limit the rotation of the flange of the connecting-screw on the inner side of the vessel whereby the valve may be screwed upon the connecting-screw and the shoulder of said valve drawn tight against the outside of the vessel.

STOVE SUGGESTIONS.

Don't throw away all the catalogues this year without looking at them. In fact, very few of them should be thrown away at all. By preserving them you may be able to make a sale of a stove or to get a part that you otherwise would have to pass on to your competitor.

There are furnaces and furnaces. There are hot air, hot water, steam and combination—hot water and hot air. Each has its good points, and every stove dealer should be prepared to tell how they differ and which kind of a furnace is the best for any particular building.

In starting heating plants for the cold term of the year, it is well to remember that registers should not be opened until the germs and microbes that have gathered during the Summer months are thoroughly roasted. These germs gather in the dark recesses of the furnace until released by the opening of the register, when they mingle in the air of the room and become responsible, in a great measure, for the irritating throat troubles that are so common at this time of the year. Before the registers are opened, the furnace should be lighted and heat generated until the germs and foreign material in the pipes have been brought to a high degree of temperature.

There is no necessity for a dealer mentioning that Winter is at hand and other suchlike remarks that take up space and serve no purpose. The people who want stoves are quite aware of the season and the necessity for action. What they are doing is making up their minds—settling on how much they are prepared to pay.

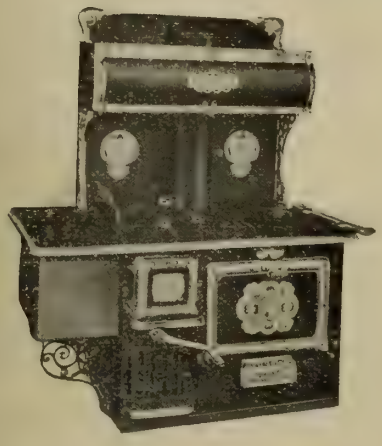
COAL AND THE TARIFF.

A DESPATCH from London, England, says the Imperial Tariff Committee has issued a number of new documents dealing with the fiscal question. With reference to the coal mining industry it is pointed out that opponents of tariff reform frequently state that as no coal is imported into this country coal miners have no interest in tariff reform; and that even if other industries may suffer, free imports are, at any rate, the best policy for the coal miners. It is argued that "It is scarcely ever true that any one industry suffers without injuring others at the same time; and practically no industry can decay without injuring coal miners. For, though there is actually no coal dumped into this country, manufactured goods in the produce of which coal has been used are constantly being dumped here, and when, in consequence of that, the industry which used to produce those goods in this country ceases to exist there is so much less English coal being used, and less work and less wages for English coal miners. For instance, there are about two tons of coal used to the production of one ton of pig iron, and about three and one-half tons of coal used in the production of one ton of steel."

The Steel Range

That rivets the attention of every woman—appeals strongly to her sense of beauty and impresses her as being easily kept clean—should have considerable space on your floor.

Does it pay you to push an inferior line of ranges, and risk dissatisfying customers, when the margin of profit is as big in selling the



Oxford Chancellor Range

besides the comfortable assurance that there will be perfect satisfaction all round?

The Oxford Chancellor does the hardest part of the selling itself.

The Oven is roomy in all sizes, and easily regulated.

Our Patented Spring Drop-Door makes a convenient shelf for basting.

The Oxford Chancellor is built of the best quality of cold rolled steel sheets with an interlining of Asbestos Millboard throughout.

The Oxford Chancellor is made to burn Hard Coal, Soft Coal or wood. Fire-box fittings are furnished for either as desired.

Our strong and systematic advertising has created an immense demand for the Chancellor. You should be prepared to meet the demand.

Our terms to the trade are liberal. Write NOW for Catalogue 61.

WE also manufacture Cast Iron Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

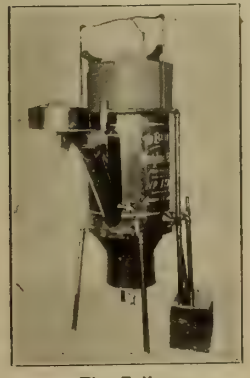
TORONTO WINNIPEG VANCOUVER 75

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

SIGNS AND SHOW CARDS

advertise you so well that it does not pay you to be without them. It will pay every Merchant in Canada to have our catalogue before him for reference. It gives styles and prices for almost every sign made. Free to all Merchants.

THE MARTEL-STEWART CO., LTD.
681-683-685 Craig St., - - MONTREAL



The Eclipse

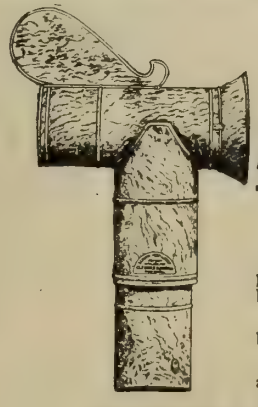
The Light That Lights!

ACETYLENE

It you want the best light for th least trouble and expense, us: acetylene. Unequalled for store, factory or house.

The Continental Heat and Light Co.
Montreal

Business Getters for Tinsmiths



Are there any defective chimneys in your locality?

Then it is your chance to get business.

— THE —

ZEPHYR Ventilator

saves the expense of building a high chimney.

It is so constructed as to guarantee a perfect draft, and, therefore, easy combustion.

By using the ZEPHYR, it is possible to burn soft coal with the best resul s.

The smoke is easily drawn off, enabling an even heat to be generated.

THE ZEPHYR IS STRONGLY PUT UP AND WILL RESIST ANY STORM

This is what others think of it:

Montreal, May 25 h, 1901.

MESSRS. T. LESSARD, Montreal.

Dear Sirs,

Your Ventilators have given us entire satisfaction.

Yours truly, THE CANADA PAINT CO., Ltd.

We manufacture and guarantee:

The Harris Filter. The Zephyr Ventilator.
The Aeolian Ventilator. Expansion Conductor Pipe.

The J. W. HARRIS COMPANY, Limited

Successors to LESSARD & HARRIS

Contractors *MONTREAL*

THE WALKER OAK

In three sizes
14, 16 and 18 inches

In four styles
Straight for wood
Straight for coal
With Hot Blast for soft coal
With magazine for hard coal



The Walker Oak is throroughly new and up-to-date. Is the strongest heater of its size in Canada.

Some Points: Cone Centre Grates, Corrugated Exposed Fire-pot, Cup Joints, Smoke Door, Screw Drafts, etc.

We can ship promptly.

Walker Steel Range Co., Limited
Grimsby, Ont.



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S 'WELLINGTON' KNIFE POLISH
The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada



VORTEX HOT BLAST COAL STOVE

f r Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.

For Sale by

E. T. Wright, & Co., Hamilton, Canada.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

FOUR THICKNESSES

The Double-Lock Fold to be found exclusively in the

Metallic Ash-Sifter

is patented. It is on the four sides, and, as the bottom of all sides is re-enforced, they are thus given four thicknesses. Contrast this with the flimsy construction of the wooden sifters, or so-called metallic sifters, and you will see reason for carrying the **Metallic Ash-Sifter** and no others. Write for Booklet.

C. M. CUTTS & CO., Toronto Junction, Ont.
Sole Makers



Sterne's Asbestos Stove Lining

is a blessing alike to the Dealer and Housekeeper. No matter how badly warped or out of shape a stove may be it can be lined perfectly with **STERNE'S ASBESTOS STOVE LINING**. Owing to its porous nature and peculiar composition **STERNE'S ASBESTOS STOVE LINING** excels all other stove linings in lasting qualities. Wouldn't you like a supply? Secure full particulars from

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.

100 CANDLE POWER



½¢ PER HOUR

AUER GASOLENE LAMP

Gives more light than

1 COAL OIL LAMPS, 6 ELECTRIC OR 5 ACETYLENE LIGHTS, AT A LOWER COST THAN COAL OIL.

Each lamp makes and burns its own gas. No wick, no dirt, no grease, no smoke, no odor.

Catalog and discounts on request.

AUER LIGHT CO., 1691 Notre Dame Street, **MONTREAL**

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

The MacLean Publishing Co.
Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

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NEW ADVERTISEMENTS.

Continental Heat and Light Co., Montreal.
Harris, J, W. & Co., Montreal.

DEPARTMENT STORE DEVELOPMENT.

RECENTLY the T. Eaton Co. increased its capital stock from $500,000 to $1,000,000, the increase being due largely to the policy of expansion now being inaugurated by that concern. The building of a large new store in Winnipeg was a radical step for Eaton to take, judging from the emphatic manner in which he previously declined any and all propositions to "branch out." His idea has always been one of concentration, and it would not be surprising if the responsibility for this western move rests upon other shoulders than his.

A similar experiment was tried by the old firm of Barnes, Hengere & Co. of Buffalo during the western boom in the States. They decided to open a large branch department store in Minneapolis, and managed to lose almost every dollar they invested, notwithstanding an extensive wholesale connection which enabled them to buy to exceptional advantage. The distance between the two stores was too great for really effective management, and we fail to see where Winnipeg and Toronto are very much different. The Eaton Co. have the advantage of a large mail-order trade in the west already established, but with Mr. Eaton himself necessarily out of the calculation a good deal will depend upon the kind of management the western store receives.

Keeping in mind the exorbitant price for their Winnipeg property in the first place, and the rush of other dry goods merchants to pre-empt the western field, we can see where even a large concern may not have the smoothest possible sailing. Mr. Eaton is too far advanced in years to be able to handle the situation himself in any way, and unless the new organization can include a measure of his ability, the pendulum of trade and money success may begin to swing in the other direction.

In strange contradistinction with the Eaton move to Winnipeg is the Simpson move to Montreal. Both illustrate the restless spirit of Toronto enterprise, but while the western store is to be a full-fledged "departmental," the old conservative business of John Murphy's in Montreal is being made even more precise. The situation raises a very fine question as to what kind of an establishment the "coming store" is to be. Looking ahead ten, or even five years, will it be just as easy to keep up the everlasting cry of "bargains," and still figure a profit? In spite of all the boasted enterprise of New York and Chicago stores, we fail to see where they make anything like the money of smaller and more conservative establishments in England. And looking things squarely in the face over here, it may be possible that a reactionary tendency is just about due, if profits are to be considered.

At any rate, the Robert Simpson Co. have surprised everyone by "doing things different," and eliminating everything but ladies' wear in their Montreal store. Thousands of dollars have been spent in fixing up the dress goods, millinery and costume floors while such stocks as men's clothing and furnishings, tinware and housekeeping helps, are entirely dispensed with. So far as we can measure things, the idea seems to be in line with Altman's business in New York, and with the well-known wealth of Montreal to lean on, the chances ought to be good for satisfactory profits. The fact of a big department store organization swinging in favor of exclusive dry goods is an element to reckon with in forecasting the future of retail storekeeping.

EXPLOSIVES AND FIRES.

ONE of the most thrilling experiences in the life of Hardware and Metal's editor occurred some years ago when engaged in mining in the Rocky Mountains. With several others he was engaged in the dangerous task of thawing out dynamite, and one of the party picked up a stick of No. 1 Hercules and held it in his fingers over the flames of a bonfire. The dancing flames from the burning pitch pine caught the waxed paper in which the powder was enclosed and it flared up while the dynamite began to sizzle. Near by was a stream of running water and with great presence of mind the miner, instead of dropping the burning stick, held it in his hands until he had run to the river bank and tossed the explosive into the water. Had the stick been dropped to the ground the concussion would have caused an explosion and the several pounds of dynamite lying near would probably have dug a good-sized grave for the mining party.

That flames have not the same effect upon explosives as concussion is well known, but there are few who will run the risk of carrying burning dynamite in their hands or standing within a few feet of burning ammunition. At the recent convention of the International Association of Fire Engineers at Duluth, however, a committee of ammunition manufacturers to prove their assertion that cartridges and shells may be consumed in roaring flames without danger to bystanders, stood within twenty feet of a roaring fire in the midst of which were sixty-eight thousand rounds of explosives. It was hoped to prove that firemen need not hesitate to go within working distance of a burning building containing cartridges and shells. The exhibitors felt there were no grounds for a contemplated increase in insurance rates on buildings containing ammunition.

A frame building was constructed for the purpose of making the test. In this building were placed sixty-eight thousand rounds of ammunition. These cartridges ranged from 22 calibre to 50-100 high velocity. There were also shot shells loaded with black and smokeless powder and rifle and pistol cartridges of various kinds. The house was made extremely combustible. It was filled with excelsior and fine dry wood and to insure a hot rapid fire, five gallons of gasoline were poured on the mass. The ammunition remained in paste board boxes just as it is displayed in hardware stores. At the end of twenty minutes the fire was put out by firemen.

All of the claims had been proved satisfactorily. Several persons who approached within twenty feet of the fire were struck by flying fragments of cartridges, but in no case was the velocity of pieces sufficient to cause discomfort. The bursting of the cartridges was likened to the popping of corn or chestnuts. It was proved that ammunition in a fire does not explode simultaneously. Each cartridge in a fire explodes individually when its primer is heated to the flashing point, but the flash from one cartridge cannot set off the adjacent cartridge.

TARIFF COMMISSION IN TORONTO.

VARIED were the interests which took advantage of the presence of the Tariff Commission in Toronto to bring before the members of the august body their views regarding the workings of the tariff in relation to the articles in which they were interested. While the keynote of the various sessions in Montreal and other places favored higher duties on most lines, the talk in Toronto was not nearly so unanimous on this score. Dry goods wholesalers opposed increases on woolens and cottons, while users of tin plates, copper sheets, etc., protested against the imposition of a duty on these goods, pointing out that a duty would be an unnecessary burden on manufacturers and consumers, as the market is not large enough to warrant the establishment of mills in Canada. In the face of many divergent views there appeared to be a general desire to maintain the British preferential agreement.

The Commission Welcomed.

President J. D. Allan, of the Board of Trade, opened the proceedings in a brief address. He welcomed the Commission to this growing distributing centre. "The time is opportune for Canadians," he said, "to look about them. We should get out of the narrow parochial views that too often characterize young countries. We are a lusty youth now, and our growth could be very much hastened or retarded by the care and consideration given by you to the representations made."

Hon. Mr. Fielding, in responding, observed that the Commission was, above all things, an open public inquiry, and they desired that any person who had anything to say should come in open meeting and present his views. Sometimes they received private statements, but they preferred that they be presented openly, so that they could be discussed.

Tuesday's session was the most interesting from the standpoint of the hardware merchant, Monday being given over almost entirely to the farmers' delegations, who demanded that if the tariff were changed at all the tendency should be downward.

Tin Plate Duty Opposed.

After dry goods wholesalers, necktie manufacturers and other deputations had been heard, an influential deputation of users of tin plates was introduced by Mr. A. E. Kemp, M.P. Mr. Hugh Malcolmson, Chatham, representing the Canadian Canners, Limited; Mr. R. J. Christie, of the Christie, Brown Co.; Mr. McFarlane, of the E. W. Gillett Co., and Mr. W. G. Francis, of the Francis-Frost Co., all strongly objected to a duty on tin plate, as it would increase the price of their products to the consumers. Mr. Kemp made a strong appeal that no duty be imposed on tin plate, as requested by the promoters of the proposed industry at Morrisburg. A prospectus issued by these promoters, referred to in a recent issue of Hardware and Metal, was produced, the document stating that the Government had promised to aid the industry. Hon. Mr. Fielding, however, stated that the utmost the Government has promised was careful consideration.

"There is not sufficient market in the country to warrant the industry being established here," said Mr. Kemp. "The home of the tin plate industry is in Wales. It is the only country that exports tin plate to any extent. The production there was 400,000 tons last year. The industry of manufacturing steel has not developed to anything like the extent that it had developed when the Americans established the tin plate industry."

Sheet Metal Interests.

Mr. J. O. Thorn, general manager of the Metallic Roofing Co., appeared with letters from manufacturers of sheet metal building materials in Oshawa, Preston, Galt, and Winnipeg, authorizing him to speak on their behalf in various matters. These manufacturers consume at least 90 per cent. of the copper sheets imported into Canada. Mr. Thorn stated that they had reason to believe that representations are likely to be made to have a duty placed upon this material. The manufacturers requested that it remain on the free list as at present, there being no mill in Canada capable of producing the great variety of material consumed here. It is not considered possible for any mill that may be established to manufacture economically, owing to the comparatively small volume and the large investment that would be necessary to provide a suitable plant, also because the impositian of a duty would so enhance the cost of this raw material as to check the consumption of many articles at present made from it.

Mr. Thorn also voiced the opinions of the other manufacturers in opposing the proposed duty on tin plates. His statement to the Commissioners on this subject follows: "We do not consider that the time has arrived when tin plates can be manufactured to advantage in this country, without at least seriously injuring a very considerable number of existing industries that use this as a raw material, and particularly without the imposition of a very high duty. In this connection we may point out that the importations of tin plates into Canada for the year ending June 30th, 1905, were 30,000 gross tons, valued at $1,751,507, while at the time the McKinley Tariff came into effect in the United States, making the duty 2 1-5c. per lb., or equal to an ad valorem duty of about 80 per cent. on the present foreign valuation, there were no tin plates made in the United States, although the population there at that time was upwards of sixty-two millions and the importations of tin plates were valued at upwards of $25,000,000. In fact, it is calculated that in 1883 the duty on tin plates entering the United States was about 30 per cent. ad valorem, but no one ventured to manufacture plates until the duty was increased to about 80 per cent., and it should be borne in mind that we use in Canada nearly every known grade, gauge and size of tin plates that are being produced either in the British or United States mills, and if a sufficiently high duty were imposed, so as to enable the manufacture of tin plates to be carried on in this country, with its population of, say, between six and seven millions, it is quite evident that the cost of innumerable articles would be very greatly increased to the consumers, in addition to many existing industries being seriously crippled."

Plate Glass and Cordage.

Manufacturers of mirror plate, represented by Messrs. W. C. Phillips, J. R. Shaw, E. Hill and Chas. Gray, asked for the admission free of duty of plate glass not bevelled, in sheets or panes not exceeding seven square feet, on which the duty is now 10 per cent., and that bevelled, polished, engraved or painted should be dutiable at 10 per cent., instead of 35 per cent. It was stated that 258 hands were employed in the industry and $150,000 paid in wages annually. Opposition came from Mr. George Kerr, representing Pilkington Bros., the large English manufacturers.

Seven manufacturers of twine and cordage, whose spokesman was Mr. W. P. Stewart of Hamilton, asked that the duty on cordage of all kinds larger than § of an inch in diameter be increased.

Mr. W. B. Sheldon, of Sheldon & Sheldon, Galt, briefly preferred a request for more protection for fans and blowers.

Higher Duty on Stoves.

"The stove manufacturers of Canada have not had much to complain about in the tariff in the last four or five years," said Mr. T. L. Moffat of the Moffat Stove Company, Weston, in opening his case, "but the American

manufacturers are spreading out, and Canada has practically an open door with 25 per cent. tariff." The United States tariff, he said, is 45 per cent. The imports of stoves into Canada were $127,000 in 1901 and $402,000 in 1905.

"The total gross product of the stove makers in Canada is $4,000,000 to $4,500,000—that is, one-tenth of the total is imported from the United States. Our raw material costs us 15 to 25 per cent. more than theirs; and our freight rates are higher. I think the competition between the forty or fifty factories in Canada will keep the price from being raised." Mr. Moffat said the chief opposition was from cheap stoves. He suggested a duty of one cent a pound additional.

Mr. F. D. Brown, representing the Builders' Exchange, asked that the duty be removed from chilled steel shot used in working stone.

Brushes and Steel Goods.

The brush manufacturers of Canada, represented by Mr. Emil C. Boeckh, president of the United Factories, Limited, asked that instead of 25 per cent. ad valorem, the duty should be 25 cents per dozen on brushes except those fastened in quills. He complained of the flooding of the Canadian market by American goods and prison-made goods from various countries.

Mr. A. F. Hatch, for the Canada Steel Goods Co., asked for a lowering of the duty on steel strips which are used for manufacturing strap hinges, tee hinges and butt hinges, as they are not made in Canada suitable for their needs.

F. W. Barrett, representing the Expanded Metal Company, asked that light steel plates, the raw material from which it manufactured fireproof wire mesh for windows, etc., be placed on the free list.

Higher Duty on Wall Papers.

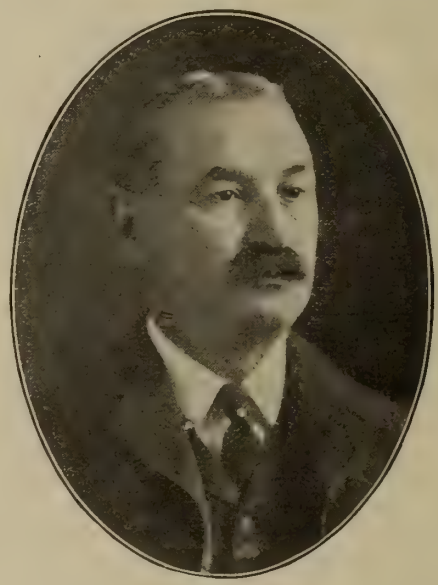
Mr. T. A. Staunton, Toronto, who headed a delegation of wall paper manufacturers from Toronto and Montreal, complained that they were suffering from importations from the United States under the present tariff of 35 per cent., and suggested a revised scale.

The Commission has decided to sit in London on Monday and Tuesday of next week, and intends to hear at these meetings representatives from the surrounding cities, such as St. Thomas, Woodstock, and Strathroy, and towns within easy reach. The other dates set are Thursday in Chatham, Friday and Saturday, November 24 and 25, in Hamilton, November 27 in Brantford, November 28 in Guelph and Berlin, and Peterboro on the following days.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 6.

MR. JOHN W. THOMPSON, of Frothingham & Workman's sales department, is the subject of this week's jobbers' and salesmen's column. Those who know Mr. Thompson would probably say there are at least two points in his character which mark him in distinction from many other travelers in the hardware trade. These are his quiet, gentlemanly demeanor at all times, and the reliability of his information in regard to hardware. These are characteristics that make a man valuable alike to the house which employs him and the customer with whom he does business. Customers rely largely upon the reports of travelers for information in regard to the condition of markets and prices. And a man whose observation is keen and correct, and whose reports are reliable, becomes a firm friend of his customers and a reliable guide in many things.



Mr. John W. Thompson,
Representing Frothingham & Workman, Limited, Montreal, in New Ontario and the Ottawa Valley.

Mr. Thompson has been with his present firm for nearly twelve years. His route covers the Ottawa Valley and New Ontario as far west as Sault Ste. Marie. On this ground he has done good work for his firm and is welcomed on his rounds by a large clientele.

Previous to his engagement with Frothingham & Workman, Limited, Mr. Thompson represented the old firm of Beury, Macpherson & Co., in Quebec City and the Eastern Townships, where he had a large trade. His first experience in traveling was with this firm. Twenty years ago the selling of goods was made difficult for men of the grip from all parts of the country by the imposition of local commercial travelers' taxes. Quebec City demanded $60 for a license, Three Rivers $20, and other towns and cities various smaller or larger amounts. These taxes have since been repealed and the Quebec Provincial Legislature has since imposed a tax of $300, which, however, does not apply to travelers representing domestic houses.

Mr. Thompson is a resident of the city of Ottawa, but is, however, a life member of the Montreal Amateur Athletic Association. His relations with other travelers are of the pleasantest nature, and many of the younger men remember him gratefully for the advice and assistance he has given them.

RAILWAYS TO BE ELECTRIC.

AS regards the future of electricity in Canada in connection with railroads a die has been cast in its favor by the recommendation of Mr. Cecil B. Smith, chairman of the Temiskaming and Northern Ontario Railway Commission, to equip the first section of the Temiskaming Railway, 100 miles, from North Bay to New Liskeard electrically. Mr. Smith has just returned from Europe, where he made a deep study of the question and only after due consideration was this recommendation made. This is the first instance of electricity being adopted for trunk lines in Canada. It is but a beginning. What the future holds out is almost beyond conjecture, but it is an assured fact that the next generation will see hundreds and even thousands of miles of Canada's trunk lines operated by electricity.

OF INTEREST TO HARDWAREMEN.

Do not be afraid to be known as a careful buyer and one who plays safe on quantities. Let the other fellow have the reputation for giving big orders. You will have a bank account after awhile when he is trying to figure his way from under a load of interest on past due bills.

There is widespread interest in a report that a $5,000,000 company for the manufacture of railway rolling stock will shortly command the labor of 2,000 hands in Toronto, but there does not seem to be any one who knows much about the plan, although the necessity for some sort of concern to provide the railways with cars is fully realized. Canada needs more grain and freight cars, and the big works at Montreal, Farnham, Que.; Amherst, N.S., and Cobourg, Ont., do not seem to be able to supply the demand. In addition to this there is the big demand from the new railways.

PERSONAL MENTION

Quebec.

The Consumers Cordage Company, Limited, Montreal, issued new price lists on the 9th of November.

Mr. Breault, hardware merchant, of South Roxton, paid a flying visit to the metropolis this week.

W. C. Springer, of the Belleville Hardware Co., Belleville, Ont., called on the Montreal trade this week.

Mr. Haskill, Jr., of the Haskill Lumturer of edge tools, Galt, Ont., was in Montreal this week.

Mr. Pratt, of St. Vincent de Paul, was among the out-of-town buyers in Montreal this week.

Geo. E. Delorme, tinsmith and plumber, of Sherbrooke, visited the Montreal supply houses this week.

L. I. Matts, general merchant, of Buckingham, was in Montreal this week calling on the local jobbers.

Mr. McFarlane, of McFarlane Bros., general merchants, Campbell's Bay, visited Montreal a few days ago.

G. R. Moods, general merchant, of Arden, Ont., visited some of the Montreal jobbers during the past few days.

W. G. Butler, dealer in hardware and tinware, Perth, Ont., spent one day this week in Montreal on a purchasing trip.

Talbot B. Strong, secretary-treasurer of James Warnock, Limited manufacturer of edged tools, Galt., Ont., was in Montreal on Tuesday of this week.

Matthew Moody, of the Matthew Moody & Sons Company, Limited, manufacturers of agricultural implements, Terrebonne, visited Montreal recently.

Messrs. A. S. Leblanc and S. H. Lewis of the Canada Paint Company's traveling staff, were in Montreal for a few days this week.

McClatchie Bros., hardware merchants, Cowansville, are now established in their new store, which is a fine three-story building with sheet metal front.

Mr. Walter Grose, one of Montreal's leading merchants, is holidaying this week in New York and other Southern American points. He is accompanied by Mrs. Grose.

Chas. Dietrich, representing Shurly & Dietrich, Galt, Ont., and the Maple Leaf Harvest Tool Co., Tillsonburg, Ont., was in Montreal this week taking orders from the wholesale trade.

Mr. Roland Yeates, representing the London Machine Tool Co., paid the Montreal office of Hardware and Metal a pleasant visit the other day. Mr. Yeates' firm is opening a branch in Montreal.

The Pedlar People of Oshawa and Montreal are getting out a new catalogue (No. 12) which promises to be the most expensive and up-to-date yet published by this firm. Readers of Hardware and Metal on request will receive this catalogue which will be ready for mailing about January 1st, 1906.

Frank H. Alfred, formerly chief engineer of the Pere Marquette Railroad, has accepted an important position with the Canadian White Co., the Canadian branch of the great contracting firm of J. G. White & Co., who have headquarters in New York, London and Montreal. Mr. Alfred will have his headquarters in Montreal.

Mr. Edwin Schofield has accepted a position as traveler with Alexander Gibb, the well known manufacturers' agent, of Montreal, who handles quite a variety of lines of hardware and metals. Mr. Schofield is now making the eastern trip as far as Halifax, and as he is not entirely unknown on that ground, there is every reason to believe that he will meet with success in his new position.

Joseph J. Paquette, hardware dealer, 1584 St. Lawrence street. St. Louis de Mile End (Montreal), was killed by an electric shock in his store last Saturday. He was searching for stove pipes to serve a customer by aid of an electric lamp which had a long regulation non-conducting wire attached. He suddenly fell unconscious to the floor, and all efforts to resuscitate him were unavailing. It is thought that the wire attached to the lamp which Paquette was using became charged from a high tension line outside the building, and that the socket of the lamp he was holding was touched by a defective wire.

Mr. W. C. Webster, senior member of W. C. Webster & Son, the well-known Coaticook hardware firm, paid a friendly call to the Montreal offices of Hardware and Metal on Tuesday of this week. Mr. Webster spoke encouragingly of the conditions throughout the country at large and particularly in his section. "Farmers are prosperous and building operations are going on apace. What more could a hardware dealer wish for?" said Mr. Webster. This firm has been established well over thirty years and its success is in no small part due to the untiring efforts of its founder. Mr. Webster spent the week calling upon the trade.

Toronto.

Mr. D. F. Walsh, Orono, was a visitor in Toronto this week.

It has been decided to hold a Canadian National Automobile show in Toronto during the last week of March next.

James McKay, late of Robertson & McKay, hardware merchants, Woodstock, is fitting up a new hardware store in that town.

Mr. W. R. Stavert, Montreal, representing Jenkins Bros., Boston, was a caller at the Toronto office of Hardware and Metal this week.

Mr. W. H. Mickus, hardware merchant. Preston, has completed a large extension to his store and will make further additions next spring.

Mr. John Goebel, hardware merchant. Hespeler, died last week. Mr. Goebel was 63 years of age and had resided in Hespeler for nearly half a century.

Mr. B. E. French, of Clysdale & French, successors to R. E. Walker, hardware merchant, Caledonia, was a caller at the Toronto office of Hardware and Metal on Thursday.

Mr. J. A. Brownlee, who recently purchased a stove and tinware business of Wm. Wyatt & Son, London, intends making a feature of the business the advertising of a weekly sale of bargains in the daily papers.

Mr. J. E. Ryan, of Mackie & Ryan, hardware and coal merchants, Pembroke, is spending a two weeks' holiday deer hunting along with members of the Hart Lake Hunt Club on the Upper Ottawa, near Des Joachins, Que.

J. T. Schell, M.P., Alexandria, contractor and millman, has built a most complete and modern residence in Alexandria. The plans were drawn up by Mr. Row, foreman of Mr. Schell's factory, who has been widely complimented on its design and finish.

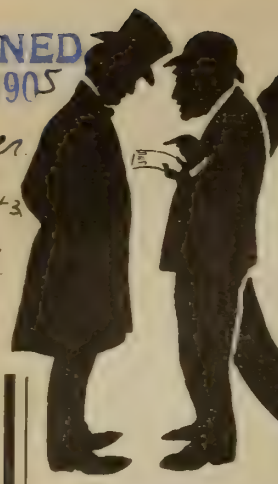
Mr. W. A. Matthews, of Ross & Matthews, hardware merchants, Cannington, called at the Toronto office of Hardware and Metal a few days ago on his way to his own home at Durham, being called there by the serious illness of his sister. Mr. Matthews called on J. B. MacLean, he having been a former pupil of Mr. McLean's in his school days.

The employes of the Metal Shingle & Siding Co., Preston, have organized a hockey team for the coming season. Officers have been elected as follows: Hon. president, C. Dolph; hon. vice-presidents, S. Moyer, J. King; president, W. J. Wilson; secretary-treasurer, A. Brown; executive committee, E. Schoreau, F. Roos, E. Killer. A team will be entered in the manufacturers' league.

Mr. E. C. McMurtry, at present with W. J. McMurtry, hardware merchant, of Galt, has entered into partnership with W. H. Barnhardt, son of the mayor of Preston, and the new firm to be known as McMurtry & Barnhardt will open a hardware store at Preston as soon as the interior fixtures are installed in the new building which has just been erected for them. The new building has been erected of sand and cement brick and has a frontage of 30 feet with a depth of 65 ft.

"There is growing friendliness throughout the West Indies towards Canada," says Mr. Harold E. M. Johnson, of Nassau, Bahama Islands, at present on a tour through the Dominion. "Our people have become tired of the selfishness of the United States, which wishes to sell us everything, but will buy nothing in return. The duty put on our fruits is so prohibitive that within the past two years the trade in that line with the United States has almost entirely ceased. There is a feeling that as Canada is a sister colony, it is our duty to buy our goods there, and the time is coming when practically all our goods will be purchased from the Dominion.

RETURNED NOV 20 1905



They're not discussing
"The Troubles on with the Plumbers,"
But the **Merits of J.M.T. Steam and Water Goods**
The kind that lasts—at lowest prices for Reputable Goods.

Valves and Cocks, Injectors and Inspirators, Steam and Vacuum Gauges and Lubricators and Oiling Devices, Steam Whistles, Water Works Supplies.

We carry Iron and Brass Pipe and Pipe Fittings.



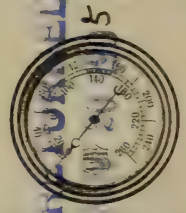
J.M.T. Valves made in brass and iron, flanged and screwed ends.



Lubricators, made single and double sight feed.



Reducing Pressure Valves.



We make a full line of Pressure Gauges for all uses; Clocks, Counters, etc.



Safety Valves for stationary, portable and marine boilers.



Hose Racks for fire protection. Various sizes.



The J.M.T. Injector—simple, efficient, fully guaranteed.

THE JAMES MORRISON BRASS MFG. CO., LIMITED 89-97 West Adelaide St. **TORONTO**

Manufacturers of Engineers' and Plumbers' Supplies, Gas and Electric Fixtures.

Tri-Use Cooker



PATENTED



PATENTED

Every dealer should stock a few of these Cookers. They sell wherever introduced.

No well-appointed kitchen is complete without one, and after once using it a woman will not do without it.

Can be used in various ways, viz., as a double boiler for cooking cereals of all kinds, as a steamer for vegetables, puddings, stale buns, bread or cake, or as two separate saucepans, etc.

Advertising matter for general distribution sent free to any dealer.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 79.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Shot—Discount is 10% instead of 15% as formerly.

White Lead and White Zinc have advanced.

Barb Wire is now quoted $2.72½ f.o.b. Montreal.

Poultry Netting—Two inch mesh 55 and 5%, other meshes 55%.

Summerlee Pig Iron has advanced to $22.

Pig Lead is now quoted from $4.05 to $4.15 per 100 lbs.

Forged Iron, Refined Iron and Horseshoe Iron have advanced 5c. each.

TORONTO.

Iron Pipe—Another advance is predicted.

Solder—Prices have increased ¾c.

White Lead—An advance of 25c. is reported.

Bar Iron—Now quoted at $2, an advance of 5c.

Shot—New discount of 10%, formerly 15%.

Barb Wire—Advanced 5c., f.o.b. Cleveland.

Wire Nails—Some dealers have advanced prices 5c.

LAST MINUTE METAL MARKETS.

Montreal, Nov. 17, 1905.

Pig Lead advanced again on the local market to-day, and is now quoted at $4.10 to $4.20.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 17, 1905.

SKATES are selling in really abnormal quantities this season and, what is perhaps the most satisfactory feature of the market, the demand is nearly all for the better goods. The formation of hockey teams all over the Province, taken with the general prosperity in Quebec, has created a desire for the more expensive grades.

General hardware is selling very briskly, the city trade being particularly fine. The most active demand in general hardware lines is for cow ties, which, although this is the fag end of the season, are going out in great volume.

Snow shoes have been selling so rapidly that the supply has not been able to keep up with the great demand. In consequence some grades have been almost sold out already and there is a disposition to ask higher prices for those still in stock.

The important changes of the week include advances in white lead and new discounts on shot, which is now quoted at 10 per cent. instead of 15 per cent. off the list price. Barb wire has been advanced to $2.72 1-2, f.o.b. Montreal, and poultry netting, 2 inch mesh, is now quoted at 55 per cent. and 5 per cent., while other meshes are quoted at 55 per cent.

Business in all lines was more exceptionally brisk up to Wednesday of this week for on that day winter freight rates were ushered in. Somewhat of a lull in business generally follows the rush to get goods while summer freights are in force, but this year a fall of snow coming on Wednesday seemed to quicken the demand for the distinctly winter lines and no noticeable falling off in orders was experienced. The end of the week saw almost as much business as the first few days, with skates, hockey sticks and other sporting goods well to the front.

Axes—Orders just now are very large in anticipation of the approaching lumber cutting season. We quote: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Sales continue to be encouragingly large. We quote: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Orders are well up to the mark and the season may be said to be fairly on. Our prices are as follows: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—We are still quoting: Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—As remarked above all general hardware lines are enjoying big sale. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists: copper rivets with the usual proportion of burrs, 45 per cent. off: and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We quote as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Business continues to be satisfactory. Prices still quoted: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—As the season for these goods is now at its height orders are coming in in good sizes. We quote: C brand, 40, 10, and 7 1-2 per cent.: M.R.M. Co., 55 per cent.; P. B. brand, 55 per cent.

Wire Nails—The advance noted last week has been held and we are still quoting $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—The demand is normal. We are quoting: $2.20 per keg f.o.b. Montreal.

Horse Shoes—Sales are large at the advanced prices which were noted last week. We still quote as follows: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4: No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60. Toeweight, all sizes, 1 to 4, $6.85. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Rifles are still being sold in pretty good quantities, while fair sized sorting orders for ammunition are being received daily. We quote: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 10 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—The trade, though it continues good, is quite without feature. Prices remain unchanged.

Cement and Fire Brick—Things are very quiet in this business this week and there is little to report. We are still quoting as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags; $2.05 in barrels in round lots.

Coil Chain— We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Skates—Big orders for the more expensive grades are the feature of the trade. We still quote: From 25c. to $2.50, according to quality.

Sleigh Bells—There has been an incessant demand for all the standard grades. Prices remain as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2;

team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—We quote: Jute, unlined $4.50; 3-4 lined $9.50; full lined $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snow Shoes— The leading interest here reports the business to be so great that the demand already threatens to exceed the supply. It would seem that this old pastime is bound to experience a great revival during the coming winter. Prices vary from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, November 17, 1905.

RECENT advances in the metal markets have had their effect on the finished products and several advances are reported this week in consequence. All grades of shot have been advanced, the discount now being 10 per cent., the former quotation being 15 per cent. Galvanized barb wire has also been advanced 5c., being now quoted at $2.42 1-2 at Cleveland in less than car lots. Wire nails are also being quoted 5c. higher by some jobbers but this advance is not general with the trade.

The past week's business has been one of the largest during the year, being as much as three ordinary weeks. Orders had been held up to the last moment but the near approach of the close of navigation on the upper lakes has been the cause of the tremendous rush of goods out of the warehouses this time. The going into effect of the winter rates on the railroads has not affected general business very greatly as yet. Several orders shipped during the past week were for carloads and in some cases over that amount.

Dealers throughout the country are actively sorting up for the Christmas trade, the volume of cutlery and silverware going out being exceptionally large. Skates, guns and other sporting goods are still meeting with large sales.

Axes and Handles—Orders are very heavy as dealers are sorting for the winter trade.

Cutlery and Silverware—Dealers are getting their Christmas stocks in order and many sorting orders are being given.

Sporting Goods—Shotguns and ammunition are still being called for.

Lawn Mowers—Most of the business has been booked but some dealers have not yet ordered their supply.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chain is being included in most orders being placed. Our quotations are: 1-4 inch, $6.50 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Manufacturers are rushing to make shipments of goods ordered. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—An advance of 5c. has been made and the market is strong. We still quote: $2.42 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire— Barb wire has been advanced as reported above.

Wire Nails—Some dealers have advanced prices to $2.15 for direct shipment.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths' orders are very satisfactory and shipments are large.

Horseshoes—All sizes of steel horseshoes have advanced. Trade is very brisk. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—Orders to ship skates and hockey sticks are plentiful. Sleigh bells are practically cleaned up.

Screws—The market is very firm with prices unchanged.

Rivets and Burrs—There is a possibility of higher prices and trade is active.

Bolts and Nuts—Quotations are very strong, but no advance has been made as yet.

Cordage—Quotations continue as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; Standard, 9 1-2c. Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-play, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is still considerable cement being sold for foundations and inside cellar work. Prices are steady. For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.15 to $2.25; American Portland, $2.15 to $2.25.

Firebrick—A larger trade is reported. Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Shipments continue large. Prices unchanged.

Hides, Etc. — The local market continues to settle to a steadier basis at present quotations. Arrivals are coming to hand plentifully but yet are only found sufficient to supply the steadily increasing demand.

Reports from the Chicago market continue to denote great strength in quotations and are ruling one or two points higher than Canadian prices. Although there is apparently not sufficient reason for the great strength of the United States market the general opinion is that it will maintain its present strong condition for some time.

Domestic dealers are more satisfied with the present condition of the market and although prices would not warrant materially laying in of stocks, it is considered that the condition is more healthy and as long as arrivals are only equal to demand, present prices will continue to rule.

We quote:

Hides, inspected, No. 1 per lb.		0 11½
" " " 2 "		0 10½
Country hides, flat, per lb.	0 10	0 10½
Calf skins, No. 1, selected		0 13
" " No. 2		0 11
Lamb skins, best city slaughter		1 05
Deer skins, green		0 12
" dry		0 22
Moose hides, green		0 07
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 17, 1905.

COPPER, tin and lead are this week the features of a very strong market. The copper market is distinctly higher and prices have advanced to the jobbers. At time of writing, however, no amendments have been made in prices to retailers and consumers.

Pig lead is now quoted a good 15c. above the prices given in our last report. This advance is accounted for, not only by the increased price of the article, but also partly to the revised schedule of freight rates, the winter rates being now in force. It is likely that the winter basis for pig lead will be even higher than at present.

Antimony is now coming in more regularly and the market is somewhat easier, though listed prices remain the same. The price is somewhat lower on the other side, but local stocks are not yet large enough to permit any shading on the figures quoted, except for big quantities.

Canada Plates—Demand is fine, and prices are unchanged. Our quotations are as follows: 52's, $2.50; 60's, $2.55; 75's, $2.60; full polished, $3.60; galvanized 52's, $4.00; 60's, $4.25.

Copper—The jobbers are confronted with an advance made by the refiners, but they have not raised their prices at time of writing. We quote: Ingot copper, 17 3-4c.; sheet copper, 24 3-4c.

Ingot Tin—The market is advancing apace and it is expected that the jobbers will have to raise their prices again

very shortly. We quote: 36 1-2 to 37c. per pound.

Pig Lead—A sharp advance has occurred as the result of increased freight rates as well as the natural tendency of the market. We are now quoting: $4.05 to $4.15 per hundred pounds.

Boiler Tubes—We quote: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—An advance in Summerlee has been reported. We quote as follows:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$19.50 to $20.00	"	"
Gartsherrie	21.25	"	"
Carron No. 1	22.50	"	"
" (special)	21.50	"	"
Summerlee No. 1	22.00	"	"
Clarence No. 1	19 50	"	"
" No. 3	19 00	"	"
No. 1, Cleveland	19.00	"	"

Tool Steel—We quote as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—The advances made last week have been held firm. We quote: Sleigh shoes, $2.07 1-2, tire, $2.22 1-2; spring, $2.75; toecalk, $2.77 1-2; machinery iron finish, $2.17 1-2; reeled machinery steel, $2.75; mild, $2.07 1-2 and upwards; rivet, $2.07 1-2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron — There is a very large demand for galvanized sheets and the result has been an even firmer condition in the trade. Our quotations are as follows: Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—No further changes in quotations have been made during the past week. Our prices are as follows: 28 gauge, $2.25; 26 gauge, $2.20; 22-24 gauge, $2.15; 19-20 gauge, $2.15; 8-10 gauge, $2.30.

Antimony—Although general conditions are somewhat easier, the price given below will only be shaded for large quantities; 14 1-4 to 14 1-2c. for Cookson's.

Tin Plates—The continued strength of the market in ingot tin is keeping the following prices very firm: Cokes, $3.75; charcoal, $4.00.

Terne Plates—Demand is good. We are quoting $6.75.

Ingot Zinc—The heightened tone noted last week is being maintained. We still quote: 6 3-4 to 7c.

Sheet Zinc—Existing conditions will tend to higher prices before long. In the meantime the following quotations are being held firm: In casks, 7 3-4c. sheet, 8c.

Bar Iron — Last week's advanced price still rules the market. We quote: $1.97 1-2 f.o.b. Montreal.

Old Material—There is still considerable excitement in the old rubber situation. Stocks are almost bare and dealers who are holding any are expecting to get much higher prices than are at present ruling. Nothing new has developed in scrap metals. Cast iron continues to be in good demand, but so far as wrought scrap is concerned, the rolling mills control the situation here. Prices are kept at the same figure and dealers appear to be selling right along, rather than take chances in stocking up for higher prices, which, before spring, are likely to be given. At the present time iron outside of Montreal is commanding much higher prices. We quote the following prices: Copper wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 3 3-4c.; machinery cast scrap, $13; wrought scrap, $12: stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Nov. 17, 1905

LARGE importations have been made during the past week by jobbers who desire to get stocks of metals in before the close of navigation on the St. Lawrence. Stocks are now in fairly good shape, there being no shortages worth reporting.

Bar iron has advanced 5c. and is exceptionally strong. Pig iron is also very firm and Londonderry is now commanding $17 at the furnace. Lead is fairly strong at the recent advance, but sales are not very large owing to the high price. Copper is quite active, with outside markets reporting advancing prices.

Pig Iron—Prices are very firm and Londonderry is commanding increased figures. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 50
Londonderry, at furnace	17 00

Bar Iron—Another advance of 5c. has been made. Business is very lively We quote $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin—Prices are unchanged with the market active.

Tin Plates— Demand is active with prices very firm.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—The market is firm with little business offering owing to high prices. We quote as follows: Pig lead, $4.25 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market is more active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Outside markets are advancing and the local market is strong and active. We quote: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—There is a better demand with stocks in hand light.

Old Material—Iron, lead, copper and brass are all in strong demand. Dealers' buying prices are as follows: Heavy copper and wire, 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—There is little change in this market, prices being steady and a good trade being done. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, November 16, 1905.

THERE continues to pour in from all quarters evidence of the enormous current consumption of iron and steel, with ample proof in the form of fresh orders that there will be an unabated strain upon our productive facilities for many months to come.

There is no truth in the report given wide currency that the Steel Corporation had purchased 50,000 tons of Bessemer pig for the first quarter from the Valley furnaces. It is understood that negotiations are pending, however.

During the past week the pig iron markets have hardened further. As

much as $17.50 has been paid for a lot of 3,000 tons of Bessemer to a Valley furnace to go to an Ohio River steel plant. The demand from steel makers has made malleable Bessemer very scarce and the foundries which need this grade are facing a troublesome situation. Some business has been done in Eastern Pennsylvania in basic pig at $17.50 delivered, and it looks as though there may be a shortage during the Winter. A western steel plant has bought 14,000 tons of basic pig, of which 6,000 tons went to southern producers and the balance to northern furnaces.

It is understood that early last week the cast iron pipe interests purchased 20,000 tons of pig iron and that further considerable quantities are wanted, although buyers seem to shy at present prices. So far as southern makers are concerned, the largest are demanding $14.50 for No. 2 at Birmingham, but there is still standard iron available at $14. The Lake Superior charcoal producers have put up prices $1 per ton to $18 at furnace.

Contracts for steel rails closed during the week foot up a tonnage in excess of 100,000 tons. This includes 25,000 tons for the Boston & Maine, 25,000 tons additional for the Harriman lines, making the total for that interest close to 170,000 tons, 12,500 tons for the Minneapolis, St. Paul & Sault Ste. Marie, 10,000 tons for the Pacific & Idaho Northern, and 9,000 tons for the Yosemite Valley.

The report that a Spanish mill had captured business on the Pacific Coast is denied. It probably grew out of the fact that three months ago the Altos Hornos de Viscaya, of Bilbao, did take a contract for 11,000 tons of steel rails for shipment to Mexico.

The plate mills are swamped with orders, among the latest being the material for an additional lake boat, captured by Chicago. It is possible that prices will be moderately advanced this week.

The pressure for structural material continues unabated, but the new tonnage being placed is moderate. Among the business coming up is 8,000 tons for an extension of the Northwestern Elevated in Chicago.

In castings a very big order has just been awarded by the builders of the McAdoo Tunnel. The quantity involved is about 40,000 tons, which is a little over one-half of the requirements.

Bids for 7,800 tons of cast iron pipe were opened in this city this week, but the contract is not yet awarded. Next week is to bring the letting of 30,000 tons for this city and of 7,000 tons for Providence.

The troubles in Russia have had a sharp effect upon the price of Ferromangese, which has been jumping lately. The usual supply of high grade low phosphorus ores from the south of Russia, which has been hampered for some time past, is now seriously threatened.

LONDON METAL MARKETS.

From Metal Market Report, November 15, 1905.

Pig Iron—Cleveland warrants are quoted at 53s. 9d, and Glasgow Standard warrants at 52s. 4d, making prices as compared with last week 2s. higher for Cleveland warrants and 1s. 7d higher for Standard warrants.

Tin—Spot tin opened firm at £152, futures at £151 5s., and after sales of 350 tons of spot and 320 tons of futures closed firm at £152 2s. 6d for spot and £151 10s. for futures, making price as compared with last week £1 4s. 6d higher on spot and £1 12s. 6d higher on futures.

Copper—Spot copper opened strong at £75 10s., futures £72 10s., and after sales of 600 tons of spot and 600 tons of futures, closed strong at £75 5s. for spot and £72 15s. for futures, making price as compared with last week £2 10s. higher on spot and £1 higher on futures.

Lead—The market closed at £15 6s. 3d, making price as compared with last week 5s. higher.

Spelter—The market closed at £28 10s., making price as compared with last week 2s. 6d higher.

MINES AND METALS.

The Dominion Coal Company may this Winter ship several cargoes of coal to Vera Cruz for consumption by the Mexican Heat & Power Company, in which James Ross and other Canadian capitalists are interested. A cargo sent last year to Vera Cruz is said to have been satisfactory to the Mexican enterprise.

* * *

A small seam of coal has been unearthed by workmen excavating for a



Style "F"

The Very Newest

Combination, Bow Lever and Side Pedal drive; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



THE "SNOWBALL"

THE ABOVE ARE TRADE BRINGERS

W. L. HALDIMAND & SON,
MONTREAL,
Eastern Agents

Made solely by
THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, - ONTARIO

building on Westminster avenue, Vancouver.

* * *

It has been stated recently that an order for 1,500 steel passenger cars is about to be placed by the Pennsylvania Railroad. The Pennsylvania Railroad has withheld its order for passenger equipment for next year until the feasibility of using steel passenger cars could be thoroughly investigated. It is intended to use the steel cars on the Pennsylvania road's many fast trains, and their adoption will reduce the possibility of fatalities in wrecks to the minimum, as well as eliminate the liability of telescoping. The cost of the proposed order is estimated at about $5,000,000.

* * *

The total output of the Dominion Coal Co. for October was 333,317 tons. Shipments amounted to 323,884 tons. The total output of the collieries for September was 322,288 tons, and shipments were 299,403 tons. The total output for October shows an increase over that of last year of 11,029 tons, and increase in shipments of 24,461.

* * *

The Crucible Steel Company has disposed of some large steam hammers that had been located in the abandoned works of that corporation in Beaver Falls, Pa., to a new company to be known as the Grays Harbor Steel Company and the plant of which will be located at Grays Harbor, Wash. The new plant will manufacture crucible steel under a new process invented by John Barrett, of New Brighton, Pa., who has joined a Cincinnati company in promoting the new enterprise. The plant, it is claimed, will manufacture crucible steel on a new basis and will reduce the cost of production materially. The purpose of going to the Pacific coast with the plant is said to be due to the fact that close by its site is a large deposit of iron ore in British Columbia that is exceedingly rich.

Dealers are becoming more fully aware every year of the superior quality and advantages of the "Metallic" Sheet Metal goods.

The quality of steel that goes into them costs us more than most makers pay, while superior galvanizing gives our zinc-covered metal a weather resisting quality and capacity for wear unequalled by any other brand. There are no raw edges on our "Eastlake" galvanized steel shingles because every part is thoroughly zinc covered by separate dipping.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.

OF CANADA, Limited

(Established Twenty Years)

Toronto Winnipeg

We also manufacture:
- "Metallic" Ceilings and Wall Plates
- "Metallic" Cornices, Skylights and Ventilators
- "Metallic" Sheet Metal Fronts
- "Metallic" Siding (stone, brick, etc.)
- "Impervia" Fireproof Windows
- "Empire" Metallic Shingles
- "Metallic" Crestings and Finials
- "Metallic" Corrugated Iron
- "Hayes" Metallic Lathing
- "Metallic" Eavetrough and Conductor Pipe
- "Metallic" Pressed Zinc Ornaments
- "Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

411

Nova Scotia Trade News

Halifax, N.S., Nov. 15.

ACTIVITY continues in the hardware trade throughout the Province. Jobbers report good orders coming in from the various sections and that they are kept busy filling them. Lumbermen's supplies are being bought largely, and every preparation appears to be made for a big cut this season. Axes are not selling as freely as heretofore, the saws, which are found to be a success, replacing them in many instances. Tarred paper and tarred felt are also selling very freely, the lumbermen using much of these materials for the covering of shacks in the woods.

* * *

All the metals continue firm and with a good demand. The jobbers here have not yet been able to replenish their low stocks to any extent owing to the high prices. There is also a good demand for glass. The price is high and the stocks low. Dealers asked for quotations on glass positively declined to name prices owing to the condition of the market.

* * *

The Sydney rail mill is now shipping six or seven carloads of rails daily to the Intercolonial Railway at Moncton. Some time ago the I.C.R. placed a large order for rails with the steel works at Sydney, and the rails now arriving are the first of the order. The new rails are to be used as wanted at different points along the line as the old ones give out. The three big companies operating in Cape Breton employ 13,600 persons, and the monthly wages amount to $650,000.

	Men employed.	Monthly pay roll
Dom. Iron & Steel Co.	3,000	$175,000
Dominion Coal Co.	8,000	350,000
N. S. Steel & Coal Co.	2,600	129,000
Total	13,600	$650,000

To the above must be added the figures of a large number of smaller companies, such as the coal companies of Port Morien and Broughton. Besides the above many hundreds of men are employed in other enterprises, and it is estimated that the wages paid must reach nearly $9,000,000 per annum.

* * *

The Nova Scotia Steel & Coal Co. is to erect at Sydney Mines a large structural device for the bunking of coal during the Winter. It will be a facsimile of the endless haulage system attached to the towers of the company's quarry at Point Edward, which consists of two gigantic towers revolving in a circle at a distance of 250 yards from each other. The aerial railway between the towers will carry the coal in a scoop and deposit in any desired place within the radius of the circle. Besides being of considerable economic benefit to the company it will obviate the necessity of a large number of men suffering in the cold at such an exposed place as at Cranberry Head during the Winter.

A good many hardware stores will be very attractive during the coming holidays, while a goodly number will present the same old appearance. It is easy to tell which will get the patronage.

BAD FAILURE AT LEVIS.

Tffe Bank of Montreal on Wednesday of this week filed a demand for an assignment on the part of Carriere & Laine, Levis, one of the oldest firms of founders in the Province of Quebec. The failure of this firm will be felt all over the Province, and the list of creditors is a long one. Indeed, it is said that the liabilities will total nearly a million dollars.

The firm was founded in the year 1862 by Messrs. Wm. Carriere and Racine, and did a large business in stove, machine, engine and boiler manufacture. At one time they were engaged in ship building, and they have lately conducted a hardware store in Quebec.

The works did not shut down on account of scarcity of work, as they had a number of good jobs under way when the Bank of Montreal made the demand for their assignment. In the meantime, it is rumored that the works are likely to pass into the hands of a syndicate or be purchased by the Federal Government to be used as workshops connected with the Intercolonial Railway.

Arrangements have been made whereby The Canadian Fairbanks Company, Ltd., have been appointed sales agents for The John Bertram & Sons Company. Messrs. John Bertram & Sons Company have long been known as leading Canadian machine tool builders, and the product of this company has reached a standard which has brought them in the front rank of machine tool builders in any country. They have recently become identified with the Niles-Bement-Pond Company, and with the facilities offered by this company, we will be able to offer the Canadian public the very latest and best machine tool construction.

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Nov. 17, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

BUSINESS continues surprisingly brisk in almost all lines of hardware. Prices are steady throughout almost the entire list, and there are few changes to record. It has been announced that bluestone will be sold for delivery next season at $5.75 per cwt., the same price as last year. Pressed spikes have been advanced 25c. per keg. All lines of heavy goods are moving rapidly.

Game Traps—There is a brisk trade at following unchanged prices:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—Wholesale prices are steady at the following figures:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Prices are steady. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices are steady since the recent advance noted two weeks ago. We quote again as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	4 90
No. 2 and larger	4 65

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Immense quantities of wire nails are being hurried in before the close of navgation. The price has been steady since the decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—An advance of 25c. per keg went into effect the first of the week. Prices are quoted as follows:

Pressed spikes, ¾ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅝ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9 25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9 00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits— Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy per doz..... $8.75
Grass " per doz 1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Boval Canadian, per doz..... $30.05
R. B, per doz..... 34.07

Files—The discount on "Arcade" files is now 75 per cent. We quote as follows:

" Arcade " ..... 75 p.c.
" Black Diamond " ..... 60 p.c.
" Nicholson's " ..... 62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c
" tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned..... 70 and 10 p.c.
" " plain..... 75 and 2½ p.c.
" pieced..... 30 p.c.
Japanned ware.....37½ p.c.
Enamelled ware, white..... 45 p.c.
" Famous..... 50 p.c.
" Imperial.....50 and 10 p.c.

Cordage—The price has been steady since the advance noted last week. We quote:

Rope, sisal, 7-16 and larger, basis..... 11 25
Manila, 7-16 and larger, basis..... 15 75
Lathyarn..... 11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge.....	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam...	$3 00	$4 20
28 " "V" crimp.....	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square....	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge.....	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red 3 10

Vises—Prices are quoted as follows:

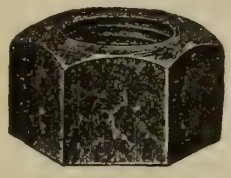
" Peter Wright," 30 to 34 .....14½c. per lb.
" " 35 to 39 .....14c. "
" " 40 and larger .....13½c. "

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited
WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING
USED ALL OVER THE WORLD.
Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.
SEND FOR SAMPLES.
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited
Manufacturers of
Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.
INGERSOLL, ONT.

Established 30 Years. Quality Tells.
We have seven factories producing daily 120,000 Files and Rasps, which are distributed throughout the four quarters of the Globe, and the excellent reputation which our Files maintain is the result of many years experience, and the expenditure of a large amount of money in designing the most elaborate machinery and tools for producing our INCREMENT CUT FILES, in all sizes and shapes, for all purposes.
We manufacture several Brands at our Dominion Works, all of which are warranted for their excellenf cutting quality.
Sold by all prominent hardware and mill supply merchants.
NICHOLSON FILE COMPANY
Dominion Works, PORT HOPE, ONT.

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6. The "1904" sheep shearing machines are sold at $13.60.

Ammunition, Etc.— Prices and discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	20 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Dominion Eley's and Kynoch's soft, 12 gauge.	
black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

22 and 24 gauge,	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 70-72 (Engine)	25c.

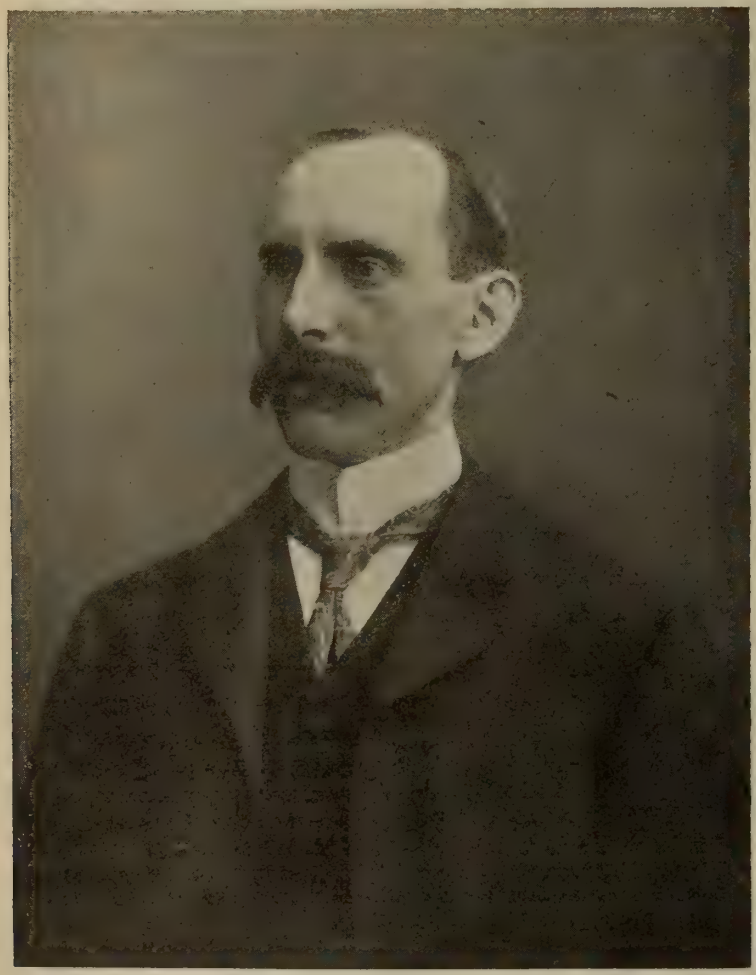
(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine—Prices are steady this week at former quotations which were as follows:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.00
26 to 40 "	2.25
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	



T. B. Lee, of Rice Lewis & Son, Toronto, ex-President Canadian Wholesale Hardware Association, one of the Canadian delegates to Washington.

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Tesson	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10

Sheet Zinc—There has been a sharp advance and the price is now $8.50 for cask lots and $9.00 for broken lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—As noted last week, there have been some advances in iron pipe. Prices are now quoted as follows:

Black iron pipe, ⅛ inch	....
" ¼ "	2 55
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— Prices are still quoted as follows:

British Columbia Trade News

Vancouver, B.C., Nov. 9, 1905.

At the meeting of the Vancouver Board of Trade this week Mr. R. P. McLennan made the rather startling statement that smuggling on wholesale scale was carried on at the international boundary near Blaine and Sumas, the two United States towns on the border and south of the Fraser River. Mr. McLennan urged the Board to take some action. He said that it was a matter of common knowledge that whole wagonloads of goods were bought on the other side of the line and driven into British Columbia without the least attempt at concealment. He knew of a case where a man built a house, buying not only the lumber and materials but the furnishings in Blaine and bringing all into Canada without paying a cent of duty. Resolutions were passed dealing with the matter.

* * *

One big freight steamer from Liverpool only cleared last week after leaving hundreds of tons of cargo, mainly metal manufactures, at British Columbia ports, and another, the Tydeus of the Blue Funnel line direct from Liverpool is in port and discharging. She brings for British Columbia mainly glass, structural steel, iron and steel in bars and plate, cement, firebrick, wire, etc. The Tydeus will take out large consignments of salmon and will also load several hundred thousand feet of lumber.

* * *

Dawson business men are endeavoring to secure the opening of an outport of entry for the United States Customs somewhere in the Tanana, which is in American territory. That district depends on Dawson largely for its supplies, and the nearest Customs port of entry is at Eagle, 700 miles from Tan-

ana. The fact that most of the supplies for Dawson, and which are sold by Dawson merchants to the Tanana country, come from British Columbia coast cities makes it interesting to Vancouver and Victoria business men. As the United States vessels are permitted to carry from Vancouver goods destined to Dawson, or between two Canadian ports, which is opposed to the Customs law, there has to be a special order made every year. The suggestion is to hold this privilege up as an inducement to have the desired port of entry established in Tanana.

* * *

The first grain elevator in Vancouver, and the first of many, it is fondly hoped by those who are struggling to turn Alberta wheat this way, is now under construction. Messrs. C. E. Hall & Sons, of Manitoba, are the firm engaged in erecting the elevator, which is of large cauacity, and the builders say that it is to be followed by a large flouring mill for export trade.

* * *

A new plumbing firm, R. E. Grosse & Son, has been formed in Vancouver. Capt. Grosse is better known as a veteran in local marine circles, while his son has been connected with the plumbing trade, with M. S. Rose, for many years.

* * *

The British bark Dundee which had such a trying experience since leaving Bremen, where she took on her cargo of cement, is now in Tacoma discharging cargo, consisting of 10,000 barrels of Portland cement. Part of her cargo was discharged at Seattle. The Dundee sighted Cape Horn four times in making the voyage and being driven back by stress of weather every time, Captain Stephens altered his course and sailed east round the Cape of Good Hope, crossing the Indian and Pacific oceans instead. On the way eleven of the crew mutinied and when in Singapore they were tried and punished.

* * *

Some of the merchants have discovered that freight shipped from Japan to Calgary is carried for a less rate right through to Winnipeg and back again than from Vancouver direct. This, it is claimed, is a direct handicap on many lines which Vancouver wholesalers might otherwise handle from their location here. The anomaly is one of the freight matters which the C.P.R. will be asked to explain while freight rates are under discussion.

* * *

The Vancouver Board of Trade received a letter at its meeting this week from the Toronto Board, enclosing a strong resolution against the tax on travelers in British Columbia, and asking that the Dominion Government disallow the Act, reconsidering its decision already made. No action was taken by the local board, the matter being considered settled.

* * *

Three large tank steamers have been purchased by the Union Oil Co. of California to carry oil to Puget Sound and British Columbia ports. They are the Roma, capacity 27,500 barrels; Washtenaw, capacity 28,500 barrels, and the Lansing, capacity 47,000 barrels. They were formerly the property of the Michigan Steamship Co. and their addition to the Union Oil Co.'s fleet makes that concern one of the largest operators of tank steamers in the world. The vessels regularly visit Vancouver with oil for the British Columbia Sugar Refinery, which uses that fuel.

* * *

A water company is being formed at Dawson to install a system in the Klondike hills. This is separate from the big scheme which the Dominion Government has had in hand all the past season, for bringing water to practically all parts of the benches and hillsides of the Klondike. O. R. Brener and Messrs. McDonald, Barrett, Palmer, McNamee, Hitchcock and Kelly are the incorporators.

* * *

The report of City Engineer Clements to the Vancouver Water Works Committee contemplates the expenditure of a total sum of nearly three-quarters of a million dollars in installing a high level system to serve the southern portion of the city, on the heights of Fairview and Mount Pleasant. This includes also a high pressure main along the water front of the city proper, and a new intake in the valley of Capilano River, the source of supply in the mountains across the inlet.

* * *

Mr. R. P. Butchart, of the Vancouver Portland Cement Co., Victoria, is on his way to Calgary again to superintend the erection of the large plant his company is erecting there. The cement industry is to have some competition in the west, in addition to the imported article, for the same concern which manufactures the article in a large way at Hull, P.Q., is building a plant at Kananaskis, some thirty miles or more west of Calgary. Messrs. Hassan and Diver of the company were in Vancouver this week buying supplies and contracting for material. The works will be ready for operation in the Spring.

* * *

The lumber association has issued its new price list which shows the increase of $1 per thousand on all classes of lumber, as well as the increase in delivery charge from 75c to $1 per thousand. Trade in lumber is still extremely active, notwithstanding the fact that cars for shipment to the Northwest are necessarily scarcer at this season on account of the heavy grain movement from the prairies east. But all cars coming west with freight are sure to go back loaded with lumber.

Local lumber demand is still good, as the remarkably fine Fall weather the coast is now experiencing has given building an impetus not usual at this season. There is as great activity in new buildings at the present moment as there was at midsummer.



William Starke, President Starke Hardware Co., Montreal, ex-president Canadian Wholesale Hardware Association, one of the Canadian delegates to Washington.

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Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words each insertion,	1 year		$30 00
" " "	6 months		17 00
" " "	3 months		10 00
50 " "	1 year		17 00
" " "	6 months		10 00
25 " "	1 year		10 00

FOR SALE.

HARDWARE and Stove business; town 4 000; one opposition; best reasons. Box 293, HARDWARE AND METAL, Toronto. [4]

AGENCIES WANTED.

MANUFACTURERS' AGENT desires correspondence with manufacturers of hardware specialties who want live intelligent representation in Western Canada. Address P.O. Box 702, Winnipeg, Man. [47]

WANTED.

WANTED—First-class salesman with good connection to take charge of a department of European importations, comprising different lines, and sell them in Canada; must be able to arrange his own samples; good salary. P.O. Box 996, Montreal. [46]

A FIRST-CLASS hardware man is wanted as manager by a well established house; a good salary will be paid and all correspondence will be treated confidentially. Address Box 295, HARDWARE AND METAL, Toronto. [46]

WANTED—Two first-class tinners for furnace work; $3 25 per day, eight hours; steady employment. Apply The Wm. Ralph Co. Vancouver, B.C. [51]

PLUMBER who can work at tinsmithing; steady job to suitable man. S. B. McClung & Co., Trenton. [f]

WANTED—Two first-class tinsmiths, used to assortment work. The Raymond Mfg. Co., Limited, Guelph. [1]

FOR SALE.

OLD ESTABLISHED HARDWARE BUSINESS in one of the best Manitoba towns; first-class wheat district; good stock and buildings; paying trade; suitable terms; a fine opportunity for anyone wishing to go into the business. For information apply to **The J. H. Ashdown Hardware Co., Limited**, Winnipeg, Man. [46]

A WANT SUPPLIED

THE EVER READY TUB HOOP

Adjustable to any size Tub or Pail, no rivets required Packed 2 doz. in a case. A ready seller.

Canadian Distributors

WATT & SQUIRE

BRANTFORD, ONTARIO

THE MINING INDUSTRY IN NOVA SCOTIA

CONSIDERABLE interest is being shown in Halifax in promoting a wider and more scientific development of the mineral resources of the Province. The mining industry is only second in importance to agriculture, and is the equal of the fishing industry. Nova Scotia is richly endowed with a diversity of precious and economic minerals, but coal is the only mineral which can be considered as having been mined in an extensive or scientific fashion. The general demand now is that gold, iron, copper, lead, and other metals be taken up and their occurrence investigated in a serious and business-like way. The Government of the Province is lending practical encouragement to the new interest which business men and others are beginning to take in the possibilities of mixed mining development. As a result of a joint request by the mining society and board of trade, the Government engaged an American expert, Mr. T. A. Reckard, of New York, to investigate the gold measures of the Province and report upon the probability of deep mining being successfully prosecuted here as at Bendigo, Australia, where mines are working at a vertical depth exceeding 4,000 feet, employing large capital and creating a stable and permanent industry. Mr. Rickard's report will be presented in December. Should it be favorable, and coming from an engineer of international reputation, the result cannot fail to be to attract the attention of English and American capitalists to the gold fields of this Province.

Government Granting Assistance.

The Government of the Province has decided to take the same course with reference to iron mining, and has asked a committee of the mining society to submit names of eminent German and American iron mining experts, with a view to retaining the best man possible to obtain to report upon the iron ores of the Province and stimulate the production of native iron ores, to displace the immense quantities of imported ore used at the steel works at Sydney, Cape Breton. At the same time an influential section of the Halifax press is urging the Dominion Government not to renew the bounties on steel as now arranged, but so adjust any extension of the duration of the bounties which may be agreed upon as to make it a greater object than at present for people to mine native iron ores, and for the steel companies to use native ore. The production of native ore has declined in the last twenty years largely because of the ores imported from Belle Isle, Newfoundland. The public are commencing to take an interest in matters relating to mining, and the situation as regards iron ore production is one which they think should be changed.

Can Copper Mining be Developed?

Another mineral which is receiving considerable attention just at present is copper. Very little thought has been accorded copper in the past, but people have had their interest aroused in the subject by the prevailing high price of the metal, and they are inquiring if there is copper in Nova Scotia, and

Hardware Store Business Methods

Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

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The American Hardware Store

A Manual of Approved Methods of Arranging and Displaying Hardware.

By R. R. WILLIAMS, Hardware Editor of the IRON AGE.

This book is descriptive of the best methods of accommodating and displaying the large variety of goods which are carried in stock in representative American and Canadian hardware stores. Copiously illustrated, and worth many times its cost to every progressive hardware dealer.

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The Lightest, Strongest, Easiest Running and Prettiest Skate in the World.

DEALERS:

It will pay you to handle the Fisher Tube Skate. There is a demand for them.

The large makers of ordinary skates are now compelled to make Tube Skates. It will take them years to get to our standard. Tube skates are not made like ordinary skates.

Write to-day for Catalogue and Prices.

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Fire Bricks, Building Bricks,
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KING, QUEEN and WELLINGTON STS.
MONTREAL

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DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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MIDLAND, ONT Limited

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GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Regina, Winnipeg
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc. etc.

whether the local conditions are favorable for its production at competitive prices. The latter part of the query has been determined satisfactorily, and it is apparent, with abundance of coal and limestone in the Province, cheap ocean transportation to the markets of the world, moderate-priced labor of good quality, ample timber and water power, the conditions for copper production could hardly be better. As regards the existence of copper ores nothing much was known prior, possibly, to a few years ago. There was evidence of copper at various parts of the Province proper, and in Cape Breton, but no real serious effort had ever been made to determine its extent.

Newfoundland has been mining copper ore for years and shipping 100,000 tons annually to chemical and reduction works in Wales and New Jersey. Now it is found that the same formation extends through Nova Scotia, New Brunswich, Quebec, and Labrador, and Dr. E. D. Peters, Jr., the eminent Harvard writer and practical authority on copper, declares that all the district covered by the Provinces surrounding the Gulf of St. Lawrence is a copper region. So that central reduction works located at the Cape Breton coal fields, where fuel and other supplies for smelting are cheap, could draw ores by cheap water freight from Newfoundland and all parts of the Atlantic Provinces. That Dr. Peters is probably correct in his geological diagnosis is evidenced by the advances made in copper development during the past year or two.

Copper Mines Working.

A number of promising beds of copper ore have been found on the Bay of Fundy, in New Brunswick, and also on the opposite side of the Bay in Nova Scotia, and several mines have been opened to a depth of 200 feet, showing no diminution of the quality or quantity of the red metal, and the work is being actively prosecuted. Promising copper finds have also occurred in Guysboro and Antigonish counties, Nova Scotia. But, perhaps, the most valuable of all is an immense body of copper ore, carrying gold and silver found at Cheticamp, Cape Breton, which Dr. Gilpin, head of the Mines Department of Nova Scotia, and other prominent professional men, says promises to rank among the largest copper mines in the world. Halifax people are furnishing the capital for the thorough prospecting of this copper bonanza, and if it turns out as present conditions indicate a large copper smelting industry is likely to be established in Cape Breton. The local Government are giving the work the strongest possible encouragment, and there seems a good chance of extensive copper works being developed here in the next year or two.

The prospect, generally, for mining, was never better, and, of course, that will help trade very much, as activity in mining means large increase in the wage-earning population, and, consequently, in the money distributed in staple supplies of all kinds.

Have you ever thought how your window display would be much enhanced by the judicious use of attractive lights?

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Tin—"Straits" and "L & F"
Lead—Best English
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From Stock or for Import to wholesale buyers only.

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ASK YOUR CUSTOMERS
if they don't need new pumps. If they do, sell them our
Standard Anti-Freezing Pumps
They'll appreciate getting a pump that doesn't have to be thawn out every zero morning

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B. K. MORTON & CO.'S
B.C. BRAND DRILL STEEL
receives the unqualified endorsement of users everywhere. Are you selling it?

There is business here—yours if you seek it.

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NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

PAINT, OIL AND BRUSH TRADES

GETTING AWAY FROM CHEAP PAINT.

ONE favorable sympton in the paint trade of this country at the present time is the evident tendency to get away from the idea of cheapness in paints and materials and to look rather at quality first and cost second. The real economy in paint and varnish buying, as is becoming generally understood, lies in the use of the best materials for the purpose desired. That is not to say that cheaper materials may not often be "just as good," considering the use to which they are to be put; but generally speaking, there is no economy in paying high wages to a painter or finisher to apply inferior goods, no matter how cheap. The ratio of cost of labor to cost of material is now so high that economy does not lie in saving on the latter.

Of course there always will be a craze for cheapness among a certain class of paint and varnish users. They either do not understand the value of quality or else they wilfully ignore it for the purpose of cheapening their work, as is frequently the case in contracts. For such buyers there must always be a supply of second or third grade goods, which will be forthcoming so long as the demand exists. But we cannot believe that these people are in the mafority, or rather, that they represent the largest volume of purchases. They buy in small lots, as a rule, and are not in the same class with the larger and more discriminating purchasers who know the value of materials and seek the best.

Abroad, the situation is somewhat different. The complaint there is that the demand for so-called "cheap" paints is working disaster to the higher technical side of the paint making industry —in other words, is crushing out the man of skill and technical experience. The result is that many men of known talent in the chemistry of paint manufacture are seeking employment there in other lines. This is not wholly due to the cheap paint craze, though partially so, the other cause, in Great Britain, at least, being the decline in England's color industry. The curse of cheapness is there seen in its double effect on buyer and seller. The buyer suffers from inferior work and the seller from lack of incentive to make the best product possible. Thus the paint trade may be easily ruined by "cheap paints."

The varnish or paint manufacturer who desires to further the cause of good materials will find a fertile field for work among the architects who specify the goods to be used. The beginning of excellence usually is in the architect's specifications. If he is rightly informed as to the covering and wearing power of a varnish or paint, he will be able to specify understandingly, and the finished work will be evidence of the superiority of the goods. Fortunately, the largest users of paints in this country are mixing more and more brains with their paints; are employing expert chemists in many instances to study the subject of materials for all purposes, both from the theoretical and the practical standpoint, and this earnest effort to secure the best at the least cost is bringing forth fruit in a better general understanding of the entire paint and varnish question and a corresponding contempt for "cheap paints."—Paint, Oil & Drug Review.

ARTIFICIAL GRAPHITE.

THE International Acheson Graphite Co., of Niagara Falls, N.Y., with the recent completion of a large extension equipped with the most modern electrical and mechanical appliances and machinery, has doubled the capacity of its plant for creating graphite in the electric furnace, and has closed a contract with the Niagara Falls Power Co. for another 1,000 horse power of electrical energy in addition to the 1,000 horse power previously used. The commercial importance of this artificial graphite may be estimated from the fact that the United States Geological Report for 1904 states that for that year the value of Acheson Graphite produced was $217,790, while all the graphite mined in this country amounted merely to $241,372. New York State, which is considered rich in deposits, according to the official report of 1904 produced natural graphite worth $119,509. Acheson Graphite is largely used in the manufacture of metal protective paints, dry batteries, stove polish, packing and as a lubricant. The electrochemical processes also consume an extensive supply.

PAINT MANUFACTURER HONORED

One of the recipients of the birthday honors recently conferred by His Majesty, is Colonel H. M. Pellatt, Toronto, secretary of the Canada Paint Co., Limited, of Montreal, Toronto and Winnipeg. The Colonel is a progressive and energetic Canadian, and fully deserves his new title of Sir Henry M. Pellatt, K.B., A.D.C.

Imperial Turps.

We do not claim it is pure Southern Turpentine, but we do know it is safe to use, and does not contain any injurious properties. This is more than we would like to say about some of the so called PURE in the market at present.

Manufactured only by

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

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the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

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Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

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Glue and Gelatine

An extensive assortment, to suit all requirements.
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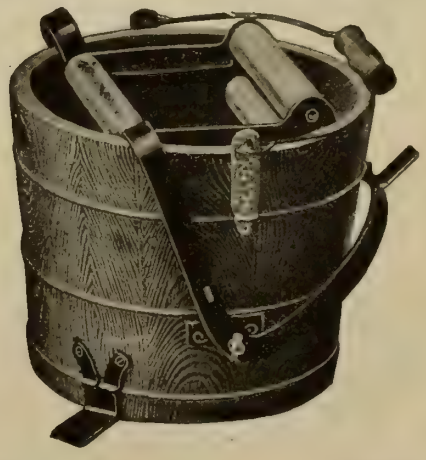
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Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

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Are made right in every particular. Made to give perfect service and long wear.

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TRADE MARK

still continues to increase their sale. These are the Paints in which **the only WHITE LEAD used,** is

BRANDRAM'S B. B. GENUINE

the world's standard for the last **187 Years.**



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HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, November 17, 1905.

WHITE lead is being steadily forced upward. Old country quotations give price for dry white lead at corroding points, at £17 10s. This would make a lay down price, with winter freights, of between $4.75 and $5 per hundred pounds for the dry article. Based upon this calculation, it will be readily seen that prices for ground lead have been much too low. Therefore, the grinders have increased their figures about twenty-five cents per hundred pounds. There is no inclination to cut for quantities, and, in fact, stocks are almost bare.

There is no interruption to the general lively air of business which pervades the several factories and jobbing houses, and every effort is being made to clear the sheets as much as possible, before the winter really sets in.

Dry colors, bronzes, and painters' sundries all feel the healthy tone, and varnishes particularly, have been subject to a good movement.

Turpentine—Prices remain steady as follows: Single barrel, 98c. per gallon. Two barrels or over, 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Conditions are practically the same as at our last report. There has been no change in price on the Montreal market. We quote as follows: Raw, one to four barrels, 45c.; five to nine barrels, 44c.; boiled, one to four barrels, 48c.; five to nine barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—As was noticed in our introductory remarks, an advance has taken place during the week. We are now quoting: Best brands Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—An advance of 15 cents all around has taken place in the dry article as well, and we are now quoting: Barrels, $5.40; 100 lb. packages, $5.65; 6 or 10 lb. tins, $6.65.

Dry White Zinc—In sympathy with persistent advances in the primary market, prices locally have risen. We quote: Pure dry in casks, 7 1-2c.; in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.; in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We are quoting a half-cent advance all around: 25 lb. irons, 8c. to 10 1-2; No. 1, 6 3-4c.; No. 2 5 3-4c.

Putty—We quote: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Our prices are as follows: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Further advances have taken place in the primary market, but local jobbers are still quoting as follows: Genuine red lead in casks $4.50; in 100-lb. kegs $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Gum Shellac—We give prices: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—This line is in excellent demand at present. Our prices are considered the rock bottom quotations: Pure white in barrels, $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—We still quote from $1.20 to $1.40 per gallon.

Castor Oil—Large quantities are being sold, and the price has been advanced on import orders. The following prices, however, still hold good on orders from stock: from 7 1-2c. to 8 1-2c. according to lots.

Refined Petroleum—The demand is naturally active at this season, and large orders are the rule. We are quoting: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—The demand for glass is tremendous. Contractors from all parts of the Province are crying for it, and will pay about any price for suitable sizes. The supply, however, is not equal to the demand, and many orders will be left unfilled throughout the winter. Some further arrivals are expected this week, but they can scarcely be expected to relieve the situation to any extent. In the meantime, prices given below are firmly held: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do.,

Do You Keep Our
HANDY FAMILY PAINTS

Specially suited for repainting articles about the home that have become shabby through wear, such as Chairs, Benches, Flower Pots, Shelves, Stands, etc. ?

Put up in Penny Lever Cans. Eighteen colors.

There is a ready demand for ***Handy Family Paints.*** Wouldn't you like a supply ? Our catalogue will be sent with pleasure if you will send us your address.

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COVERT MFG. CO.
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Auto Screw Jack
Harness Snaps, Chain, Rope and Web Goods, etc.
FOR SALE BY JOBBERS AT MFRS. PRICE

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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

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ABOUT GLUES

What kinds do you handle ? Are you and your customers satisfied ? Perhaps we can give you a better article at a fairer figure. Our SCOTCH GLUES will be found of exceptional strength, and equal to many glues for which much higher prices are charged. Let us send samples.

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GENUINE
PRATTS ASTRAL LAMP OIL

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OILS GUARANTEED GENUINE.

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LONDON, ENGLAND.



IT'S EIGHT HOURS EXACTLY
The Time It Takes
"Island City Brand"

House and Floor Paints to dry—is a third of a day. It's pretty hard to find a crack or blister in that drying, too. Our Varnishes give just as good results as our Paints.

Let Us Send You Prices

P. D. DODS & CO.
Toronto, Montreal, Vancouver, Winnipeg

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3

Painters in Canada use the painting material made by the

CANADA PAINT COMPANY

IT COMES AS NATURAL FOR A PROGRESSIVE HARDWARE MAN TO MAIL HIS PAINT AND VARNISH ORDERS TO THE CANADA PAINT COMPANY, AS WE GO TO CHURCH TO PRAY, TO BED FOR SLEEP OR TO THE MARSH FOR DUCKS!!

FROM START TO FINISH THE CANADA PAINT COMPANY MANUFACTURE EVERY ITEM ON THEIR LIST. COLORS, VARNISHES AND PAINTS SUITABLE FOR EVERY CLASS OF WORK. DO NOT LOOK ELSEWHERE FOR BETTER PAINTS. THEY ARE NOT TO BE FOUND. THE BEST PAINT IS MADE BY THE CANADA PAINT COMPANY BY CANADIAN WORKMEN, CANADIAN CAPITAL AND FOR THE CANADIAN TRADE.

THE CANADA PAINT COMPANY LT'D

$16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto November, 17, 1905.

WHITE lead has been advanced from $5.55 to $5.80 on the local market owing to a scarcity of supplies. The sales recently have been very large owing to the expected advance, and the present prices are likely to be held very firmly by the jobbers. Red lead and white zinc have not been advanced as yet, but the increase in prices in Montreal is likely to be followed by an advance here on these lines.

Linseed Oil and Turpentine remain at the prices quoted a week ago. Prices for oil have fluctuated in England, but are again quite strong. The scarcity of turpentine has allowed some jobbers to sell at higher than prices quoted, but $1 is still the ruling figure.

The season's business has been the largest on record and the certainty that prices of paints will advance greatly next year is causing many dealers to place orders for paints for immediate delivery at the low prices now quoted. This will cause a heavy business to be done during the remainder of the year, and as the stocks are now rather light in the different warehouses they are unlikely to have anything to carry over for the coming year.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c. to 48c.; boiled, 50c. to 51c.; 5 to 9 barrels, raw, 46c. to 47c.; boiled, 49c. to 50c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5 gallon lots, $1.10 f.o.b. point of shipment, net thirty days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum— Dealers in the back districts have been laying in their Winter supplies and shipments have been large. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Canadian crude has advanced 2c. Pennsylvania crude holds firm at the price listed. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

VEHICLE FOR PAINT.

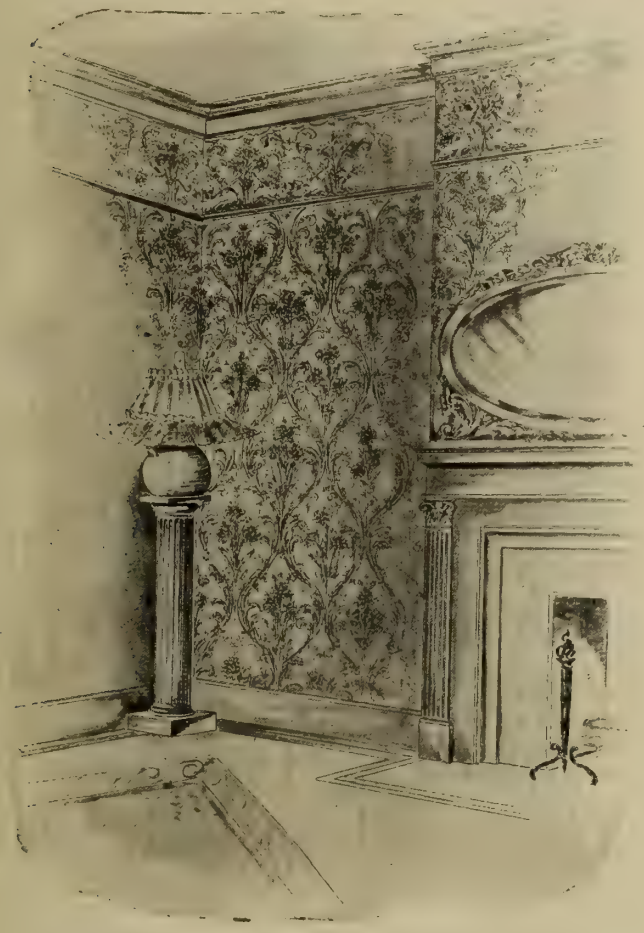
A. JUNKERS, Berlin, Germany, has secured a German patent for a vehicle, specially designed for mineral pigments, and making the paint weatherproof, easy working, and of increased covering power. The inventor mixes, say, 100 parts of potassium silicate (density, 15-22 deg. B.) with 0.7 part of finely divided sulphite cellulose. The cellulose facilities the uniform drying of the silicate and improves the covering power of the paint, the latter by distributing the particles of pigment more uniformly throughout the mass. The paints are ready for use as soon as mixed, and will remain in this condition for an unlimited time without any of the pigment settling down to the bottom. The vehicle can also be used as a topping for protecting coats of paint already applied.

BRITISH COLUMBIA TURPENTINE.

THE Monarch Wood Extraction Co. of Victoria, B. C., which controls the patents for the manufacture of turpentine from fir wood, recently made a twenty-four hours' run of its plant with gratifying results. There remains considerable to do in the way of adjusting the plant before the factory will be running commercially, however. The turpentine produced is said to be of the highest quality, several specimens having been put through the whole process. In addition to the turpentine a high quality of resin is obtained as well as less valuable oils and resins. The returns from the wood vary considerably. From fifteen gallons to thirty gallons of turpentine a cord have been obtained from some of the samples treated independent of the bye-products.

WALL PAPER

DEVELOPMENTS during recent years have been such that the utmost care must be taken in stocking wall paper in order that quality and pattern may be right. Wall paper manufacturing has made great strides in Canada of late. The way in which imported papers have been replaced by those of Canadian production is a proof of this. The designs for the Spring business are such as to insure a big business and it is well

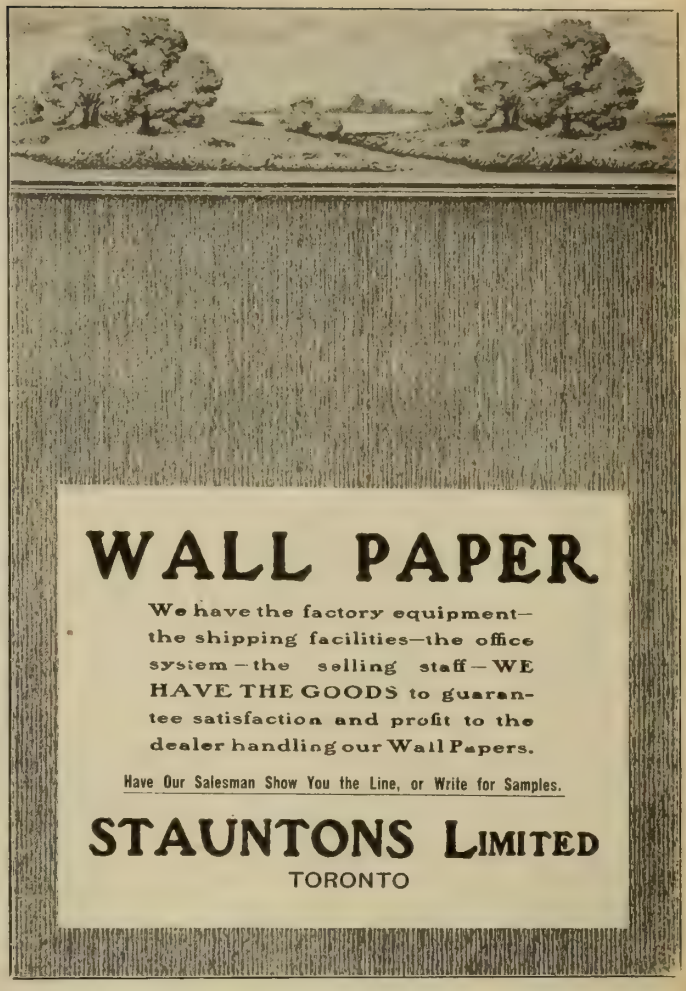


Illustrating Drawing Room and Parlor Design No. 1667.
This elegant decoration is manufactured by Stauntons Limited, Toronto.

for merchants to make their selections at once in order that they may not be found unprepared when the season opens. Although the leading mills have increased their facilities for turning out paper during the Summer, yet the anticipated sale of well paper next Spring will keep them running to their full capacity and early orders are essential for early delivery.

The bulk of the retail Spring business is done in a very short time. The period at which it is done, too, varies greatly according to the forwardness or the reverse of the season. For these reasons it is absolutely necessary for the success of the department that supplies should be on hand in good time. A display must be made the very first day of the season, and the merchant who has not got his stock at that time will be out of the running.

Orders are reported by all manufacturers to be coming in satisfactorily. The lines which were submitted in



the samples have met with great favor and the previous expectations of the manufacturers have been exceeded by the actual results. Favor is divided, too, and there will be no lack of variety in next year's offerings. This is a desirable feature, for while it makes the manufacturers spread their efforts over a wider field, yet the variety is conducive to greater retail sales.

COLOR SCIENCE.

CHILDREN under seven years of age almost invariably prefer yellow to all other colors, it is said.

Women, according to M. de Cnadolle, are more apt to have brown eyes than any other color, the proportion of that hue being 35 per cent.

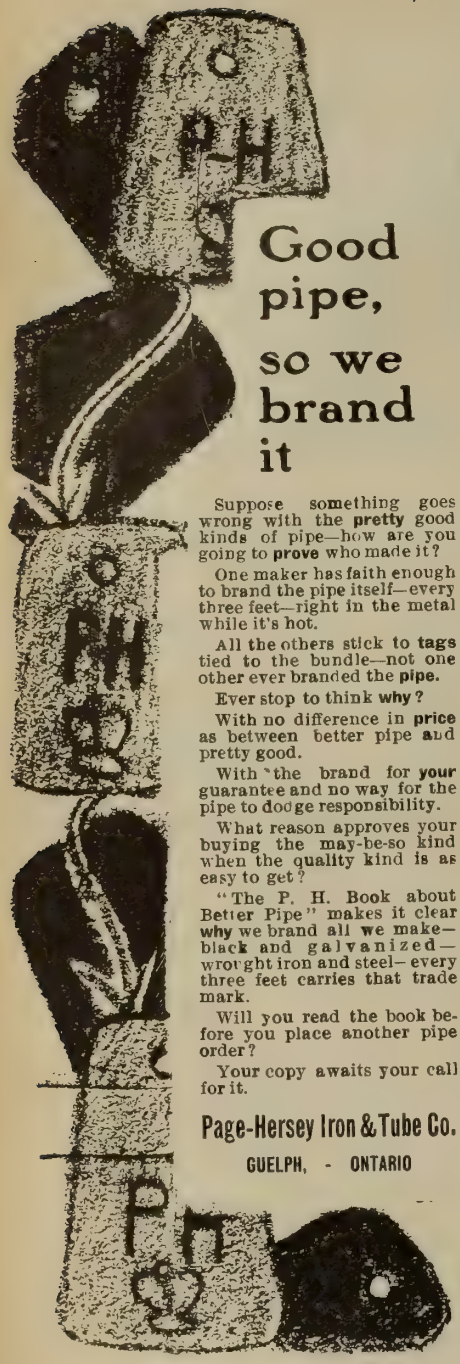
Colors passing through a prism can be made to produce sounds. Green and red lights produce the loudest noises and blue and yellow the faintest.

It is said that dew will not form on some colors. While a yellow board will be covered with dew, a red or black one beside it will be perfectly dry.

Careful experimenting has shown that through a certain depth of water, where only 50 per cent. of the red rays passed through, there were 60 per cent. of orange; yellow, 80; green, 90; indigo, 95.

A writer in Science says that in ordinary cases of partial color-blindness the color sensations that remain are blue and yellow, not blue and red or blue and green, as is generally assumed and stated in text-books.

There has been lately found on the Isthmus of Tehauntepec a flower which roughly does the work of a clock. In the morning it is white, at noon red and at night blue, the changes of color being remarkably regular.



$2 FOR THIS SMALL SUM THE $2

MANUFACTURER and SUPPLY MERCHANT

may keep posted on new openings for trade.

The CANADIAN CONTRACT RECORD

reports weekly all projected building and other construction works throughout Canada as well as new business enterprises.

Send your name and address with $2 for a year's subscription to

Canadian Contract Record

Toronto, Montreal, Winnipeg, and Vancouver

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INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE J. Y. Griffin Co., of Winnipeg, have secured a site in Fort William on which they will erect a large plant to carry on their business similar to that in Winnipeg.

The Empire Lumber Co. will erect a large saw mill at Latchford, Ont.

A new hotel is being erected by Messrs. Dean and Mortlach, Sask.

The Whyte Packing Co., Stratford, are building an addition to their works at that place.

The Canadian General Electric Co. and the Canada Foundry Co. will erect a warehouse 140 x 40 feet in Winnipeg.

Prospectors report the discovery of indications of iron ore in Nipegon district, New Ontario, over an area covering 50 miles.

The Vancouver Nail Works were recently destroyed by fire at a loss of $50,000. The building and plant were partly insured.

Welsh coal exporters are looking for new markets and are anxious to give eastern Canada a fair trial with their best grades of anthracite.

The L. H. Packard Co., Montreal, will erect a handsome $40,000 factory on St. Antoine Street. It will be a five-storey building, brick and stone.

It is announced that the Brantford Street Railway will change hands this week. The purchasers are unknown. Big improvements and extensions are contemplated.

The output of the Dominion Coal Company's mines for October was 333,317 tons, and shipments amounted to 323,887 tons. This creates a new high record for the company.

The Dominion Bridge Co., owing to the volume of business done in the West and the extensive railway construction sure to take place, have decided to establish a plant and yards at Winnipeg.

The owners of the Sullivan mine in Kootenay, B.C., are considering the proposition of enlarging the smelter to a capacity which will enable it to treat not only all the company's ore, but also that of other mines in the same district.

The Catholic School Commission, Montreal, will erect a new brick school house at 219 Fulham Street to cost $40,000, and the Quebec Bank will also build a new bank on the corner of Amherst and St. Catherine Streets to cost $26,000.

A Detroit company intend to erect a smelter at Argentine near Haileybury. This smelter will be in running order by Christmas, and will handle all ore worth from $25 up. This company, it is stated, intended originally to erect a smelter at North Bay, but have been induced to locate at Haileybury.

Negotiations have been begun to establish a new industry at Kingston, Ont., for the manufacture of lap-welded iron and steel tubes for marine, stationary and tubular boilers, also wrought iron pipe for gas, steam and water. It is understood that an attempt is being made to interest Kingston capital in the venture.

Records were broken in the output of the Dominion Steel Company's open hearth furnaces and blooming mills last month. The open hearth shows a tonnage of 18,915, an increase of 3,837 over any other month in the company's history while the blooming mills produced 15,262 tons, exceeding the output of any previous month by 1,246.

The B. C. Electric Company at Victoria are making arrangements to build a new office building of brick two storeys high. The first floor will be used by the company and the second floor will be rented for offices. The company are also contemplating the exploitation for gas, which will be supplied for domestic and other purposes.

The Brandon School Board have decided to submit to the municipal electors in December, a by-law for the purpose of borrowing $52,000, which will be used as follows:—Collegiate building, $30,000; four roomed school, $9,000; repairs to the central school, $5,000; to pay off the balance on the Park school, and to pay for lots secured, $5,000.

A fly-wheel, eighteen feet in diameter and weighing thirty-five tons, has been installed in the power house of the St. John Railway Company by the Canadian General Electric Co. This wheel is an important part of what is known as a direct alternating electric light unit, 600 killowatt, and is connected with an engine of 1,200 h.p., cross compound, manufactured by the Laurie Engineering Co., of Montreal.

The Granby Copper Company have called a special shareholders' meeting for December 1st to authorize an application to the Legislature of British Columbia, under whose laws the company is incorporated, for permission to increase the par value of each share, from $10 to $100. The total capital will remain unchanged, so that the number of shares will need to be cut down to one-tenth their present number. The meeting will also authorize an increase in the number of directors from 12 to 15, and will make changes in details of the by-laws.

Mackenzie & Mann are negotiating

for the Moose Mountain iron ore deposits and will exploit them actively. A railway has been commenced from the village of Killarney on the north shore of Georgian Bay to these ore fields a distance of about 70 miles. Ore-shipping piers are to be erected on the bay, and the distance from these piers to lower lake ore-receiving ports will be less than from any of the upper lake shipping ports on the American side of the lakes. Besides Mackenzie & Mann the chief owners are, Joseph Sellwood, Duluth; J. T. Gates, J. L. Lambert and J. T. Mitchell, of Chicago, and Blair and Company of New York.

The by-law granting a loan of $12,000 to the Jackson Wagon Works Co., St. George, was carried by a majority of 839 in the town of Galt as an inducement to have that company locate there.

Companies Incorporated.

Calder Grain Shocker Co., Hamilton, share capital $30,000, purpose to manufacture grain shockers. The directors are:—J. Calder, G. S. Bingham, J. J. Morton and H. Rader, all of Hamilton, and A. R. Wardell, of Dundas.

Clinton Threshing Co., Clinton, share capital $50,000, purpose to manufacture threshing machines, engines and other machinery. The directors are:—D. A. Forrester, Goderich, and W. W. Farran, W. Jackson, W. Gunn and C. Hovey, all of Clinton.

Adjustable Axle Nut Co., London, share capital $30,000, purpose to manufacture and sell the Williams Adjustable sleeve axle nut. The directors are:—R. C. Williams, John Sussex, and A. Simpson, all of London; and W. T. Pridham and W. E. Davis, of Toronto.

Banwell-Hoxie Wire Fence Co., Hamilton, share capital $100,000, purpose to manufacture and sell woven wire and other fencing. The directors are: Henry Banwell, Walkerville; and Elizabeth Brett, Agnes Waldie MacGregor and James Edward Banwell, all of Windsor.

St. Catharines Building & Paving Co., St. Catharines, share capital $50,000, purpose to manufacture products of cement, etc. The directors are:—J. T. Petrie, F. A. Henry and A. W. Marquis, all of St. Catharines, and C. E. Secord, township of Grantham, and W. H. Swayze, township of Louth.

Canadian District Heating Co., Hamilton, share capital $250,000, purpose to produce natural gas, electricity, steam, and hot water for lighting and heating purposes. The directors are:—W. W. Stewart, W. J. Clark, R. B. Griffith and W. P. Witton, all of Hamilton, and J. H. Williamson, of Toronto.

Ontario Minnesota Mining Co., Port Arthur, share capital $60,000, purpose to carry on the operations of a mining, milling reduction and development company. The directors are:—J. D. Ensign, G. A. Elder and V. Stearns, Duluth, Minn.; W. W. Blackshaw, West Superior, Wis.; and G. F. Piper, of Minneapolis, Minn.



No. 30. OSHAWA, ONT. Nov. 18, 1905

ARE YOU

We have been telling you about **Perfect Metal Lath** — how well it works, how well it sells. No doubt, by this time, you have written to one of our offices and received full particulars. If you haven't done this, you can write now and secure the necessary information. **10,000 sq. yds. daily—remember that is what we are able to turn out, and it sells at 10c. per sq. yd.**

EQUIPPED WITH

Our latest manufactures are our **Fireproof Partition Stud** and **Sheet Steel Furring Strip,** two lines that we are offering at a fair price, and two lines which, owing to advances in the cost of lumber and fire insurance, are being received with open arms by builders. It it needless to say that the demand will continue to be heavy. The nearest Pedlar warehouse will be glad to quote you prices.

PEDLAR GOODS ?

Of course, we continue to manufacture **everything** required in the way of **Roofing, Siding, Covering, Ceiling,** etc. You have heard of our **700NA Brick Siding,** our **709NA** and **709NB Stone Siding,** our **710 Rock-Faced Stone Siding.** You have heard of the **Oshawa Shingle,** the best metal shingle made. You have seen some of our **Zinc** and **Copper Enrichments** and know how artistic they are. Every Hardwareman in the country ought to be selling Pedlar goods. The Hardwaremen who don't sell them **work in the interests** of the Hardwaremen who do. Which side are you going to be on ?

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

Many Reasons

Why Sales of Our Horse Shoes Exceed all Other Brands Combined.

Material possesses the qualities which enable it to withstand severe wear, and at the same time it has the ductility necessary to ensure ease of working and proper welding.

Shape designed to give the Blacksmith the least possible amount of fitting—correctly proportioned—crease placed and made so as to give proper setting to nail.

Finish of our shoes stamps them at once as a high-grade product—culling in very close and every shoe in each keg is a perfect one.

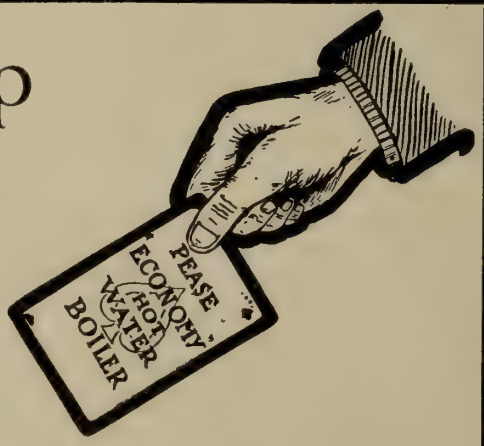
To sum up

"M. R. M." Horse Shoes

embody "more quality" than any other shoe on the market and the increasing sales is strong evidence that our claims are justified.

THE MONTREAL ROLLING MILLS CO.

Our Trump Card



Our trump card is the "Pease Economy Hot Water Boiler."

It is the article that completed the triumph for the "Pease Heating System"—that put the skybosh on the sploger, so to speak.

We have increased our facilities for manufacturing by the addition of another foundry, so we can fill orders now the same day as received.

Spread the glad news, please! and send in your order to-day.

PEASE FOUNDRY CO., Montreal.

PEASE-WALDON CO., Winnipeg.

Business Changes

Ontario.

David Belleau, Ottawa, plumber, has assigned to W. A. Cole.

The stock of Coxall & Co., Colborne, is advertised for sale by auction on the 22nd.

J. C. Gilpin, hardware merchant, St. Mary's, has sold to St. Mary's Hardware Co.

O'Connor & Wilson, hardware and plumbers, Ottawa, have assigned to E. A. Larmonth, meeting of creditors on 23rd inst.

Quebec.

J. J. Paquette, hardware merchant, Montreal, deceased.

The assets of L. C. Gigyere, hardware merchant, Quebec, are to be sold.

Western Canada.

Andrew Sharp, blacksmith, Belcarres, advertising business for sale.

John Telford, blacksmith, Minnedosa, has sold his business to S. Madill.

A. F. Murdoch, blacksmith, MacGregor, has sold out to James Priscon.

J. H. Martin, plumber, Winnipeg, has been succeeded by Wallace & Jones.

M. T. Greenway, blacksmith, Yellow Grass, has sold out to Henry Long.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

No. 143. A firm of mineral importers in Manchester, and a Lancashire manufacturing firm prepared to buy and smelt crude cobalt under conditions, will welcome correspondence from Canadian producers and shippers of same.

No. 145. A Lancashire saw mill firm now obtaining supplies from the Baltic would welcome quotations from Canadian lumber mill owners for pine floor boards free from knots in length from 9 to 25 feet.

No. 146. A Manchester firm of machinery importers desires to correspond with Canadian manufacturers of machine tools, valves, pipe fittings and paper mill machinery.

No. 147. A Lancashire firm of oil importers now obtaining their supplies from the United States would welcome quotations for naptha and creosote from Canadian producers.

A Manchester manufacturer of carriage and cart wheels wishes to obtain prices and description of spokes and hubs from Canadian shippers of same.

The town of Campbellford intend to develop and supply electric power, and for this purpose will erect a new dam to cost $60,000 and to give 3,000 h.p. The town has made application to the Government for license, and it is expected as soon as it is granted the work will commence.

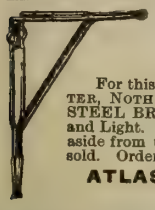
STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

OF ONTARIO Limited

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for. For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U. S. A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works
NEWPORT, MON., ENGLAND

EXPERIENCED ADVERTISEMENT WRITERS

who are open for a situation are requested to register their names with the MacLean Publishing Co., at any of their offices. Inquiries are occasionally made by manufacturers and wholesale houses who contemplate establishing their own advertising department.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

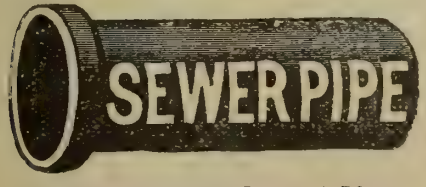
THE IMPERIAL CEMENT CO., Limited
Makers of the Celebrated Brand
"IMPERIAL" PORTLAND CEMENT
OWEN SOUND, ONT.

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Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
WE MAKE THEM.
SEND FOR CATALOGUE TO
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Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

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Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
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We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited
TORONTO MONTREAL LONDON
OTTAWA WINNIPEG

H. & R. SINGLE GUN

Automatic and Non-Ejecting



Simplest "Take Down" Gun Made

12 and 16 Gauge, Steel and Twist Barrels
20 Gauge, Steel Barrel

Superior in Design, Workmanship and Finish and the most popular Gun on the Market.

HARRINGTON & RICHARDSON ARMS CO.
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BUILDING AND CONSTRUCTION

HOMES OF THE FUTURE.

AT a meeting of the Nomad Club, in Montreal, recently, an interesting and novel paper was read by Mr. Roswell C. Fisher, owner and builder of "The Sherbrooke," and other apartment houses in the city, on the above subject.

Mr. Fisher began be defining the word "home," and expressing the opinion that every man ought to have a home, even if it was only one room. Broadly speaking, his definition of a home is any place where the occupant, man, woman, or husband, wife and family, affixed their individuality on the surroundings, and made it theirs for the time being. To begin with, then, it was obvious that a dwelling of some kind, if but a single room, was a requisite. Another essential was privacy, which proved that a hotel could not be a real home.

The speaker then sketched the evolution of the home, and how, from a separate building, detached, with grounds, it had now become, for the most part, a separate building attached to another building, due to the modern condition of life, which was squeezing people together. The frontage of houses was getting narrower, and, at the same time, deeper, which produced the horizontal home or flat.

This had finally developed into the apartment house, which Mr. Fisher contended was a real home. He combatted many prejudices against such a building such as that it lowered the family tone, that it was a place of awful bachelors and no place for children, who had to play in the corridors. As a matter of fact, there was no necessity for children playing in the corridors, as they had their own corridors in their suite of rooms. Such a house, the speaker contended, solved the cooking and servant question, as well as the many little family jars as to meals.

Among the advantages of the modern apartment house, Mr. Fisher cited the facts that it furnished privacy, permanency, and an opportunity for individualizing the home. Its smallest unit was a sitting, sleeping and bath room, which unit might be extended to twenty or more rooms, with a chef and assistants to cook for those that wanted it.

This was the house of the present—the result of modern conditions—and Mr. Fisher believed that the home of the future would be simply a development of the apartment house. To make it more comfortable, Mr. Fisher suggested to add to it the club, where those who saw no harm in cards and billiards could enjoy themselves without traveling blocks away, which, in a climate like ours, was often a matter of inconvenience. In such a house there would be a ball room, a room for private theatricals, a gymnasium, a hospital service, and, in fact, a club where the best society of men and women could live and have their homes. With reference to cost, Mr. Fisher quoted figures to show that it would be less than was now being paid for the same accommodation.

CEMENT BRICKS.

THE extraordinary growth of the cement building block industry during the past three years has developed almost the united opposition of the brick industry. The brick manufacturer and bricklayers' unions, in large cities, have influenced legislation against the hollow concrete block, requiring a 16-inch wall for the block, where a 12-inch brick wall will pass inspection. The entire adverse legislation being founded upon political pull. In short, graft ordinances, under which a brick having a compressive resistance to fracture of from 363 pounds down to 90 pounds per square inch will be received, while a cement block mixed one cement to four and one-half sand and gravel will develop a resistance of 2,750 pounds per square inch in 30 days and 3,750 pounds per square inch in one year. Yet the concrete block wall must be laid four inches wider than the brick wall. This simply shows how common sense can be overriden by political pull, and the substantial interests of entire communities subordinated to the selfish personal interests of a particular set of men, such as the clay brick manufacturers and bricklayers' unions. In order to overcome these graft ordinances we are in favor of the use of cement brick in large cities, where millions of them can be marketed; these brick can be made at a lower cost than burned clay brick. Pressed cement brick of a high grade, which bring $18 per thousand, are now in the Chicago market. They sell readily and are preferred to the clay brick. One cement brick mixed 1 to 15 and compressed on very heavy machines are finding a good market at $15 per thousand. Strange to say the bricklayers' unions do not object to laying these or other cement brick; they handle them as readily as they do the burned brick. When people become familiar with cement brick it will follow as a matter of course that the cement building block will be received with equal favor by reason of the greater economy in the use of the hollow concrete block. Therefore, do not give up the block; investigate cement brick machinery and take up the cement brick as a side line. It will pay. They can be used for partition walls. Cinders being used instead of sand and gravel. In Germany a great industry has been built up in a cheap brick known as Schwammstein brick, made of a porous volcanic rock and hydraulic cement. They are used for partition walls, being light and not over strong, yet answer every purpose for partitions in the best dwellings. One-storey cottages are built of this brick. They are very porous and need the protection of overhanging roofs, unless plastered with Portland cement mortar.—American exchange.

BUILDING NOTES.

The Waterous Co., Brantford, are to build an $8,000 addition to their factory.

Dundas Council have decided to install a filtering plant and make improvements to the reservoir.

The Northern Electric Mfg. Co. will erect a factory to cost $115,000 at the corner of William and King streets, Montreal.

Tenders are being advertised for by Parr & Fee for the erection of a brick warehouse for S. McConnell & Co., Vancouver.

The Granby Curling Club, Granby, Que., are erecting a new rink 152 feet by 36 feet, the whole to be covered with corrugated iron.

The foundry of the Canadian Aluminum Works, at Chambly Canton, Que., is being recovered with Pedlar's Perfect Rubber Roofing.

The Dickson Co., Peterboro, will erect a large planing mill at that place for the manufacture of sash, doors, blinds, interior fittings.

The Canadian Bank of Commerce have purchased a site in the centre of the business district of Halifax for $60,000, and will erect a modern bank building.

The New Liskeard Athletic Association are building a covered skating rink at New Liskeard, to be 70 feet by 165 feet. They expect to have it ready by Christmas.

W. Percy Gillespie, Regina, has purchased the property opposite the Alexandra Hotel, for which he paid $8,000. He intends building a large block on this property.

The Government will erect a new post office building at Edmonton as soon as a site can be selected. The city will secure the site leaving the Government to erect the building.

The three Masonic lodges of Vancouver have purchased a site for a new Masonic Temple on the corner of Georgia and Seymour streets. It is said the price paid for this property was somewhere in the neighborhood of $10,000.

A syndicate has purchased the Hamilton & Scott store, and the Adcock mill buildings, St. Thomas, for $16,000. Mr. Adcock will erect a new mill on the corner of Southwick street and the M.C.R. tracks. There is also talk of a new hotel being erected next Spring on the Ellison lot.

Permits have been granted in Hamilton for the following buildings: Gleadon & Fisher, four brick houses, $4,800; Fanning & Fogwell, six brick houses, $10,000; John Cline, brick house, $1,200; George Clapham, brick house, $1,200; Federal Life Building, $300,000; D. Henry, two brick houses, $4,800.

The building permits issued in Toronto during the first eight days of November represent an estimated expenditure of $139,315. The greater portion of the permits are for the better class of brick houses, of which 37 are projected at a cost of $99,150. There are also permits for 15 roughcast and frame houses, costing $21,450, and the balance is made up of alterations to brick buildings, $12,515; brick store on Dundas street, $1,100, and three stables to cost $9,000.

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By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
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Article XX.

CONSTRUCTING A PLUMBING SYSTEM.

WHILE it would be a useful thing, no doubt, to go fully into the details of several complete plumbing systems, large and small, showing both plans and elevations of different sections of each plant, thereby indicating to the reader how the object sought may be attained in a variety of ways and in that way helping him, perhaps, to surmount difficulties which from time to time present themselves, and while we may touch upon different phases of the subject again, we must, on this occasion, confine ourselves to a description of the system shown in the accompanying cut, which, after all, embodies all of the essential features contained in any system of plumbing, no matter how extensive it may be.

In the matter of installing a plumbing system in any kind of building the two chief points to be kept in view are, first, that the fixtures, piping, etc., shall be so constructed that the sewage may pass away to the sewer with a minimum of friction and with the least possible chance of choking, and, secondly, that by no possible combination of circumstances may the deadly sewer gas be permitted to escape from any part of the system into the air in the house.

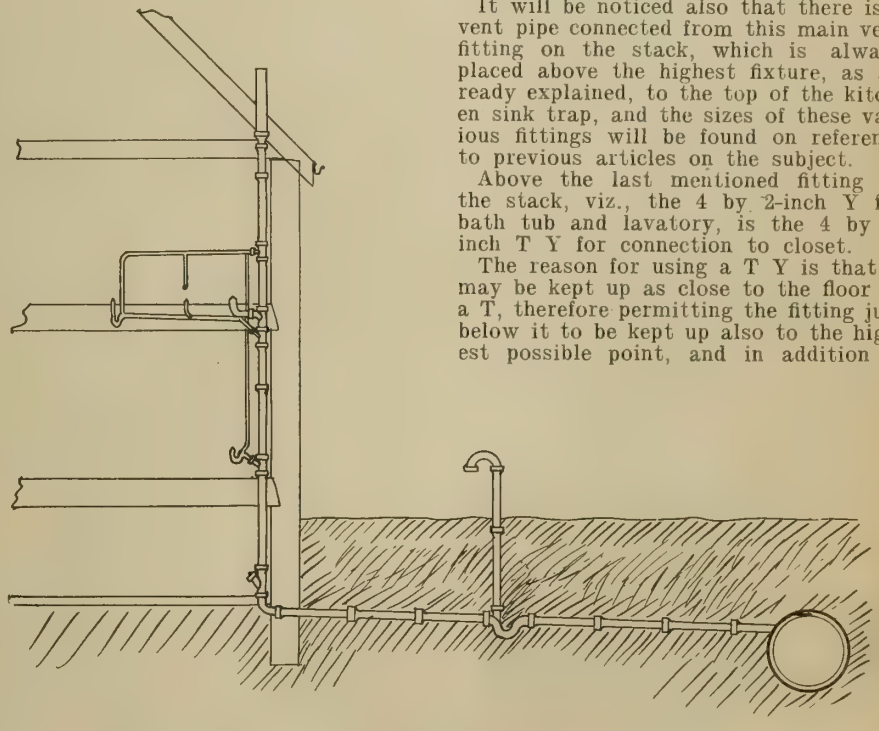
Now, starting off with these two ideas in our mind we will begin the construction of a little system which includes a sink in the kitchen and a closet, bath and basin up-stairs.

In such a system we would of course have a four-inch soil pipe which may be medium in weight but not under any circumstances light, because of the danger of having sand holes or cracks which may not develop for some time, and all soil pipe and fittings should be coated with linseed oil inside and out (this is usually done by the manufacturers) but not coated with pitch as was formerly the custom, because the latter material is likely to cover defects which often prove dangerous after the plant has been some time in use.

Starting from the bottom of the soil pipe stack, we see that it is turned out through the basement wall for a distance of three or four feet before it enters the tile pipe drain, and the chief reason why iron should be used through the wall in preference to tile is that in case of settlement of the wall the latter is very likely to be broken and the sewage allowed to run back under the basement floor, while there is little danger from this source where iron is used, and in addition it is a distinct advantage to have nothing but iron pipe inside the building because of the reduced liability of the escape of either sewage or sewer gas.

Inside the wall will be noticed a 4 by 4-inch Y, into the side of which is placed a 4-inch "clean-out," the cover of which may be removed for the purpose of removing any obstruction in the drain.

In the opinion of the writer the best clean-out fittings are those made of cast iron with the cover bolted on, because



not only is the seal more easily made with the soft rubber washer supplied with this class of clean-out than is the case with the brass fitting with the cap screwed into an internal thread, but unlike the latter, the former are not pressed out of a true circle by the uneven pressure of the lead, which is caulked between them and the soil pipe fitting in which they are placed.

Passing up from the basement to the kitchen we come next to the fitting placed in the stack to receive the waste from the kitchen sink, which if pretty close to the floor will be a 4 by 2-inch Y, or if it be a little higher up where the opening into the stack will be about on the level with the bottom of the trap, about as shown, and what is no doubt the best arrangement, then a 4 by 2-inch half Y is used, with a $\frac{1}{4}$ S trap.

If, however, there is any special reason for keeping the opening into the stack at the highest possible point, then a 4 by 2-inch T Y and a P trap are the proper kind of fittings to use.

The next fitting on the stack as we move upward toward the roof is a 4 by 2-inch Y from the side of which is taken a branch for the waste from the bath and lavatory respectively.

On the end of this branch is shown a trap which will be connected with the bath tub, the said trap having a vent or "break-syphon" connected back to the main stack, as explained in a previous article, and between the said trap and the stack is left a branch for the lavatory trap which will be placed above the floor, and also a branch from the vent pipe to connect to said trap.

It will be noticed also that there is a vent pipe connected from this main vent fitting on the stack, which is always placed above the highest fixture, as already explained, to the top of the kitchen sink trap, and the sizes of these various fittings will be found on reference to previous articles on the subject.

Above the last mentioned fitting on the stack, viz., the 4 by 2-inch Y for bath tub and lavatory, is the 4 by 2-inch T Y for connection to closet.

The reason for using a T Y is that it may be kept up as close to the floor as a T, therefore permitting the fitting just below it to be kept up also to the highest possible point, and in addition a T Y has an opening on the side at right angles to the run of the fitting, and at the same time enters the stack with a graceful curve, providing a minimum of friction and liability to choke.

Where a closet is connected to the stack as described, assuming, of course, that the closet is of the modern "syphon" variety, there will be no necessity for a break-syphon, as the air will be drawn down the stack and will be equally as effective as if a break-syphon were connected to the lead bend under the closet where such a connection is always placed in the case of syphon closets.

In case the older style wash-out closet is used, however, a break-syphon must be connected to the horn on the top of

the trap of the closet, provided for the purpose, and to the main vent just before it enters the stack.

Above the break-syphon connection to the stack the next fitting, which is just under the roof, is a 4 by 5-inch increaser, and from that point upward to the proper height, which when not near attic windows need not exceed eighteen inches, the stack should be five inches in diameter, instead of four inches, as it is from the increaser down to the first joint outside the basement wall.

The reason for increasing the size of the stack to five inches at under side of the roof is that during very cold weather the internal surface of the pipe where it is exposed above the roof becomes coated with hoar frost, and four inch pipes frequently become choked up solidly, thereby allowing the traps on the system to be syphoned for want of air.

In most places a trap must be placed on the drain between the house and the main sewer, and where this is the case a "foot" vent is placed on the house side of the trap and run up above the probable snow level, and on the top of this is placed a regular cap made for the purpose, or a return bend as shown, and as the stack inside the house is usually warm a draft is created within it which constantly draws fresh air down through the foot vent and through the drain and stack, so that any gases generated are quickly passed out above the roof.

AMERICAN SCHOOLS AND HEALTH LAWS

By J. D. Sutcliffe of the British Institution of Mechanical Engineers.

A SEVEN weeks' tour examining the schools of the Eastern and Central States of America raises at once a comparison with the schools visited when the writer was last in the States fourteen years ago. The progress in the provision for the health of the school children has been most marked and every care is now taken that the heating, ventilation, sanitation and fire appliances are of the most perfect description.

In 1891, when five weeks were spent by the writer in examining the schools in the Eastern States from an engineering point of view, the majority were warmed by hot air furnaces fixed in the basement on what was known as the "Smead System." This system has now been almost entirely superseded by steam and hot water heating combined with fan ventilation, but great credit is due to Mr. Smead for the educational and pioneer work done between 1885 and 1895, in raising the standard of comfort and health in American schools. No other man has done so much for the children, and in 1891 his system was in use in probably 90 per cent. of the schools in the Eastern States. It was never considered suitable for the English climate, as the air was passed over the outside of a furnace which warmed it to the required temperature, and English engineers considered such air too dry and too liable to have the nature burned out of it. America has evidently come to the same conclusion, and it is seldom one sees the furnace system except in the smallest village schools.

Statutory Regulations.

The State of Massachusetts was the first to draft rules and regulations for the building of schools, and even in 1891 there were most stringent regulations regarding the heating, ventilation and sanitation of school buildings. The following extracts from their by-laws show this :

"1. The apparatus, with proper management, is to heat all the rooms, including the corridors, to 70 deg. Fahr. in any weather.

"2. With the rooms at 70 deg. Fahr. and a difference of no less than 40 deg. Fahr. between the temperature of the outside air and that of the air entering the room at the warm air inlet, the apparatus is to supply at least 30 cubic feet of air per minute for each scholar accommodated.

"3. Such supply of air is to so circulate in the rooms that no uncomfortable draught will be felt, and the difference in temperature between any two points on the breating plane in the occupied portion of a room is not to exceed 3 deg. Fahr."

It will be noticed that the temperature is to be maintained "at 70 deg. Fahr. in any weather." This is very stringent, and in the opinion of most English engineers is far too high. It must not be forgotten, however, that the percentage of humidity in the air is small compared with this country, and most people find that 70 deg. is not more comfortable in America than 60 deg. in England. The question of relative humidity is an important one in fixing the most comfortable temperature, and whereas records kept in American schools last Winter show an average humidity of only 26 per cent. the humidity observations taken in the writer's office were never lower than 65 per cent., and the average for the Winter months would be about 72 per cent.

A Typical Chicago School.

The Chicago schools were not examined on the previous visit in 1891, as it was understood the school buildings were far behind those of the Eastern States. This has now all been altered, and Chicago is paying great attention to the equipment of all schools built within its area. On an average twenty-five new twelve-roomed schools are built each year, and the Chicago Board of Education employ their own architect for these. In addition, they have appointed a special expert in heating, ventilation and sanitation, Mr. T. G. Waters, who has charge of this portion of the work and designs all the necessary equipment. He aims at, and secures, a very high standard of efficiency, and the following description of one of the most recent schools shows the amount of care taken to provide fresh air and comfortable working conditions for the children. The school selected is a three-storey building, 174 feet by 124 feet in plan with twenty-seven rooms in addition to the rooms in the basement. It was designed by the architect to the Board of Education, Mr. W. B. Mundie, and erected under his supervision. The heating and ventilation and all matters pertaining to plumbing, gas fitting and sewage, were designed and installed under the direction of Mr. Waters. The three floors are practically identical; there is a longitudinal central corridor with the rooms at either side and a stairway at each end; the classrooms, eight per floor, are practically all of the same size, 27 feet by 32 feet, and each classroom has a spacious wardrobe, through which the group of flues in connection with the heating and ventilation rise for the rooms of that tier. Above the stairway of the main entrance, situated in what is really a mezzanine storey, is the office of the principal, and over this, in the second storey, is a library. The three central rooms of this part of the third storey, it may be added, are formed by sliding blackboard partitions which, when rolled away, form an assembly room with a permanent stage on the opposite side of the corridor.

Air is distributed throughout the building on the plenum system. It is received by a double outlet fan in the centre of basement, and discharged in opposite directions through both tempering and heating coils located immediately beyond; and the individual room supplies are carried from the warm air plenum chamber to the various groups of flues. The fan is run at a speed of 150 revolutions per minute, belt driven from a 9 ft. by 14 ft. steam engine, and has a capacity under as assumed air pressure of ¾ oz. of about 25,000 cubic feet from each outlet per minute. Each outlet is provided, however, with a plate so that any desired quantity of the delivery up to 50 per cent. may be cut off. The air is carried from the plenum chamber through the small blast ducts to vertical flues and thence to the room inlets, each room supply being independent. The air is delivered about six feet above the floor level, but the area of the opening is such that a considerable reduction of the velocity of the incoming air is effected. Among the requirements of the apparatus it is specified that the supply should amount to 1,800 cubic feet of air per hour per pupil, assuming an avergge occupancy of fifty-four pupils per room. The escape of air from the rooms is in general through side registers at the floor line in the wardrobes, this method providing for warming these rooms as well. The exhaust system is designed to provide for the discharge of about 75 per cent. of the inflow from the fan into the building, the rest of the air escaping through the numerous inevitable points of egress possessed by every building besides the open doors. There are two boilers of the horizontal tubular type, 60 in. in diameter and 18 ft. long, containing forty-eight 4 in. tubes, and a pressure of 45 lbs. is carried.

The exact cost of this building could not be learned, but a similar new school which is just being completed is expected to cost $145,000, of which $12,000 is allowed for the warming and ventilating plant.

Steam-Heated and Furnace-Heated Schools Compared.

Mr. Waters also gave the writer figures relating to two eight-roomed schools, each accommodating three hun-

dred and twenty scholars, and which were erected in 1894. One of these was heated by steam heating apparatus and mechanically ventilated by means of fans. The other was heated by warm air from furnaces and ventilated by natural means only. The warming and ventilating plant in the first school originally cost $5,000, and in the furnace-heated school $3,200. The total cost of the bituminous coal used in the steam plant (price 10s. per ton) amounted to $450 per year, whilst anthracite had to be burned in the furnace plant, costing $6.50 per ton, and the average cost of fuel was $1,000 per year. The steam-heated building was also less costly to maintain, the repairs to the plant from 1894 to date amounting to only $85, whilst $450 had been spent in the same time on the furnace heaters.

The Board of Education of the city of Chicago has not installed furnace heaters in any first-class school building for the past sixteen years, except the one referred to previously, and this is in addition to an existing building which was heated by furnaces and the character of which was such that the introduction of modern steam heating and ventilating plant to heat both buildings was not permissible.

Although one must admire the thoroughness with which the whole subject of heating, ventilation, and sanitation has been studied, and the results obtained, one cannot altogether agree with the methods that are most in favor. As an example, all the heating surface is placed at one point in the basement. Now they frequently get temperatures of 40 degs. to 45 degs. Fahr. below freezing, and this means that the hot air has to be delivered into the rooms at a temperature of from 150 degs. Fahr. to 170 degs. Fahr. in order to maintain an average temperature of 70 degrees throughout. It cannot be considered good practice, and doubtless in time the methods will be modified to avoid such high initial temperatures.

New York Schools.

Turning now to the city of New York, similar stringent rules affecting the comfort, health, and safety of school buildings are in force. The city has its own board of education, and this board has its own architect. It also appoints a chief engineer, who is a trained man and designs all the heating, ventilating, sanitary, and fire-prevention appliances, and sees to their proper application. The architect's department, under Mr. C. B. J. Snyder, is now spending over a million and a quarter pounds sterling each year in building new schools and in bringing the older schools up to a reasonable degree of effectiveness for their work.

The writer had the pleasure of inspecting the "New High School of Commerce," and there is certainly no school in England, excepting perhaps the Manchester School of Technology, that can compare with it either in beauty of design or in wealth of equipment for the purpose intended. The building is five storeys high with basement, and has a frontage of 150 feet on Sixty-fifth street and 100 feet on Sixtv-sixth street, and will accommodate 1,630 students. The contract price for the school was $302,500, but it has cost with additions over $350,000. Practically it serves the same purpose as the Manchester Whitworth street Secondary School, but there the comparison ends. The basement contains a fine restaurant where food is supplied at cost price, a swimming bath 50 feet by 30 feet, a fine gymnasium with a gallery round asphalted and banked to serve as a running track, besides the fans, boilers and engines necessary for supplying the fresh air, heat, steam, hot water, and for driving the elevators. Two elevators run continuously from basement to the fifth storey, and a class of forty are taken up or brought down at the same time. The steam supply is furnished by four boilers, 18 ft. long and 4½ ft. diameter, while the conveyance of coal to the boilers and the removal of ashes from them is by an overhead trolley track, which saves a great amount of floor space. It was specified that the whole building was to be kept at a temperature of 70 degs. Fahr. in any weather, and the fans are large enough to supply fresh air at the rate of 1,800 cubic feet per hour for each pupil in the building. The air is only delivered at a temperature of 68 degs., the real warming being done by steam-heated radiators fixed in each room. The radiators are all controlled automatically, so that if the temperature in any part gets above 70 degrees the nearest radiators are partially closed off, while if it sinks below 70 degrees the steam supply is increased. This is much sounder in principle and design that the Chicago method of concentrating all the heating surface at one point, as the air is forced into the rooms at normal temperature.

The lighting is by electricity, generated by a complete plant of dynamos and high speed engines on the premises, and this is the case with most New York schools, although occasionally it is obtained from one of the supply companies. An interior telephone system is so arranged that the principal can be in constant touch with all parts of the building.

In a crowded city like New York, the playground problem is a very serious one. In this country we require a minimum unbuilt or open space for a playground equal to 30 square feet for each child. In New York the architect is pleading for a minimum playground space of at least 5 square feet per child, but in some of the more crowded areas it is almost impossible to get this.

Considerable precautions are taken to minimize fire risks, and the new schools are all in direct electric communication with the fire stations. All school doors open outwards and are fixed with automatic bolts so that it is only necessary to push against them from the inside for them to fly open. The scholars are regularly drilled in fire exercises, and at the High School of Commerce the building can be cleared in less than four minutes.

The filtering of the air has received considerable attention, and each fan has its own air supply and its own filter. The filter for each fan consists of 260 bags or sacks 6 feet long and 10 in. diameter. Fresh air enters at the front of the bag, and must, of course, pass through the fine canvas bag before it can reach the fan. The bags are easily taken down and cleaned or washed and others take their place whilst this is being done.

New Legislation.

The State of New York last year passed an Act to "Amend the Consolidated School Law Relative to the Proper Sanitation, Ventilation, and Protection from Fire of School Houses." This Act is very drastic in some of its provisions, and insists on all plans deposited with the board of education showing in detail the proposed heating, ventilating, lighting and sanitation. The Act goes on to say, "The commissioner shall not approve any plans that do not provide at least 15 square feet of floor space and 200 cubic feet of air space for each pupil. Provision must also be made for assuring at least 30 cubic feet of pure air every minute per pupil, and the facilities for exhausting the foul air shall be positive and independent of atmospheric changes." This, of course, means that no school can be built without providing mechanical ventilator of some description. The fire protection clauses are worth quoting, as these matters are entirely neglected in many English schools, and it is a custom in some schools to lock the outside doors—a most reprehensible practice. "All exit doors shall open outwardly and shall, if double doors are used, fasten with movable bolts operated simultaneously from the inner face of the door. No staircase shall be constructed except with straight runs, all changes in direction being made by platforms. No doors shall open immediately upon a flight of stairs, but a landing, at least the width of the door, shall be provided between such stairs and doorway."

The State of Pennsylvania has so recently as the 2nd of April last passed an Act, entitled, "An Act for the purpose of governing the construction of Public School Buildings in order that the health, sight and comfort of all pupils may be protected." The Act declares that "Whereas it is of great importance to the people of this Commonwealth that Public School Buildings here after erected by any Board of Education or School Trustees shall be properly heated, lighted and ventilated. No school house shall be erected in this State until the plans, specifications, etc., for the same showing in detail the proper heating, lighting and ventilating of such building have been approved.

"Light shall be admitted from the left or from the left and rear, and the total light area must equal at least 25 per cent. of the floor space. Each classroom shall have at least 15 feet of floor space and not less than 200 cubic feet of air space per pupil, and shall provide for an approved system of heating and ventilation by means of which each classroom shall be provided with fresh air at the rate of 30 cubic feet per minute for each pupil, and warmed to maintain an average of 70 degs. Fahr. in the coldest weather."

These new Acts show that the school authorities in America are keenly alive to the necessity of healthy school buildings, and one cannot help asking when our education authorities are going to wake up to the vital necessity of fixing some definite health standard for all our schools.

PLUMBERS' CASE SERIOUS.

ACCORDING to the reports in the daily newspapers the plumbers and supply men on trial in the Toronto Police Court for "conspiracy" in forming what is called the "plumbers' combine" are already convicted and sentenced to long terms in jail in addition to having to pay enormous fines. In reality the case is not as bad as that yet, it being necessary for the court to hear the witnesses and pass judgment upon the evidence submitted. But the matter is undoubtedly a serious one and is looking more so each week. From present indications it would appear that as a result of bad legal advice, referred to in a recent issue of Hardware and Metal, certain members of the trade in Toronto have placed themselves in a serious position and some may have to pay for their mistake by both fine and imprisonment.

* * *

During the past week unlooked for developments have occurred, the case in the Police Court having been proceeded with in spite of the fact that the trial before the Assize Court had been commenced. The latter court adjourned the cases to come up for further hearing on Friday of this week, the accused electing to be tried by the judge, but on Tuesday the investigation proceeded in the Police Court, Secretary W. H. Meredith being discharged as a defendant in order that he might be placed in the witness box. For over two days he was examined by Crown Attorney Curry, extracts being read from the minute books, etc., of the Master Plumbers' Association, and Mr. Meredith being asked various questions in an endeavor to prove wrongdoing. The witness firmly maintained that the association members did all they could to secure a profit of 25 per cent. on all work done and maintained that this was a fair profit for them to expect.

* * *

Agreements between the supply houses and master plumbers were inquired into, the daily newspapers seizing the opportunity to criticize the agreement harshly although it is little different from many other trade agreements in existence. It was shown that in some cases more than the regular profit was secured, but in fully 90 per cent. of the contracts performed the association's rules were adhered to, the smaller firms invariably being found to be charging the regulation prices. Some cases of violating rules of the association were investigated and it was shown that J. B. Reeves, the complainant in the present investigation, was one of the most active members and if any wrongdoing was done he was a party to it. Later on it is probable that further evidence will be presented regarding Mr. Reeves' record as treasurer of the journeymen's union.

* * *

During the examination of Mr. Meredith it developed that books showing the extent of the "I.O.U." system were kept by him, the Crown officers securing them as evidence. Members of the association claim to have no knowledge of these books, the larger firms being the ones chiefly concerned in them. Much evidence was also taken regarding the association's bank account and the distribution of the funds to the members. The cross-examination of Mr. Meredith was most exhaustive and the Crown Attorney claimed to be well satisfied with the results.

* * *

After Mr. Meredith's evidence was taken, Mr. Black, bookkeeper for J. B. Reeves, was examined in an endeavor to show that the journeymen conspired to damage Reeves' business. Secretary Morris, of the Central Supply Association, was also called to give evidence regarding the agreements entered into between the supply houses and their customers. The Crown contends that the last agreement proposed between the two associations was illegal, it being a conspiracy for the committees to merely come together and draft a proposed agreement. This is a point of law which will have to be decided, however.

* * *

On Friday the cases came up before the Assizes again and a report of their doings will be given next week. The net result of the week's doings in the Police Court is to make it practically necessary to postpone the trials until the January Assizes, thus dragging on the cases in the newspapers and keeping the accused in suspense as to the result. The loss of time has already been a heavy one and it is regrettable that the matter could not be dealt with immediately. While some of the union men have been permitted to continue work, several of the supply men and master plumbers are kept in court from day to day. In one case where a supply man wished to leave the room for a few minutes he was asked to leave his hat behind.

* * *

Throughout the country the newspapers are making charges that "combines" exist in various places. No specific action has yet been taken and the matter is undoubtedly newspaper talk. The publicity given the trials in Toronto, however, is certain to have an injurious effect on the trade generally, so that the sooner the matter is disposed of the better. If any are found guilty of wrongdoing they must suffer the consequences and it is to be hoped that they will face their trials like men rather than absenting themselves from the country. The important work before the members of the association is to discover if any rules in the association's by-laws are illegal and have them amended in order that the work of the organization in future may be such as to protect the trade from the evils of competition while giving the public the benefit of the most up-to-date work at a living price.

THE PLUMBER'S HARVEST.

THE following from an English exchange is supposed to describe the doings of an English plumber. The cap would, of course, not fit any of our Canadian readers but should prove interesting reading :

"He is walking about his shop rubbing his hands and chuckling to himself, with one eye on the thermometer and the other on the door, for as the mercury slowly sinks towards the bulb he knows there will soon be a procession of distraught householders whose water-pipes have burst, and who will anxiously implore him to save the drawing-room ceiling from destruction. Not that he intends to hurry himself. He is a plumber, and a plumber is a leisurely person, even when he is gleaning his yearly harvest. Besides, if he saved the drawing-room ceiling he would be spoiling the plasterer's little job. He peers out of his dirty window between the wonderful selection of twisted lead pipes, which look as though they were suffering from dread disease with their large bulbous joints and conventional broad black bands. Round the corner—his shop is always just round the corner—comes the first of the procession, a worried little man who has forgotten his overcoat in spite of the frost, and snatched up the first hat—his son's—from the hat-stand. 'Come to No. 3 at once. The pipe in the bath-room has burst and—' 'Just off to No. 10, sir.' 'You must come to us first, the drawing-room ceiling—' ' 'Fraid I've promised, sir. So's theirs.' 'Come at once. I'll make it worth your while.' 'Well, in that case, I'll be with you in ten minutes.' The little man goes puffing back again, and the same dialogue is repeated a dozen times with a dozen other distraught householders. Only then does the plumber leave his lair to reap his harvest. He is a leisurely man and it will last him weeks. 'If people will pour boilin' water down the pipes, 'stead of wrappin' 'em up in straw or felt, I ain't goin' to grumble,' he says. Why should he ?"

LIGHTNING RODS.

FOUR years ago the Royal Institute of British Architects appointed a committee to look into the matter of lightning rods. A report was made recently, which may be epitomized as follows :

First. Two main lightning rods, one on each side, should be provided, extending from the top of each tower, spire, or high chimney stack, by the most direct course to the earth.

Second. Horizontal conductors should connect all the vertical rods (a), along the ridge, or any other suitable position on the roof; (b) at or near the ground line.

Third. The upper horizontal conductor should be fitted with aigrettes or points at intervals of 20 to 30 feet.

Fourth. Short vertical rods should be erected along minor pinnacles and connecting with the upper horizontal conductor.

Fifth. All roof metals, such as finials, ridging, rain water and ventilating pipes, metal cowls, lead-flashing gutters, etc., should be connected to the horizontal conductors.

Sixth. All large masses of metal in the building should be connected to earth either directly or by means of the lower horizontal conductor.

Seventh. Where roofs are partially or wholly metal-lined they should be connected to earth by means of vertical rods at several points.

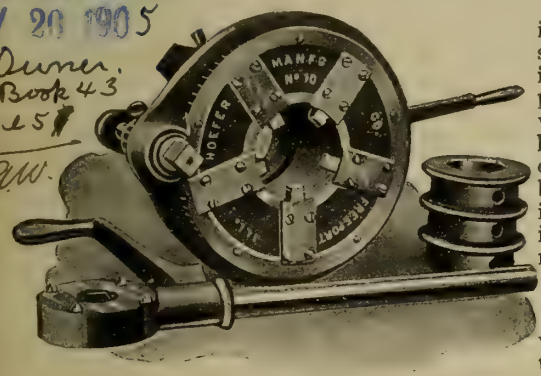
Eighth. Gas pipes should be kept as far away as possible from the positions occupied by lightning conductors and as an additional protection the service mains to the gas meter should be metalically connected with house services leading from the meter.

HOEFER PIPE THREADING MACHINE.

A NEW adjustable hand power pipe threading machine has just been brought out by the Hoefer Mfg. Company, Freeport, Ill., who desire to secure a good agency in Canada. The machine is capable of threading pipe of any material in which it is regularly made. It cuts a standard tapered thread, the taper being effected by the slight withdrawing of the dies as they feed forward, thereby increasing the diameter of the thread. The operator does not have to force the dies on the work. They are fed forward automatically, being mounted in a gear, which is drawn in an advancing direction by a threaded sleeve having a thread of the same lead as that of the dies. The thread is cut clean and to a proper taper, so that the pipe will make up with a perfectly fitted joint and is left strongest where the thread terminates.

A distinctive feature of the machine is the provision of means for quickly adjusting the dies so that they will cut either slightly over or under the standard size. Another unique feature and one that is very desirable is that a given size of machine requires but one set of dies (five in a set) to cut the threads within its capacity; consequently much time is saved that would otherwise be

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Hoefer Adjustable Hand Power Pipe Threading Machine.

lost in substituting a new set of dies to cut another size of pipe. The dies are arranged with a projection which insures the correct centreing of the pipe, and as the dies are not taken out of the machine they cannot be lost.

The machine may be operated easily by one man, as a powerful leverage is obtained and the friction is comparatively small, making only a moderate amount of labor necessary. The machine is of simple construction and although light is claimed to be very strong. It is described as having no complicated parts to get out of order, and the moving parts are so protected that they will not become clogged with dirt or chips. The dies may be readily sharpened by grinding their faces. They are all numbered in their proper order and any number can be duplicated.

A HEATING PATENT.

A boiler furnace, as is known, works best when as little heat as possible escapes through the chimney. To some extent, says Technische Berichte, this escape is unavoidable, for if all the heat were utilized the chimney would not draw, since it is the heat in the chimney which first produces the draft in the furnace necessary for burning the fuel. Nevertheless, too much heat escapes by the chimney in most cases. A patent recently granted professes to rectify this defect by bringing the flue containing the products of combustion to the place where the steam is applied before it passes into the chimney. The air, steam, or hot water and feed pipes are passed through this flue, so that the heat contained in the gases of combustion prevents radiation from the pipes in question and contributes to the heating of the air, water and steam.

PLUMBING NEWS.

Hemmond & Rodway, Winnipeg, have secured the contract to install heating and plumbing systems in the new Normal School at Winnipeg.

* * *

S. G. Gourlay, St. Catharines, is to install one of the new "Bernhardt" boilers, made by the Garwood Foundry & Machine Co., Garwood, N.J., in a building for which he has secured the contract to install a heating system. The "Bernhardt" is pronounced a wonder by all who have seen it.

* * *

Rumors are rife of the establishment in Toronto of a factory to manufacture steel radiators. The plant will be, it is said, a branch of an American company. About a year ago a company in which Mr. Safford, well known to the heating trade, was interested, secured a charter to manufacture steel radiators, but little has been heard of what they intend to do. Naturally this company is being connected with the present rumors.

* * *

The James Smart Mfg. Co., Brockville, report securing the following contracts to install heating and ventilating systems: St. Andrew's Church, Hanover; Episcopal Church, Forest; Presbyterian Church, Kingston; Disciples Church, Collingwood; Methodist Church, Brinston's Corners, and the Roman Catholic Church, St. Anicet, Que.

* * *

Taylor-Forbes' new warehouse on King street west, Toronto, has been stocked up with "Sovereign" radiators and boilers during the past week, the new warehouse being a great convenience in shipping goods.

NO BAD DEBT.

A FRIEND of mine was recently returning by train from Buffalo. In the smoking room of the car were a number of commercial travelers who were engaged in discussing losses from bad accounts. During the conversation some were boasting how little their firm had lost through goods sold by them.

"You fellows may boast as you like," said my friend, whose identity was unknown to them, "but I am with a house in Toronto which does a business of $10,000,000 a year, and we never have a bad debt; never lose a cent."

The travelers looked at him with scorn, and one remarked: "What house are you with?"

"With the Customs House of Toronto," said he, "and we are always paid in advance."

"Well, by Jove, you have got us. Come and have something at my expense," said the traveler who had doubted the Customs House man's veracity. W. L. E.

DON'TS FOR BOILERS USERS.

A BOILER manufacturing firm in England incorporates in its catalogue some practical don'ts for those handling boilers. They are:

Don't fix sectional boilers to poor chimneys, as they require a good draught. Don't let the ashes accumulate under the fire-bars. Don't let the soot remain in the boiler-flues. Don't use small slack, as it is not economical. Don't put the new fuel towards the back of the boiler when firing, but near the front. Don't let the fire-bars become uncovered at the back. Don't leave the firing-door open. Don't let the fire out during frost. Don't light a fire in the boiler when the pipes are frozen. Don't fix a boiler without a safety-valve. Don't allow hot water to be drawn off from the boiler. Don't fix the cold water supply pipe direct into the boiler. Don't empty the apparatus during the Summer months. Don't screw sectional boilers up too tightly. Don't light a fire in a new boiler before the bolts have been slacked back. Don't fix a boiler without covering it with non-conducting material. Don't try to make the boiler sections meet, as they are not intended to. Don't fix a boiler more than two sizes larger than is necessary for the work. Don't fix a boiler to work to its full listed capacity. Don't be content with an old pattern boiler, when a modern one will save its cost in one or two years.

HORSE-POWER VS. MAN-POWER.

THE measurement of a horse's power of work, first ascertained by Watt, the inventor of the steam engine, was founded upon the basis that the average brewery horse was capable of doing work equal to that required to raise 330 lb. of weight 100 ft. in one minute, or 33,000 lb. one foot in one minute. This estimate, however, was for one minute; it would not be possible for a horse to perform this amount of work continuously for eight consecutive hours. One horse could exhaust 12 men in a single day, for where a strong man could perhaps pull half of 330 lb. to a height of 100 ft. in two minutes, he probably could not repeat the operation more than a few times. A man's power is about one-tenth of a horse's power. That is, where a horse could pull 330 lb. to a height of 100 ft., one minute, and then slack up and repeat the operation, for eight hours, thus pulling four hours, and slacking up four hours, it would require ten strong men to perform the same amount in that length of time. When man put horses to work the gain in labor for the world was thus ten-fold. Multiply this by steam power, water power, air power, and above all, electric power, and one has a problem in mechanical progression. — Popular Mechanics.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 17, 1905.

A FEVERISH haste to ship goods before the winter freights came into force characterized the early part of the week, and as many of these rush orders were received too late to be sent out on the 14th (the last day of summer freight rates) the last days of the week were also more than ordinarily busy.

The shortage of iron pipe which has been so marked of late reached an acute stage this week, with the result that deliveries on nearly all sizes both of black and galvanized are nearly impossible to get. The culmination was the inevitable withdrawal of discounts by the manufacturers, and the substitution of advanced prices.

Iron pipe fittings are also difficult to obtain, the local foundries being rushed to their utmost capacity to fill orders. Between the demands of the retailers for immediate shipments, and the difficulty of getting new stock from manufacturers, the jobbers are at their wits' end this week.

Range Boilers—A steady trade is manifest. Prices remain as follows: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Last week's advance has been held very firm, especially in view of another advance in the primary market. Prices are: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe—The continued scarcity, added to steady advances in all iron products, has compelled manufacturers to withdraw their discounts. Prices now are as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.; 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings—Last week's situation is continued in the present one. There is a fine demand for these goods. Our discounts are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—Conditions are steady. We quote as follows: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Nov. 17, 1905.

IRON pipe's advance of a week ago holds quite firm, and low stocks will cause the figures to jump upward again during the coming week in all probability. Some dealers having large stocks are still selling low, but the majority are unable to do better than the figures we quote.

Low down syphon closets and, in fact, all Canadian enamelware, have advanced as announced last week. Lead pipe holds firm at the higher figure and solder is being held higher, the increasing prices of lead and tin being responsible.

Business continues remarkably good for this season. Trade in Toronto is being affected adversely, however, by the trial of the master plumbers and supply men charged with "conspiracy" in organizing a "combine." Instead of attending to their work a large number are forced to hang around the court room and days and weeks of valuable time are being lost.

Lead Pipe—Last week's advance holds very firm and a fair trade is doing. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 per cent.

Soil Pipe and Fittings—Buying is very active owing to the rush of opening the ground before it is frozen up. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Another advance is predicted, the recent rise being adhered to by most dealers. We quote as follows: Black, 1-4 inch, $2.09; 3-8 inch, $2.09; 1-2 inch, $2.38; 3-4 inch, $2.99; 1 inch, $4.29; 1 1-4 inch, $5.85; 1 1-2 inch, $7.02; 2 inch, $9.36; 2 1-2 inch, $15.75; 3 inch, $30.50; galvanized 1-4 inch, $2.92; 3-8 inch, $3.08; 1-2 inch, $3.53; 3-4 inch, $4.14; 1 inch, $5.94; 1 1-4 inch, $8.10; 1 1-2 inch, $9.72; 2 inch, $12.96; 2 1-2 inch, $23.00; 3 inch, $30.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Demand for boilers is very brisk as many contracts are being completed. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—As predicted a fortnight ago, prices have been advanced, our quotations now being: Bar solder, half-and-half, guaranted, 20 1-2c.; refined, 19c., and wiping at 18 1-4c.

Enameled Ware—We are unable to announce the new list figures on Canadian enamel ware, but an advance has been made covering all lines. The high price of iron is largely responsible for the increase.

'TWAS WORK TOO.

Prof. Nichol, the Cornell physicist, during the recitation of a freshman class in natural philosophy, observed a tall, lanky youth in a rear seat, his head in a recumbent position, his body in a languid poise, his eyes half closed and his legs extended far out in an adjacent aisle. He was either asleep or about to lose consciousness.

"Mr. Frazer," said the great scientist, "you may recite."

The freshman opened his eyes slowly. He did not change his somnolent pose.

"Mr. Fraser, what is work?"

"Everything is work," was the drawling reply.

"What! Everything is work?"

"Yes, sir."

"Then, I take it, you would like me and the class to believe that this desk is work?"

"Yes, sir," replied the youth wearily, "that desk is woodwork." — Cornell Widow.

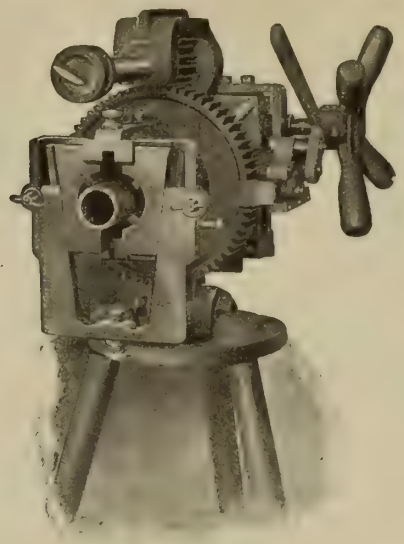
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The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

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More pipe threaded with less effort and expense in repair costs. Our Machines and Hand Stocks embody distinctive features:

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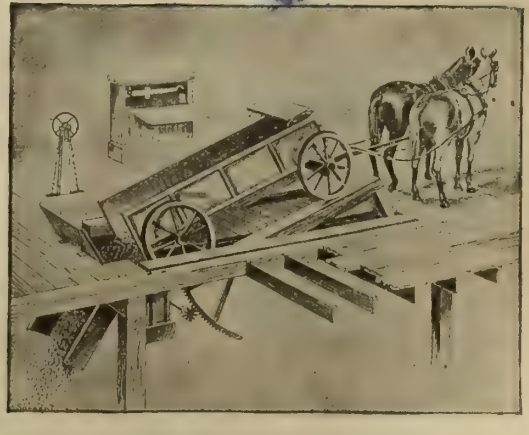
Everything in scales, from the smallest postal scale to the largest Railway Track Scale.

Nobody ever questions the quality of a scale with "FAIRBANKS" on it.



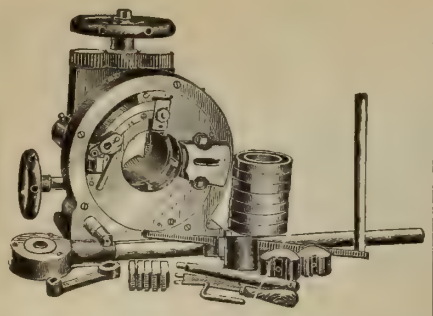
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THE CANADIAN FAIRBANKS CO., Limited

MONTREAL TORONTO WINNIPEG VANCOUVER



Merrell Portable Hand Machines

Nos. 5, 6, 9 and 11

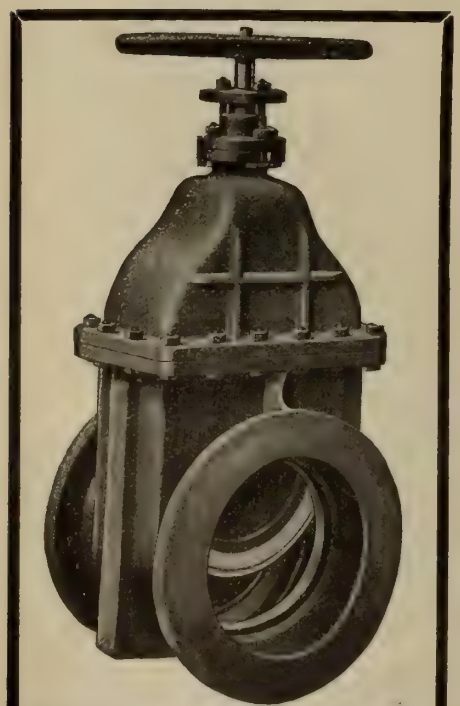
These machines do better and more rapid work, both in threading and cutting off, than any other hand machine on the market. They have a greater range of work and make quicker changes from size to size of pipe. The vise is self-centering, is actuated by rack and pinion to feed the pipe into the chasers. The machines have our Standard Adjustable quick-opening and closing Die Head, and our Improved Cutting-off Knife. No. 5 cuts and threads pipe 1 to 4 inches, inclusive; No. 6 cuts and threads pipe 1 to 6 inches, inclusive.

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WALKERVILLE, ONT., CANADA

THE TRANSMISSION OF HEAT.

PROFESSOR TYNDALL explained that the transmission of heat is powerfully influenced by the mechanical state of the body through which it passes. Pure silica, in the state of hard rock crystal, is a better conductor than bismuth or lead, but if the crystal be reduced to powder, the propagation of heat is exceedingly slow. Through transparent rock salt, heat is copiously conducted, but through common table salt very feebly. Asbestos, he explains, is composed of certain silicates in a fibrous condition, and he could place some asbestos in his hand, and in it a red-hot iron ball which he could hold without inconvenience. That the division of the substance should interfere with the transmission might be reasonably inferred, for heat being motion, anything which disturbs the continuity of the molecular chain, along which the motion is conveyed, must affect the transmission. In the case of asbestos, the fibres are separated from each other by spaces of air; the motion has, therefore, to pass from solid to air, and from air to solid, and it is easy, consequently, to see that the transmission of vibratory motion through this composite texture must be very imperfect. —Tyndall on Heat.

VALUE OF AIR SUPPLY.

THE science of architecture, if under this head we include the principles of building construction and the heating and ventilation of buildings, has done and is doing much of interest and importance to the student of public health science. The air supply, especially for the modern civilized and too often sedentary form of mankind, is in the long run quite as important as the water supply, the milk supply, or any other supply. Surely we can not be too careful of the purity of a substance which we take into our bodies oftener and in larger volume than any other, and which has come, rightly no doubt and as the result of long and painful experience, to be known as the very breath of life. Human beings may survive and seemingly thrive, even for long periods, in bad air, but for the best work, the highest efficiency, the greatest happiness and the largest life, as well as for perfect health, the very best atmosphere is none too good. Hence the permeability of the walls of houses and other buildings, and the heating and ventilation of dwellings, school houses, churches, halls and other public places require, and in the near future will receive, a much larger share of our attention than they have to-day.

WESTERN HEATING CONTRACT.

Smith & Fergusson Co., Limited, Regina, are busy installing the heating and ventilating system in St. Paul's Church. The specifications called for a Pease Economy furnace.

In Nelson, B.C., the J. H. Ashdown Hardware Co. are installing a Pease Economy furnace in the public school. This firm are agents for the Pease-Waldon Co. of Winnipeg.

The Pease-Waldon Co. specifications have been accepted for the heating and ventilating of the public school in Carlyle, Sask. Porteous Bros., the local agents for the company, are installing the work. W. A. Elliott, of Brandon, is the architect in charge.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co.

TWEED, Ontario Limited

MANUFACTURERS' AGENTS.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL

29 Melinda Street TORONTO

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

WORK AND PRICES RIGHT GALVANIZING ONT WIND ENGINE & PUMP CO. TORONTO, ONT. LIMITED.



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.

182 Adelaide Street West

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO

CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

GUELPH AXLE WORKS

THE GUELPH SPRING & AXLE CO. LIMITED

GUELPH, ONT.

The Best South Wales Produces

IN STEEL COKE TINPLATES

"LLYN"
"LYDBROOK"
"ARTO"
"FRONTEIR"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

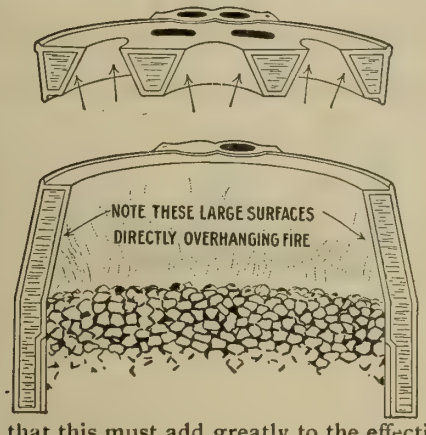
FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

Clinch that Contract Now

The man who waits until he is asked to figure on a heating system is likely to remain waiting. You must go out after business now-a-days.

Make sure that you have a chance to submit your tender. This is the best time to hustle for Spring trade. Go after the man who is going to put up that new building. Talk about an

OXFORD HEATING SYSTEM



and you'll not only have a chance to figure on the job, but ten chances to one of getting it.

The Oxford System has so many convincing points, is so irresistible a proposition that it will go far towards clinching that contract.

Our Oxford ("B" Series) Boiler is immensely superior to anything ever offered in the heating line. The principal feature of the Boiler is the improved build of the fire-pot, which is wider at the bottom than at the top. The upper walls overhang the fire and, as a practical man, you will notice by a glance at the cut that this must add greatly to the effective heating power of the surfaces in question.

A joint that is a joint. Squeezing in layers of rubber is the old method of making joints, and, of course, the source of endless trouble and annoyance. Our new method—smooth tapered steel nipples pressed into smooth tapered holes—makes an absolutely permanent metal to metal joint.

Our smaller sizes in Oxford Boilers save your time. They are built together when we ship them, so the steamfitter has only one joint to make.

Oxford Steam and Hot Water Radiators are a fitting complement to Oxford Boilers, and these, in combination, assure Beauty with Economy, Efficiency and Consequent Comfort.

Send for the Gurney Oxford Book of Steam and Hot Water Heating Apparatus.

WE also manufacture cast iron and steel plate ranges, gas stoves, ranges and heaters, hotel ranges, warm air furnaces and all kinds of cooking and heating apparatus, plumbers' supplies.

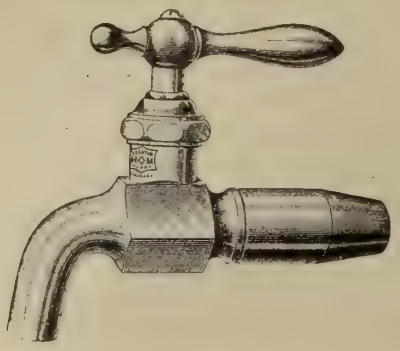
The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 130
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MUELLER FULLER WORK

STANDARD GRADE BIBB.



In some fuller bibbs the bearings at the eccentric and ball stem joint wear prematurely and get so much play that the bibb will neither fully open nor tightly close.

In Mueller Fuller Bibbs the bearings at this point have broad enough surfaces to make them wear for years without being perceptibly affected. They will always admit a full stream and completely shut it off.

Mueller Fuller Bibbs are made in plain and hose patterns and with tail pieces for all styles of pipe connection. The Bibb illustrated is the plain pattern with lead pipe tail piece.

Each Bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea,

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

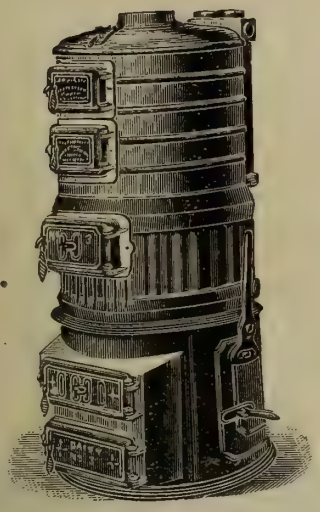
WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

This is the season when you want Light and the best is what we all are looking for.

THE WELSBACH GAS LAMP



is not surpassed by any, while the

LINDSAY LICHT

is in favor in nearly every house and office in Canada.

We stock both of these lamps and can ship at once upon receipt of orders.

Our line of hanging lamps for oil is complete, and we solicit a share of your orders.

THE ROCHESTER LAMP CO.

109 Church Street, TORONTO.

Are You Wise or Otherwise?

It's because we know you are wise that we want to interest you in

The NATURO Closet



This is something that will not appeal to the plumber who has too much business and too much money, because it increases both.

Our method of assisting our customers to gain new and profitable trade is wonderfully successful and can be made to benefit you as well as anyone else.

Drop us a line if you want further particulars.

The NATURO Company

C. H. Muckenhirn, President.

Salem, N.J.

WM. STAIRS, SON & MORROW, LIMITED

HALIFAX, N. S.

Have a complete line in Enameled Sanitary Goods and solicit enquiries, and all Orders given prompt attention.



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

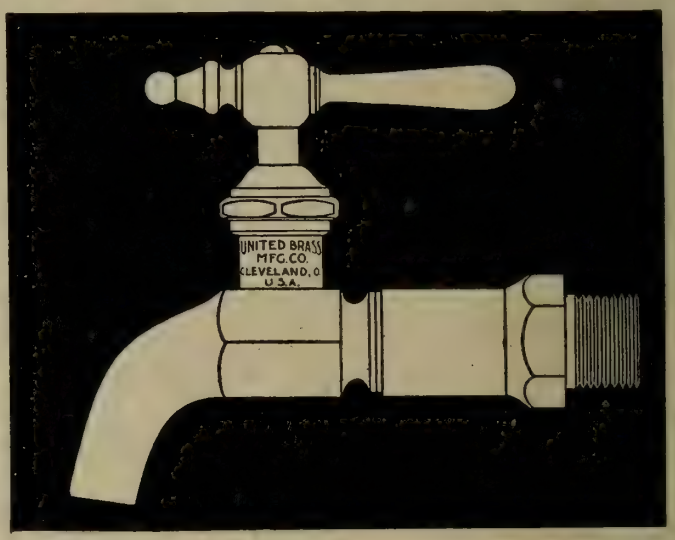
Fine Grey Iron Castings.

OSHAWA, - CANADA

Tried and Tested—Always Satisfactory

United Fuller Work used by Leading Plumbers Everywhere

Unite with United Brass Goods The Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

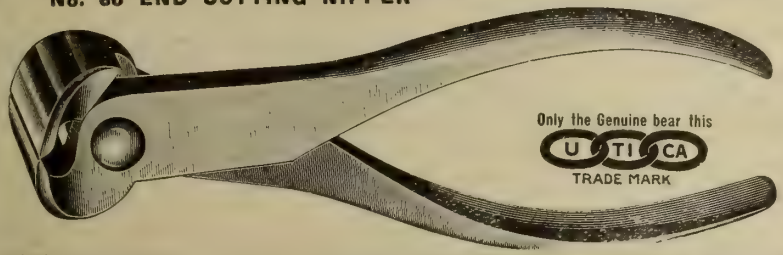
J.C.M.

Galvanized Dead Flat Sheets

made from British Siemens Martin Steel only; most reliable for working up. Apply for samples and prices to:

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND.

No. 60 END CUTTING NIPPER



QUALITY GUARANTEED

Ask your dealer for UTICA TOOLS or write us.

HIGH GRADE PLIER AND NIPPERS. *UTICA DROP FORGE & TOOL CO.*
Canadian Office, 215 Coristine Building, MONTREAL. Factory, UTICA, N.Y. 296 Broadway, NEW YORK, U.S.A.

ARE YOU IN NEED OF

SPRINGS?

We make them any shape

Send samples for prices

The WALLACE BARNES CO., BRISTOL, Conn.

The most light for the least money

C. G. E. INCANDESCENT LAMPS

LONG LIFE EFFICIENCY RELIABILITY

Write for prices and quantity discounts.

CANADIAN GENERAL ELECTRIC CO., LIMITED
HEAD OFFICE: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

TIN PLATES

"ELYN" "LYDBROOK" "GRAFTON"

I can supply these famous brands at Lowest prices.

Write for prices and ascertain.

J. A. HENDERSON, Agent for **T. W. & J. WALKER,**
Board of Trade Bldg., MONTREAL. WOLVERHAMPTON.

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

NEWMAN'S PATENT
INVINCIBLE FLOOR SPRINGS

Combine all the qualities desirable in a Door Closer. They work silently and effectually, and never get out of order. In use in many of the public buildings throughout Great Britain and the Colonies.

MADE SOLELY BY
W. NEWMAN & SONS, Birmingham.

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED
5 5 5
YEARS YEARS YEARS
5 5 5
GUARANTEED



At the Same Price

Isn't it Best to use the Kind that are

GUARANTEED
FOR
5YEARS 5 YEARS 5
BY
GLAUBER, CLEVELAND, OHIO, U.S.A.

THERE IS MONEY IN IT

Selling Brands of SHEATHING like "CYCLONE" and "JOLIETTE" is certainly profitable to the retailer. And we have other trade bringing lines too. Here they are :

"BLACK DIAMOND"

TARRED FELTS
BUILDING PAPER

WRAPPING PAPER
READY ROOFING

A stock of the above is essential to successful business.

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Nov. 17, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—		
56 and 28-lb. ingots, 100 lb.	$37 00	$38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. / 14x60, " / 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	50

IRON AND STEEL.

	Montreal.	Toronto
Common bar, per 100 lb.	1 97½	1 95
Forged iron "	2 17½	2 05
Refined " "	2 32½	2 05
Horseshoe iron "	2 32½	
Hoop steel, 1½ to 3 in. base		2 75
Sleigh shoe steel "	2 07½	
Tire steel	2 22½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 56
"J" quality, best warranted		0 18
"I" " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works :

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co. :

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
16 gauge	2 35	2 30
18 "	2 25	2 40
20 to 24 gauge	2 20	2 50
26 "	2 25	2 65
28 "	2 30	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 75
All bright	3 75
Galvanized Canada Plates, 52 sheets	4 00

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 10	
22 to 24 gauge	3 35	3 75
26 "	3 60	4 00
28 "	3 85	4 25

Apollo.

10¾ oz	4 25
28 gauge (American gauge)	4 00
26 "	3 75
24 "	3 65

	Comet Bell.	Queen's Head.
16 to 20 gauge	3 10	
22 to 24 gauge	3 35	3 60
26 "	3 60	3 85
28 "	3 85	4 10

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "		5 60
"	5-16 "		4 45
"	⅜ "		3 85
"	7-16 "		3 70
"	½ "		3 55
"	9-16 "		3 45
"	⅝ "		3 35
"	¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	17 25	17 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	23 00
Plain, 14 oz	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 50	7 25
Part casks	7 75	7 50

LEAD.

Imported Pig, per 100 lb	4 25
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's	per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality	Special
4 and 4½ ft. 3 in. rolled rim	$18 00	16 00
5 feet "	19 00	17 00
5½ " "	20 50	18 50
6 " "	23 25	21 25

Plate E I1

4½ feet	2½ in.	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00

Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	1 90
¼ "	2 09
⅜ "	2 09
½ "	2 38
¾ "	2 99
1 "	4 29
1¼ "	5 85
1½ "	7 02
2 "	9 36

Galvanized pipe—	
¼ inch	2 92
⅜ "	3 08
½ "	3 53
¾ "	4 14
1 "	5 94
1¼ "	8 10
1½ "	9 72
2 "	12 96

Lead Pipe discount 25 per cent.

Malleable Fittings—Canadian discount 35 pe cent.; American discount 25 per cent.

Cast Iron Fittings— Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work. discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over, an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 and 10 per cent.
Standard Globe, Angle and Check Valves, discount 70 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 75 and 5 per cent.

No. 1 compression bath cock	net	1 75
No. 4 " "	"	1 75
No .7 Fuller's	"	2 10
No. 4½, "	"	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 6⅔ per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

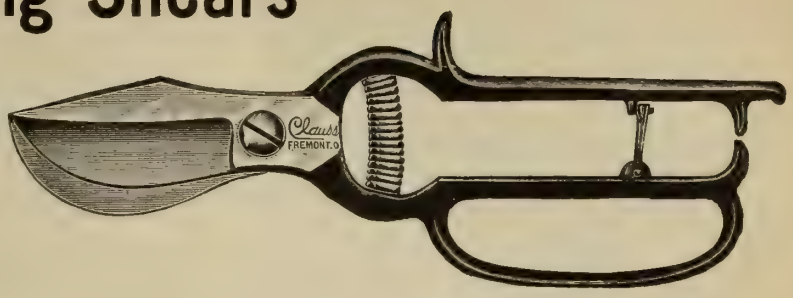
Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		56.00

Clauss Brand Pruning Shears

Fully Warranted

Our Plain Pruning Shear is of the very best our secret process of manufacturing can produce. There is no question as to the quality, which is unsurpassed.

Filed Handles and Finely Polished Blades. Ask for Discounts.



The Clauss Shear Co., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Refined	0 18½
Wiping	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PUTTY.

Bulk in bbls	1 50
Bulk in less quantity	1 80
Bladders in bbls	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	....	5 75
" hunters	....	5 25
Underhill American Bench Axes, 40 p.c.		

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt	per ton	45 00
Heavy Straw Sheathing	per ton	35 00
Dry Sheathing	per roll, 400 sq. ft.	0 40
Tar "	" 400 "	0 50
Dry Fibre	" 400 "	0 55
Tarred Fibre	" 400 "	0 65
O. K. & I. X. L.	" 400 "	0 70
Resin-sized	" 400 "	0 45
Oiled Sheathing	" 600 "	1 00
Oiled "	" 400 "	0 70
Root Coating, in barrels	per gal.	0 17
Roof " small packages	"	0 25
Refined Tar	per barrel	5 00
Coal Tar	"	4 00
Coal Tar, less than barrels	per gal.	0 15
Roofing Pitch	per 100 lb.	0 80 0 90
Slater's felt	per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz.	1 00 1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross	50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt.	0 60 0 65
Red		0 05 0 06
Crayon	per gross	0 14 0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English	per doz.	2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz.	5 00 9 00
man	"	0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz.	0 55 1 00
Axle	"	0 22 0 33
Screw	"	0 22 1 00
Awning	"	0 35 2 50

PUMPS.

Canadian cistern	1 80
Canadian pitcher spout	1 40

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and	5	"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1½ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		0 22	0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz. 2 75	3 25
Bronze, Genuine	" 6 00	9 00
Shutter, porcelain, F. & L. screw	per gross 1 30	2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes	....	2 50

Woodyatt, ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.

Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ..per doz. 2 25
Cabinet.
Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz. 1 25	3 50
Brass	" 1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross 1 35	1 50
Brass head	" 0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross ...	7 80
" "	" ...	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

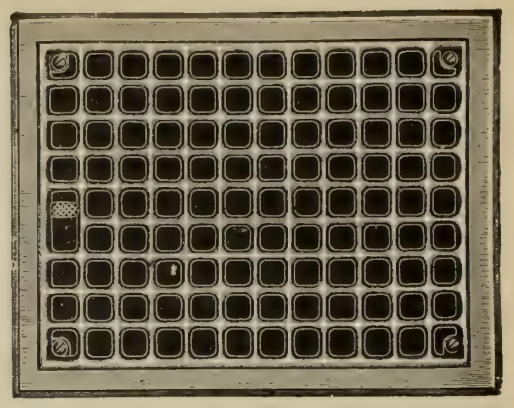
Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.

HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.



PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord. 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... . . . 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24..... ...	0 85
" 18 x 30.....	1 00
" 18 x 36.....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb.....	per lb.	0 37
2-lb. or over	"	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "		28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 pe cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent..... . .
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80 No. 19, $2.50. All prices per 1000 ft. measure F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	56 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	33 00
Royal Canadian, 11 in. "	....	39 00
Royal American, 11 in. "	....	39 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

COMMERCIAL TRAVELERS.

At the quarterly meeting of the Dominion Commercial Travelers' Association, held Saturday night in their rooms, Board of Trade building, Montreal, the president, Mr. J. S. N. Dougall, made a report showing an increase of 380 members, and a record of 860 new ones, making the total over 5,000 on this roll.

During the meeting there was quite a long discussion over a new bank account which had been opened, the president and treasurer showing the benefits derived by the association in so doing. Finally the action of the Board of Management was confirmed, and a vote of confidence was unanimously passed.

Nominations for officers and directors for the ensuing year resulted in the following names being brought forward:

President—Fred L. Cains, of the firm of Brophy, Cains, Limited; W. J. Egan representing W. R. Brock & Co.

Vice-president—E. D. Marceau was elected by acclamation.

Treasurer—Robt. C. Wilkins by acclamation.

Directors—Ed. S. Bois, R. J. Forman, J. D. Shaw, W. F. Cleghorn, A. Terroux, Jas. S. Thompson, J. B. Giles, and G. W. Prescotte.

To keep pace with Montreal's growing commerce, it is proposed to build a new $3,000,000 wharf.

BENNETT MANUFACTURING CO.

Practically no dividend will be paid creditors of the Bennett Manufacturing Co., Pickering, manufacturers of hardware boxes, refrigerators, kitchen cabinets, etc. The company went into liquidation some time ago and it has now been announced that the liquidators have been unable to dispose of the machinery, although considerable advertising has been done. The machinery is covered by liens for all it is worth. The other chattels were disposed of and realized about $800 clear out of which rent, wages and insurance will be paid. The claims against the company amount in all to $9,000.



WALKER CORK SCREWS

are good holiday souvenirs and live sellers the whole year. Are made well and are made out of good material. That is why we guarantee every one that we put out. When ordering Cork Screws try **Walkers.**

Manufactured only by ERIE SPECIALTY COMPANY, ERIE, Pa. U.S.A.



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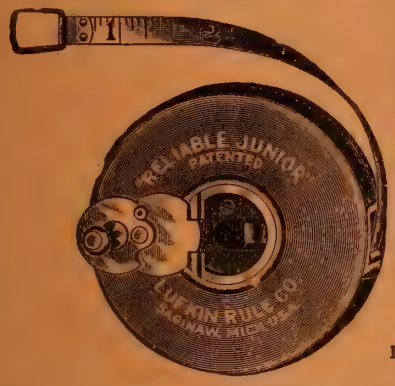
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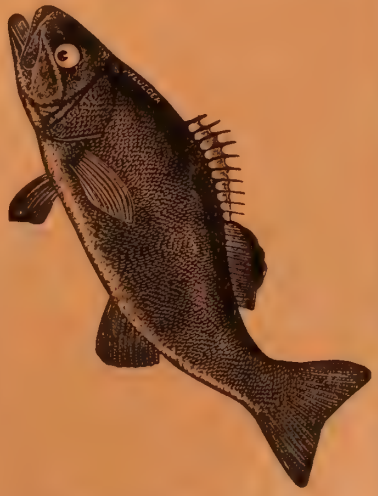


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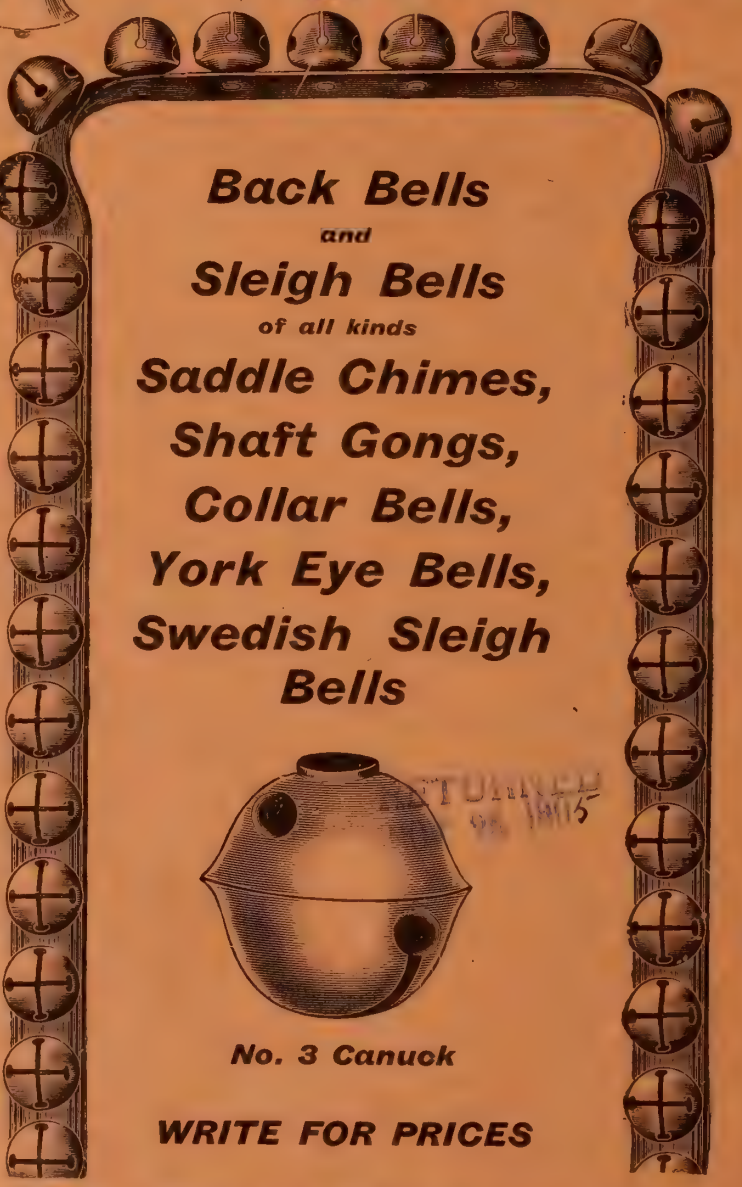
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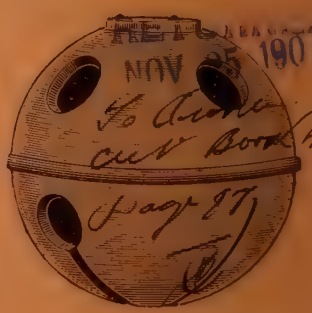
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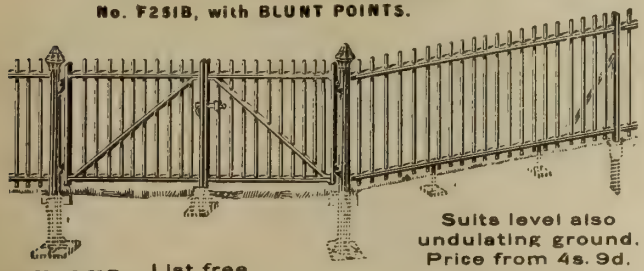
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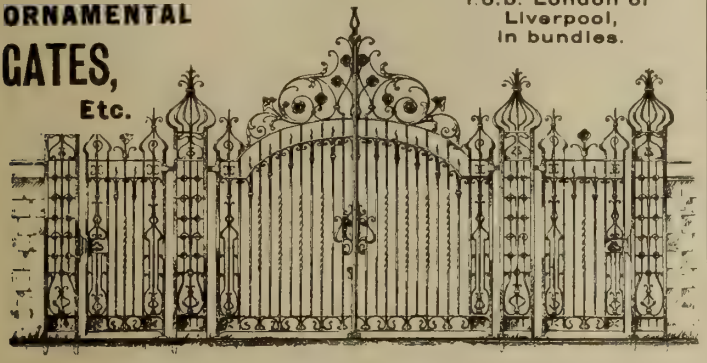


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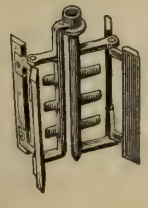
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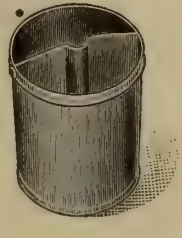
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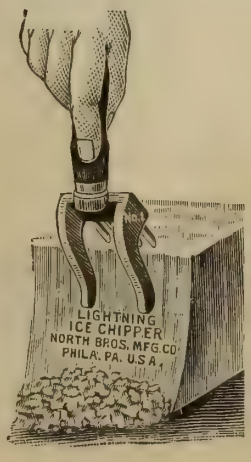
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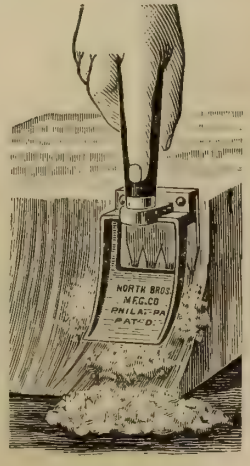
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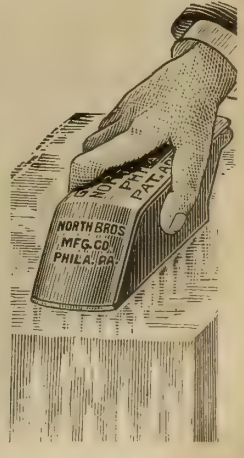


THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or dessert, with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, **Automatic** Tin Scrapers.

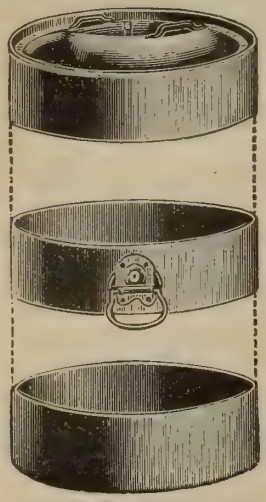






"LIGHTNING" "CROWN" "GEM"
ICE CHIPPERS ICE SHAVE

Davidson's Milk Can Trimmings



IN COMPLETE SETS

"Broad Hoop" Pattern—Composed of the following: 1 Broad Hoop Bottom, 1 Cover, 1 Centre Hoop 6 inches wide, 20 gauge, 1 Broad Top Hoop, 1 pair Cover Handles, 1 pair Side Handles.

and Milk Cans with Broad Hoop Patent Roll Rim Bottoms

are in great demand and their general popularity is increasing yearly.

They give satisfaction to users and dealers alike.

IMPORTANT

The best mechanical skill obtainable is utilized to make Davidson's Milk Can Trimmings perfect in even the smallest details.

Write for Price List.



Heavy Rolled Edges make our Patent Bottoms doubly durable and waggon and factory floor protectors.

Some customers do not like to send us small orders. That's a mistake. We take them, large or small. We are waiting for your order now.

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

Antimony Lead Copper Zinc Tin

LARGE STOCKS ***CLOSE PRICES***

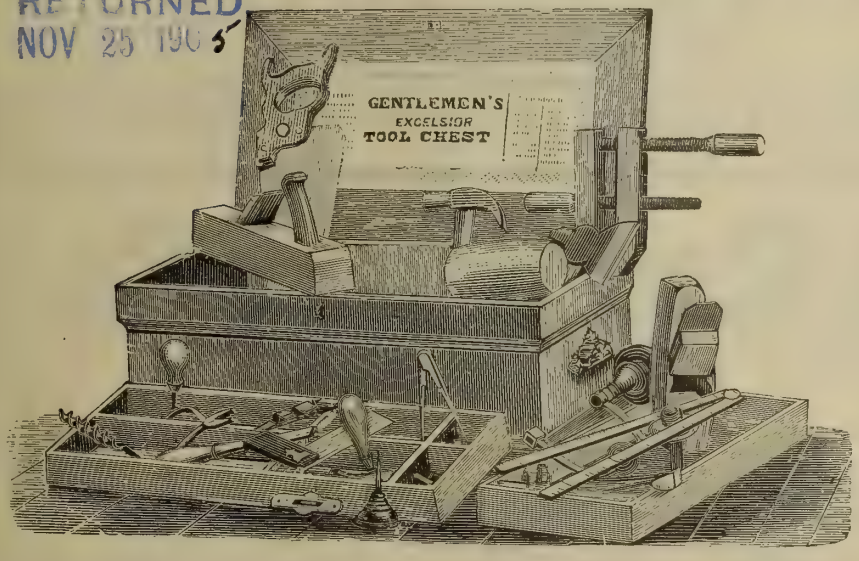
M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

THE RETAILERS' HARVEST—XMAS SPECIALS

RETURNED NOV 25 1905



TOOL CHESTS—Selected Chestnut, containing from 16 to 35 Tools.

"Oh, I want something for a boy—I don't know what; but I must get something. He's getting so big now that it's hard to know just what to give him. Can't you help me out?"

No doubt you recognize it—that's Xmas Talk.

The flurried parent who has been looking all over town for the past week, and is now no better off than when he started out.

This is your chance to reap a harvest, if you carry a good line of "Christmas Specials."

Tool Chests, Rifles, Air Rifles, Bracket Saws, Skates, Hockey Sticks, Pocket Knives, Boys' Axes, and many other things too numerons to mention, any of which will sell like hot cakes during Christmas week.

We carry a complete stock at prices sure to please. If you are not prepared, now is the time to place your orders, don't wait till the last minute.

Orders to be shipped by express will have our special attention during the Holiday Season.



SAVAGE, MODEL 1905—22 Calibre, Take-Down. Fitted with Adjustable Screw which regulates the Trigger Pull to any desired strength. Swiss Butt Plate.

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Cat Book 43
page 83



KING REPEATER—Shoots 150 times without Reloading, Repeats at the Muzzle, Beautifully Nickel Plated.



STADACONA—Extra Quality, Welded and Tempered Narrow Steel Runners, Straight, full Nickel Plated and Polished Perpendicular Supports, Improved Top Plates, Left and Right. 10½—2.

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Guaranteed Best Quality

Sole Agents for Canada

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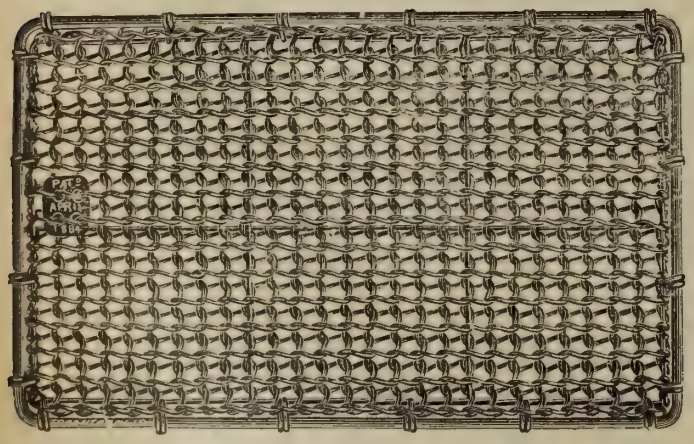
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PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

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The most durable, cleanest and perfect sanitary Mat made.
Has been on the market for 20 years.
All sizes and shapes made to order.
For stock sizes see catalogue.

THE B. GREENING WIRE CO.
LIMITED
HAMILTON, ONT. MONTREAL, QUE.

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That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

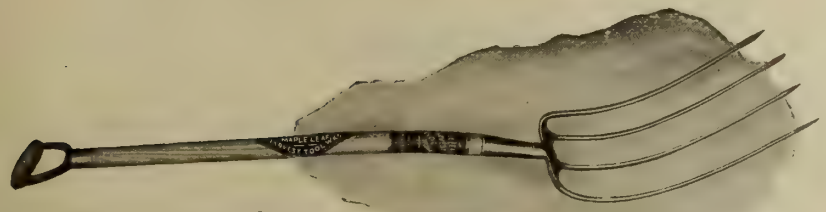
Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS
CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



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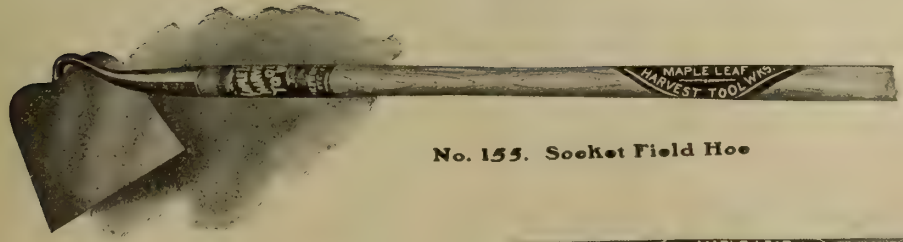
No. 138. Spading Fork.



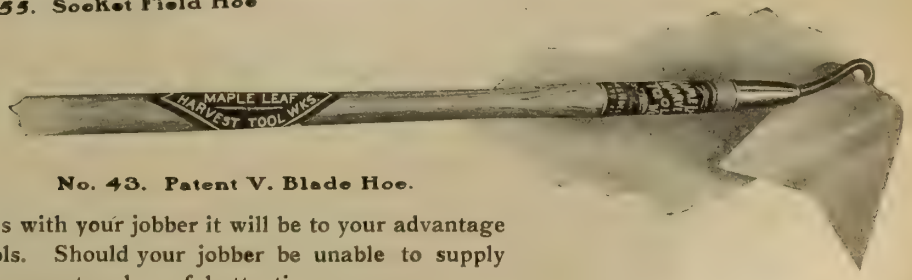
No. 243. Beet Fork.



No. 108. Hay Fork.



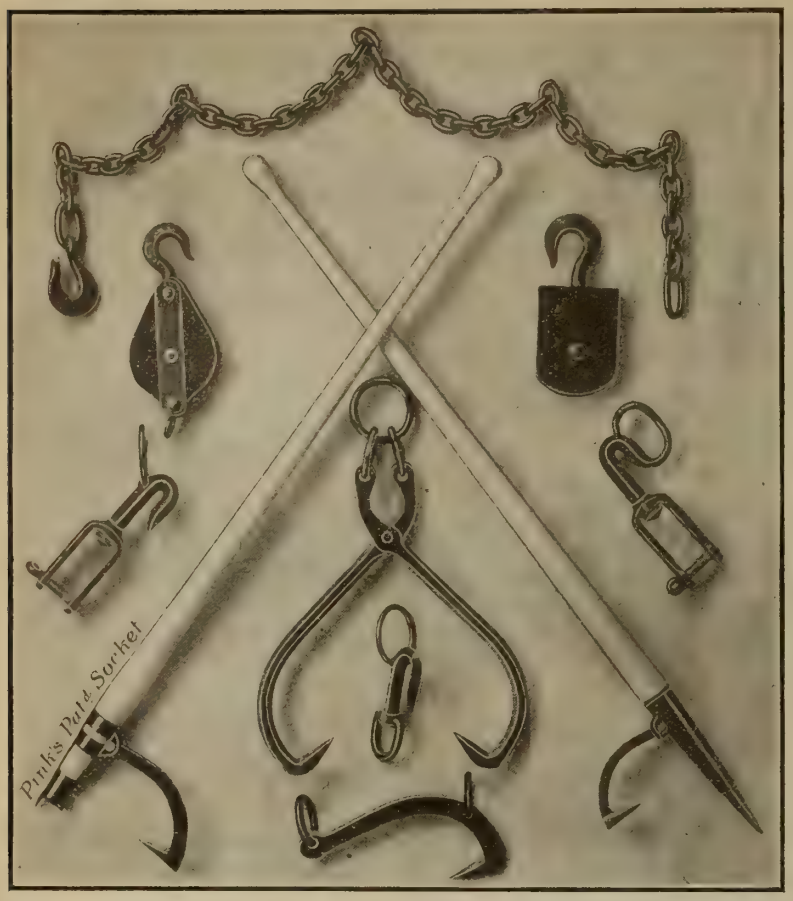
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No. 43. Patent V. Blade Hoe.

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The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



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MADE IN CANADA

THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

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Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

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I Can Furnish You with the

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Send for Catalogue and Price List

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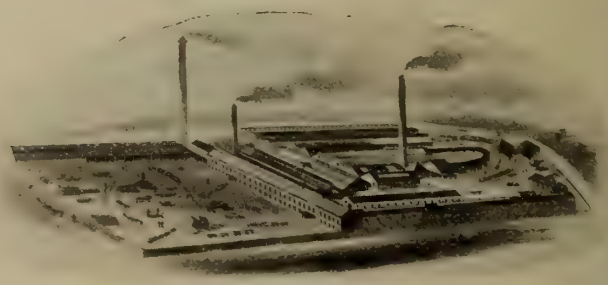
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One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

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T. Montreal
in Book 43
Page 85



"Acme" All Steel Wrenches
Lengths 6, 8, 10, 12, 15 ins.

Tools of Quality



Knife Handle Machinists' Wrenches
Lengths 6, 8, 10, 12, 15, 18, 21 ins.

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We endeavor to select only those that use has shown to be reliable.

Of the tried and true sort of **Wrenches** we have a large variety adapted to all the different uses, and suiting all requirements as to price.

We sell at fair prices and give you the best of service.

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Double Head "S" Wrenches
For nuts 3/8 to 1 1/4 in.

Wholesale
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FOUNDED 1809



Westcott "S" Wrenches
Lengths 6, 8, 10, 12, 14 in.

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ESTABLISHED 1847

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WITH SILVER AND PLATED MOUNTS

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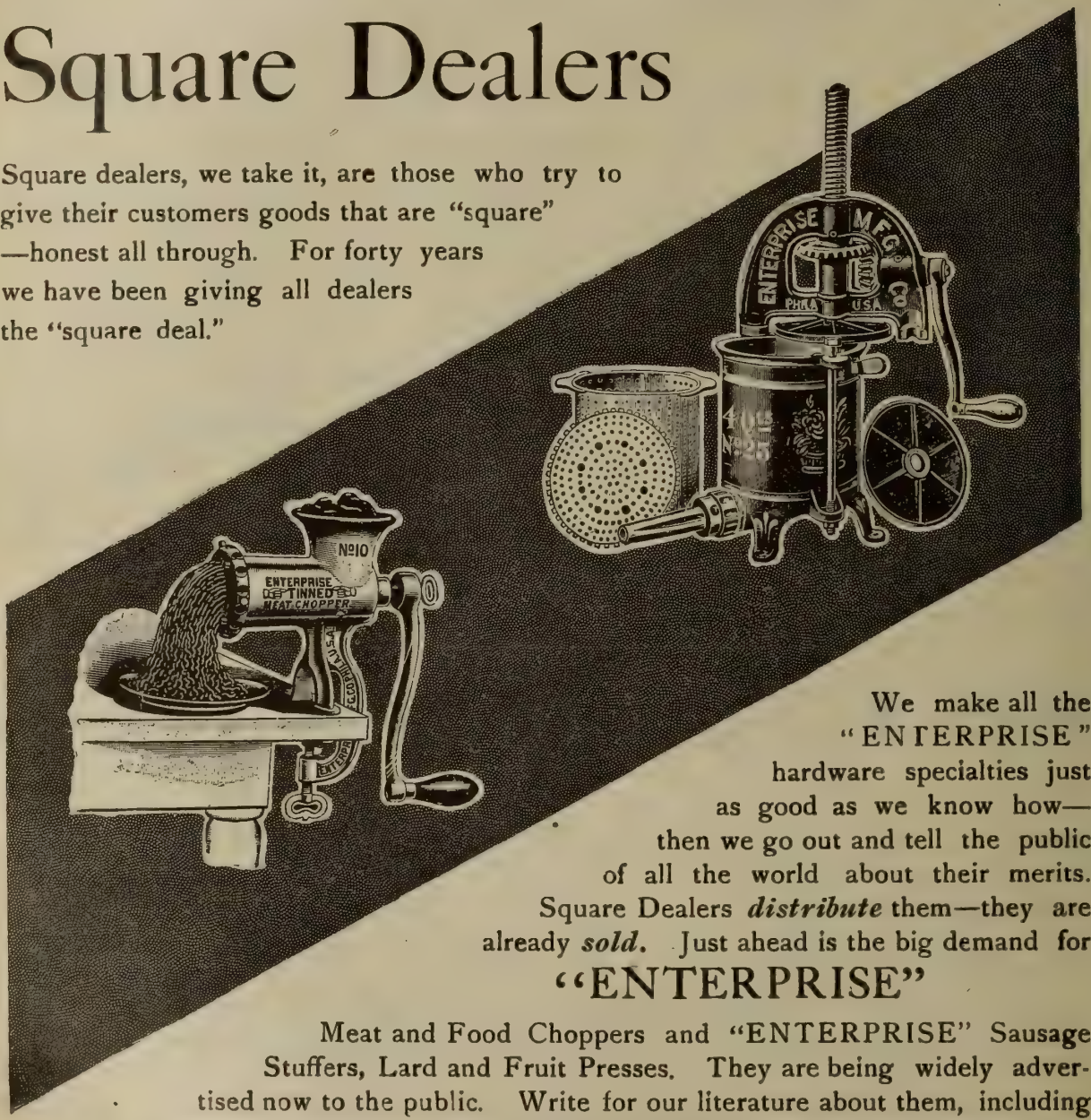
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Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new Booklet: "The Cook, Her Critic and—." We will send you a supply of these on request.

The Enterprise Manufacturing Co. of Pa.

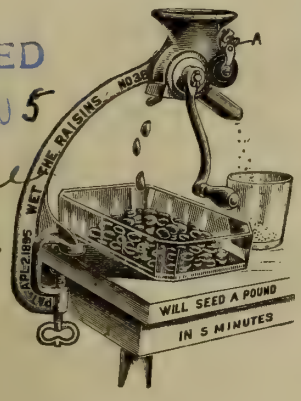
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DEALERS SHOULD ORDER THEIR SUPPY EARLY—

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CHEAPEST MADE

It always stays in place.

No glue or cement to work loose.

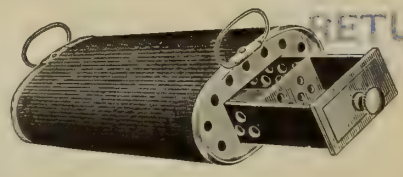
It is moisture proof.

Anyone can apply it with tacks which are included in each box.

25 feet in each Package, enough for two doors.

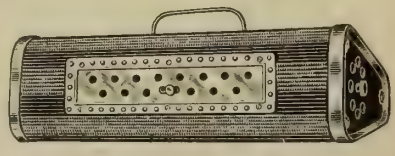
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No. 3D, covered with dark green Brussels carpet, asbestos lined, white metal ends.

Weight 7 lb.



No. 7D, Flat Top Heater, covered with Brussels carpet, cold rolled steel ends, heavily nickel plated, adjustable ventilators.

Weight 9 lb.



CLARK'S COAL WILL BURN 16 HOURS

Warm Feet keep you warm all over

Caverhill Learmont & Co

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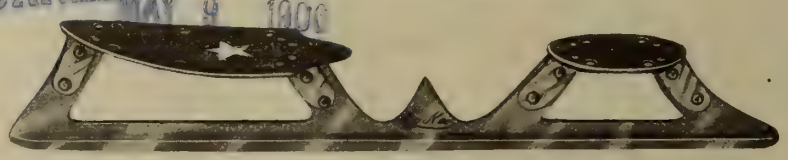
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To owner
cut Book to
Page 16 W.S.E.

The Mic-Mac Hockey Skate is copyrighted by us, both as to design and name.



PLAIN RUNNER WITH PUCK STOP

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FLANGED RUNNER WITH PUCK STOP

We also make the above patterns **WITHOUT** Puck Stops.

Mic-Mac and Regal Skates are made only in highest Starr quality. Dealers should carry them to satisfy their best customers

THE Mic-Mac Hockey Skate in the standard weight pattern is very popular with Senior Hockey players because of certain points which it possesses. It is made with a double centre bracket and is correctly designed so as to accomplish speed. To all these important good points is added the quality of neat appearance.

THE "REGAL" HOCKEY SKATE

There is not a handsomer or richer-looking skate made than the Regal, and the name is quite in harmony with its style and unapproachable quality. It is made with loop bracket as originally designed by us, and with a new (1905) heel.

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Like the STORM KING HANGER

is the most popular Flexible Hanger Track made in Canada. Popular because it surpasses all others in quality and workmanship.

The discriminating buyer specifies "*Storm King*" *Brand—the Perfect Track.*

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MADE BY

SAFETY DOOR HANGER CO., - Hamilton, Canada

Sell your Customers the

ALUMINUM OIL HEATER

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But there's certain money in the Oil Heater that sells at sight and stays sold—only the Aluminum holds this record.

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The Very Newest

Combination, Bow Lever and Side Pedal drive ; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



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THESE ARE TRADE BRINGERS

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Made solely by

THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, - ONTARIO

CORDAGE

Your Trade

REQUIRES THE VERY BEST



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Did you ever stop to think whether you were handling the **BEST?**

Do you know that there **IS** a best in Cordage, as well as in everything else?

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The result is a product which cannot be excelled in quality, while reasonable in price.

This means

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When you are stocking up, ask your jobbers for Cordage manufactured by

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couldn't secure you more fully.

WARRANTY

This saw is made of CRUCIBLE CAST STEEL, of the FINEST QUALITY, is tempered in Oil, carefully tested, and is

FULLY WARRANTED

If found defective upon reasonable trial the purchaser may return it to the Ironmonger from whom he bought it and who is hereby authorized to replace it free of charge or to refund the price paid.

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Etna Works, SHEFFIELD

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Couldn't have anything fairer than that could you?

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led us to make other things which appeal to the women in the home and are handled by the same jobbers and retailers. The trade, we think, recognizes that they can count on us to help move anything we make.

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Simplest freezer made. Patented dasher does the work. Better than ever this year. The product of our new factory—better facilities. This, and strong advertising make it the freezer the women ask for.

Frezo Freezer

An excellent freezer, double scrapers fastened same way as in Peerless Iceland. All sizes.







Dana Mop Wringer

Wrings the mop dry in five seconds—does it without wetting the hands and without danger of upsetting the bucket and wetting the feet. You stand in a natural position—both feet rest firmly on the floor. The latest, the simplest, the best Mop Wringer on the Market.

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We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

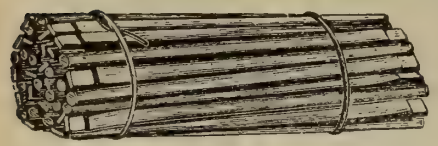
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THEY SELL WELL!
THE PROFITS ARE RIGHT!



Sole Manufacturers—
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Averaging Accounts	Bad Debts
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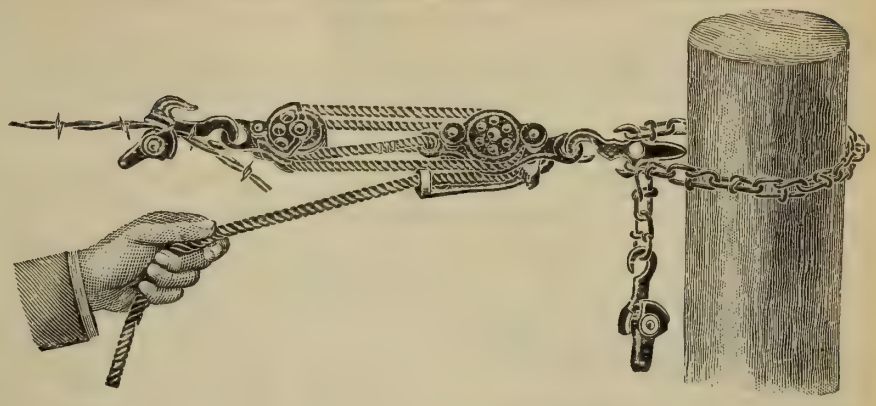
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OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

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In the relation of seller to user is an important one. Your customer is probably your neighbor and friend and he looks to you for goods that are right. He expects you to give him his money's worth. When you handle the Atkins Celebrated Silver Steel Saws you feel secure in the knowledge that you are selling the finest goods it is possible to obtain in the Saw line. Are you selling them? If not, NOW is a good time to make a change for the better. Write for Catalogue and Discounts.

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There are many reasons why you should seek Cylinder Lock trade. There are many more reasons why **you** should seek Cylinder Lock trade with

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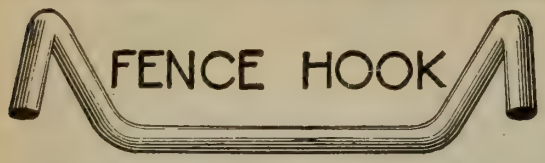
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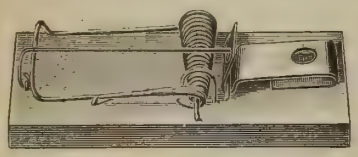
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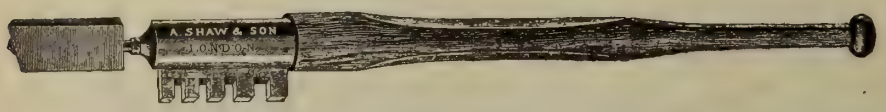
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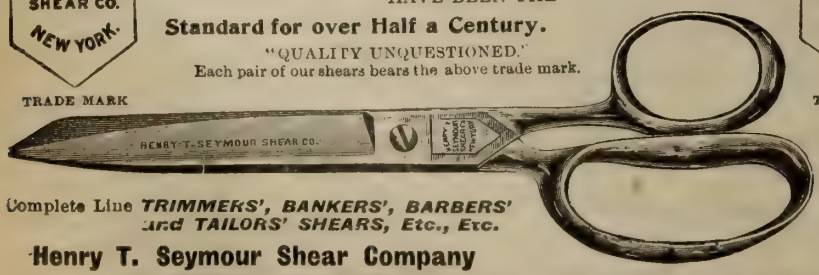
HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

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Latest Catalogue will be sent in exchange for your business card.

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In all qualities and sizes

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TORONTO, ONTARIO.

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STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

Out This Week

The November Number of

THE BUSINESS MAGAZINE

Our Home Publication for the Busy Man and His Family.

Read this clever article, which appears in the November number, and imagine twenty-five more just as good.

How Great Business Men Keep Well.

(THE WORLD MAGAZINE.)

Amid the strenuous conditions which prevail to-day in the business world, the great captains of industry find their only safety in an increased leisure and the pursuit of healthful pastimes. The greater the business and the greater the wear and tear of the responsibility, the greater the need for an enforced leisure. That is why millionaire business men pay their thousands and thousands of dollars for outdoor recreation.

WHAT means do rich business men take to preserve their health? They have a system to which, almost without exception, they each and all conform. This system is founded on one remedy. One New York man pursues it at the cost of $500,000 a year; another, equally devoted to it, has it without cost. These two men are about equally rich and powerful.

It is enlightening to all the world to know this system, so costly and so cheap and so efficacious for these great men of affairs are healthy men. They are marvels of success in finance and in health.

To triumph in the strenuous life requires more than genius and wealth. It means endurance and force. Health is the great business man's greatest asset. A Rockefeller ailing in the height of his daring career would give a million dollars "for a new stomach." Schwab to recover from the impairment of his giant strength spends in two years a fortune that would buy the town in which he was born.

One millionaire in New York employs a physician at $10,000 a year to attend him—because he did not follow the system. Another, during a painful illness two years ago, contracted with a doctor to serve him exclusively for five years. Lately, conforming to the system by this same doctor's advice and the example of his associates, he paid the doctor a large lump sum to end the contract.

But the physicians testify that the millionaire men of affairs are poor customers of theirs. Their system of health-keeping is not medical.

Fresh air and a change of scene, developed to a science and a system, is the New York multi-millionaire's panacea for all his ills.

(For the rest of this article, see November number).

The MACLEAN PUBLISHING CO., Limited

Montreal Toronto Winnipeg

SPIRAL PACKING

THE CANADIAN RUBBER CO OF MONTREAL LIMITED

THE MARK OF QUALITY.

Hundreds of Hardware Men have learnt wisdom from experience, and are placing their stock orders for Spiral with us.

We've manufactured 90% of Spiral Packing sold in Canada during the past 20 years.

Under our own name and Brand we now offer **"CANADIAN" SPIRAL,**—the matured results of our exclusive experience in manufacturing this special kind of packing.

Place a trial order with us, and it won't require any advertising talk to make you a permanent buyer.

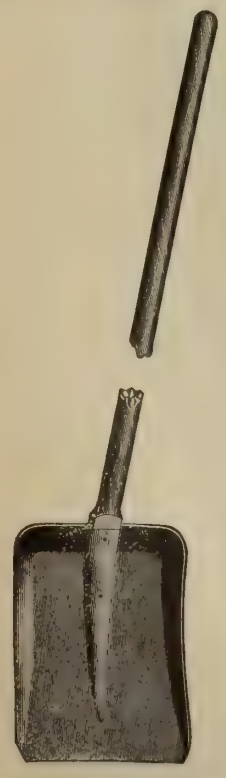
We would be glad to put our proposition fully before you.

Write our nearest Sales Branch to-day for samples and information.

172 Granvill St., Halifax, N.S. | Imperial Bank Building, Montreal, Que. | Front and Yonge Sts., Toronto, Ont. | 89 Princess St., Winnipeg, Man. | 403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



Arctic Snow Shovels

are securely fastened to the handles by bolts, which pass through iron straps encircling the handles.

Are the shovels that you are selling made in this manner?

We stock them in two qualities—Japanned and Galvanized.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

KEMP MFG. AND METAL CO., Limited,
McDermot Ave. East, Winnipeg, Man.

AMONGST OURSELVES

MORE than the usual number of letters have been received during the past week from subscribers who desire the aid of Hardware and Metal's staff in securing information of value to them. We reproduce a few of the requests, as the information given on the points raised will probably be of interest to others of our readers. This also affords an opportunity of urging upon our readers the advisability of corresponding with the editor more than is done at present. Any information that can be secured by our staff will be cheerfully given. In some cases time may be required in order to give a definite reply, but in such an event the correspondent will be notified. A question that is in the mind of one of our readers is likely to be a problem to others, and if a sufficient number of queries are made a "Question Box" department would probably develop into one of the most interesting in the paper.

* * *

The two letters from Morrisburg reproduced in this issue are also worthy of commenting upon. Hardware and Metal has practically fought alone in opposition to the "promoter's enterprise" at Morrisburg, and it is gratifying to have two of the most reputable citizens of that town write commending the stand we have taken. On such matters as this—and the hardware trade is vitally interested in the proposition to establish a tin plate industry in Canada—readers in all parts of the country should express their opinions in letters to Hardware and Metal, the columns of which are open to a discussion of any subject of interest to the trade.

* * *

The freight charges evil referred to in a recent letter from Purvis Brothers, Sudbury, has not raised a discussion, but it undoubtedly is a matter worthy of the closest attention of the retail trade. If the local merchant is to pay "extras" he should understand the "whys and wherefores" of the question. Were a strong Retail Hardware Dealers' Association in existence in Ontario that body could act on such a question, but in the meantime the columns of this paper provide a good medium for discussion.

* * *

Hardware merchants in all parts of Ontario are realizing more and more the necessity of a retail association to deal particularly with the hardware trade. The Retail Merchants' Association may be a good organization for grocers and other tradesmen, but it has failed to grasp its opportunities and cannot be considered a factor in the organization of the hardware trade. Mr. W. A. Matthews, of Ross & Matthews, Cannington, in a recent chat with Hardware and Metal said the hardwaremen in his district were more than anxious to have the trade organized, and he agreed that it would be a good plan to discuss the matter fully during the coming Winter in the columns of Hardware and Metal, following this up with a call for a convention in Toronto next Good Friday. At this gathering the preliminary steps towards forming an organization could be taken and the work completed at a larger convention, to be held at the time of the Toronto Exhibition. What have readers of Hardware and Metal to say to this suggestion?

* * *

"The Organization of a Hardware Association" is the title of an article which will appear in these columns next week or the week after. It will be written by one of the best informed men who has attended the conventions of the Retail Hardware and Stove Dealers' Associations in Manitoba and the Northwest, and it will be interesting reading. Other articles will follow by other writers. But the matter of organization affects the retail hardware merchants chiefly, and if they are in earnest about it they will write us letters expressing their views on the matter.

MORRISBURG, ONT., NOV. 17, 1905.

THE MACLEAN PUBLISHING CO.,
Toronto.

Dear Sirs,—Enclosed herewith find thirty cents (30c.) in payment for three copies of HARDWARE AND METAL.

As regards subscription to Canadian Grocer, my business is entirely with cheese and butter exporters and consequently your valuable paper would not be of much benefit to me in a business way.

I take this opportunity of congratulating you upon the fearless and public-spirited manner in which you have treated a matter that not only affects the investing public generally, but is likely to be of serious consequence to Morrisburg ratepayers if the proposed scheme is carried out. My only regret is, that the information in the three journals referred to was not available to the ratepayers of Morrisburg before the by-law granting the promoters certain concessions and privileges was submitted for the ratepayers' approval.

Yours very truly,

WM. EAGER, Manufacturer.

* * *

Norman H. Dahmer, Conestogo, writes, stating that he recently saw an advertisement of gasoline soldering irons, and states that he would like to know the names of the makers and secure prices of these goods.

There are several lines on the market, one being manufactured by the Gleason Mfg. Co., New York.

* *

Babb & Kirkland, Portage la Prairie, Man., desire to secure the name of the manufacturer of a tinner's torch for coal oil, called the "Primus." They state that such a torch would be a real boon to take the place of gasoline torches, the cost of extra insurance where gasoline is carried being very heavy.

We cannot give the address of the manufacturer of the Primus, but some reader of Hardware and Metal may be able to do so. The White Mfg. Co., Chicago., manufacture a coal oil tinner's torch, however.

* * *

Cleland Bros., Meaford, write, asking the addresses of makers of metallic numbers for house numbering.

These goods are carried in stock by several of the wholesale houses, they being manufactured in Toronto by Messrs. Patterson & Heward, 319 King street west, and D. Johnson, 3 Markham street, Toronto.

* *

Jas. F. Denwoodie, Souris, Man., writes, asking for some good book on hardware window dressing and adds. "I might say I am more than delighted with Hardware and Metal, and your Business Magazine is also a credit to any publishing house. I do not know how I got along without Hardware and Metal so long, as it would be impossible now."

We have recommended "The American Hardware Store," by R. R. Williams, and sold by MacLean Publishing Co. at $3, as the best book dealing with window dressing and other subjects of interest to the hardware merchants.

* * *

Stephenson & Illsey, Red Deer, Alta., write us as follows: "Can you furnish us with this information? In general contract work in modern tin and plumbing shops, what system of figuring is used? Our rule is to secure a list of requirements, fittings, and time, and to the sum total of initial or first cost, add our percentage of profit. Our reason for asking this is simply because we have an idea that some acquire a list of stock required and add to this their percentage and then figure the time required for the completion of the work, separately and at the usual rate charged for jobbing or contract work as the case may be. Also, if you can, kindly tell us what rates are charged by the leading shops for tinners' and plumbers' time in Toronto?"

* * *

Messrs. Stephenson & Illsey had adopted the proper method of figuring contract work, viz., to make out a complete list of all materials required, estimate the amount of time that will be consumed in installing the plant, and as the cost of materials and time represents the amount of money which they must lay out, it is quite reasonable and right that they should have a profit on

the total cost, instead of on the cost of the materials only. It is also usual, where competition will permit, to add an additional 5 per cent. to cost of both materials and time for unforeseen and unprovided for details. The cost to the consumer, for plumber and helper, is 65c. per hour.

* * *

While still discussing the subject of correspondence, reference might be made to the investigation being made into the plumbers' and hardware "combines" in Toronto. While the cases are before the court Hardware and Metal will endeavor to give the news as fairly as can be done to all branches of the trade. Sensation mongering will be left, however, to the daily press. Undoubtedly there will be some interesting points brought out, but the courts should be left to try the cases and find the accused guilty of any wrongdoing that can be proved against them. If any point arises which any reader desires to discuss space will be given, provided the correspondence does not come under the ruling of the court condemning unfair criticism of accused persons before they have been found guilty.

* * *

Letters of friendly criticism, or suggestions whereby improvements may be made in the paper, will also be appreciated by the publishers. The growth of the paper during the past year has been most satisfactory, but if the reading matter or special departments can be improved upon the publishers are anxious to make the change. Particular attention might be drawn to the Plumbing and Steamfitting section of the paper. In reading matter and advertisements the department is now the most important in the paper, and many commendations have been received regarding the practical value of Mr. Quinn's articles, particularly to plumbers in the country districts. One plumber from a small Ontario town says he makes a practice of sending Hardware and Metal up to the workshop as soon as it arrives each week, rather than allowing it to lie in the office where none but the proprietor can see it. We try to make the paper interesting to the clerk and workmen, as well as the business man, and the plumber referred to appreciates our efforts. Ask yourself if you are making as good use of the paper?



Iver Johnson's 1906 Calendar.

A HANDSOME CALENDAR

Iver Johnson's Arms and Cycle Works, Fitchburg, Mass., have published a beautiful calendar for 1906, a reproduction of which is given herewith. Such calendars as these are not only a convenience but a standing advertisement in the hardware store, and readers of this paper will do well to write for a copy, mentioning the offer of a free copy made in Hardware and Metal.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles hat they contain. It would assist the editor in writing the review.

Toronto Silver Plate.

Three fine catalogues issued by the Toronto Silver Plate Co., Toronto, are available to readers of Hardware and Metal who carry plated goods and hollow-ware in stock for the holiday and all the year round trade. Catalogue No. 18 deals with sterling silver and electro-silver plate, it containing 96 pages handsomely illustrated with engravings of several hundred styles of silver goods, table sets, berry dishes, cake baskets, cruets, water sets, etc. Catalogue No. 20 is devoted to trophies and prize cups, about 40 pages being given containing illustrations of numerous articles suitable for presentations. Catalogue No. 21 contains 40 pages and cover. The articles illustrated comprise all classes of table cutlery. The catalogues should be in the hands of every hardware merchant, as those who have not already laid in a stock of silverware are almost certain to find it to their ahvantage to do so.

Pipe That is Pipe.

The Page-Hersey Iron & Tube Co., Guelph, have issued a new discount sheet quoting discounts on their various grades of standard and heavy pipe. Any Canadian steamfitter who has not yet secured a copy should write asking for one, mentioning the name of Hardware and Metal in their communication.

Screen Door Spring Hinge.

Columbian Hardware Company, Cleveland, claim for their new wrought steel screen door spring hinge three distinctive points of superiority. The hinge is shapely, clean cut and has the spring covered and protected from the weather, as it should be. Being constructed of wrought steel it is very smooth when finished with a glossy coat of japan. It is composed of five parts only, the two flanges of heavy wrought steel, two steel tips, and a heavy spring made of best oil tempered spring steel wire. It also has the holdback feature. The spring is so coiled and attached as to

WIRE NAILS
TACKS
WIRE
Prompt Shipment
The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

swing the door quickly and evenly, and has an unusually smooth action. The edges of the flanges are drawn down at right angles to form a bead, thus giving a neat beveled effect, and strengthening

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A.&W.



Columbian Screen Door Spring Hinge.

the flanges. Has broad bearing surfaces, and is easy to apply. Dealers are requested to write for free sample hinge.

The Columbian Hardware Company, Cleveland, manufacturers of the above hinge, have just issued an artistic little booklet, Screen Door Fixings, No. 19, describing the Columbian, their Cleveland, another new steel spring hinge for screen doors, their Clover Leaf, Acorn and Columbia Screen Door Hinges, Screen Door Sets, Door Springs, Door Pulls, etc. It may be had for the asking if Hardware and Metal is mentioned.

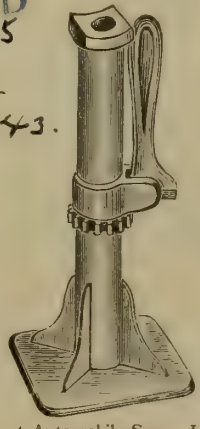
New Century Stud.

A. B. Ormsby, Toronto and Winnipeg, is sending out to the trade a leaflet describing the New Century Stud for fireproof partitions in all styles of buildings, it being used in connection with metal lath. The construction of the stud is illustrated on the pamphlet and the method of its use is thoroughly described. Copies of the folder will be supplied to any reader of Hardware and Metal who mentions the paper in a letter of inquiry.

COVERT AUTOMOBILE SCREW JACK.

Superiority over all other auto jacks is claimed for the automobile screw jack

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Covert Automobile Screw Jack.

manufactured by the Covert Manufacturing Co., Troy, N.Y. The accompanying cut fairly illustrates the apparatus, but its many advantages cannot be fully comprehended and appreciated without seeing the article itself in operation. It is a ratchet double screw lifting jack, easy to operate, and is strong, light, compact, and quickly adjusted. It has no loose parts, and is always ready for immediate use by carrying it in the tool box. The great necessity of having such a powerful jack ready for instant use in an emergency when on the road, is fully appreciated by all automobilists, and every owner of an automobile should possess one of these unequalled jacks. Special attention is directed to the advertisement of the Covert Manufacturing Co., in this issue.

A Message to Paint Dealers

There is not a paint dealer in the Dominion who can afford to ignore our agency proposition. Sherwin-Williams Paints, Varnishes and Colors are known everywhere as trade winners and trade keepers. It's because every one of them is made to be the best that can be produced for its particular uses. They not only bring profit to the dealer in their first sale, but they bring customers back again and again, and are a strong means of establishing steady trade in other lines the dealer carries.

Sherwin-Williams Products get the best trade, and the surest trade. The dealer knows what he can claim for them and recommends them, knowing that they will do what he says they will.

Behind the Sherwin-Williams dealer is the Sherwin-Williams reputation, the Sherwin-Williams aggressiveness, and the Sherwin-Williams advertising system, constantly working to help the agent in every way possible.

Write our nearest office today for detailed information. It will put you under no obligation whatever.

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS
Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg.

THE ART OF BUYING.

THAT "goods well bought are half sold" is a saying which is as true as it is expressive. Probably if inquiries were made a great number of failures to secure success by retail merchants could be traced to ignorance of this oft-repeated saying. To be "well bought" does not only mean to secure a parcel of goods at a favorable price, as compared with the intrinsic market value, but really conveys a great deal more than that. It means that they are bought just at the proper moment in the right season to secure good condition and freshness—that they are just the description and quality to suit the buyer's particular trade, and further—that they are bought in quantities suitable to his trade requirements, sufficient to meet all probable demand without at the same time leaving a surplus to be jobbed off, thus slaughtering the advantage gained in buying.

To accomplish this the storekeeper must consider it necessary to acquire all possible knowledge of the conditions surrounding his business. The retail merchant should be the man of information on every point of interest in his district; by this means he is enabled to know when to buy the many luxuries of life which a populace will be inclined to purchase when prospects are animated, or to introduce new articles to take the place of others which are declining or falling into disfavor; to know when and how to stock up the plain necessities of life which the public must purchase even though the district may be in a state of depression.

Thus far as regards his local knowledge; next follows the importance of knowing "where to buy," and a great

deal depends upon the buyer's knowledge of this point. Every commercial man who calls upon him will claim to have the best supply of goods in his particular industry but the buyer must necessarily use a good deal of judgment and discrimination in placing his orders. If he has a very large outlet for a certain article he will probably find it to his advantage to go as near as possible to the "fountain head" for his supply, to save the expense of unnecessary handling, whereas if his demand is only a small one it is not unlikely that he could make better terms with a wholesale dealer. A wholesale dealer often by his large aggregate buying secures an advantage from the manufacturer which it would not be possible to give to the retailer. Moreover, the wholesale dealer can frequently supply the retailer on terms which the manufacturer could not for a moment entertain.

It must not be forgotten that wholesale buying evolves largely on the question of financial manipulation and does not of necessity mean adding a large amount of profit to the original manufacturer's price. Again, the retailer has a much better variety and assortment from a wholesale house than he could possibly get from the manufacturer, and he will often find it to his advantage to spend a few days once or twice a year visiting the various markets, by that means becoming more individually in touch with the working details of the various market prices and gaining a measure of knowledge difficult to obtain under any other conditions. There are, however, a great number of storekeepers to whom a journey from their local district is practically an impossibility. To these men a very excellent means is provided by the various newspapers and journals who take up the many details peculiar to the storekeeper's needs. By reading regularly those papers which deal with his particular lines he can keep in touch as thoroughly with the market fluctuations, and receive as up-to-date information on all points connected with his business, as if he were really at the various markets. "Where to buy" will thus become a much easier proposition.

Another point of great importance to the retailer is to avoid altogether "speculative buying." This is particularly necessary in the case of small buyers. Speculative buying on the part of small traders is much to be condemned, and in most cases leads to disaster. The great thing a small storekeeper should study is the constant turning over of stock which he carries, as by this means alone can complete freshness of goods be secured. The trader may occasionally lose the advantage of a slight movement in the market by adhering strictly to this rule, but the ultimate advantage of having an absolutely fresh and saleable stock outweighs by a good deal the uncertain profit of buying goods in a speculative way.

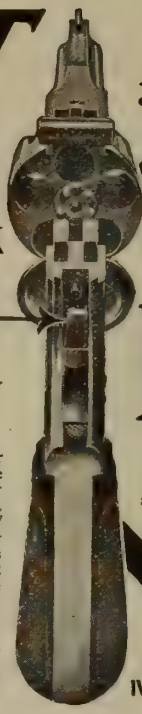
A point of primary importance to the storekeeper is the "deterioration" of his stock. A successful merchant must of necessity watch his stock that no particular lines are allowed to fall into the background. Any decline in the sale of any particular article should be at once noted and efforts made at once to relieve the stock on hand. The public has grown to a large extent to know pretty well its own requirements and in this connection a storekeeper will always find that "the first loss is the best." If it is necessary to job off a given line, do so immediately it becomes necessary, and before the goods become shopworn and out of date.

Another important factor in storekeepers' buying is the question of "seasons." Care should be taken that as the season closes, so its particular stock decreases, so that on its closing that stock has been well nigh sold out, leaving room for the approaching new season. By this means the locking up of capital is diminished and a storekeeper will be able to keep his banking account well ahead instead of having his capital on his shelves. This is an important point for the retailer who wishes to succeed. Wholesalers are keen to discriminate between the "slow" and the "ready" payer and a little care in regulating the stock in the way indicated will go a long way towards keeping a floating capital, bringing profit to the trader, and maintaining good standing with his wholesaler.

A point which is often overlooked is the necessity for the trader doing his own buying. A storekeeper may have a good man in his employ in whom he has implicit confidence, still it is not wise to allow such a man, however good, the power to send orders for goods simply because the stock has run out. A storekeeper is anxious to get the best terms and the closest prices, and he can only secure this by keeping in close touch with his requirements, and letting the wholesaler know that every order he sends is the work of his personal scrutiny, and that invoices are severely criticized by himself. By this means he will secure the best attention from his wholesaler and he in his turn will be careful to place such a buyer on bottom prices.

A point which often crops up in a country district is the question of "combined buying." This is greatly to be desired wherever possible. Local storekeepers by keeping thoroughly in touch with one another develop a friendly feeling born of mutual interests, and a measure of care is then exercised to bring into the district a volume of goods which whilst being sufficient for the purpose will not be an overstock, besides which the combined buying enables the dealers to obtain their goods on such favorable conditions that they can place them on the respective markets at a moderate figure and at the same time secure adequate remuneration to themselves.

IT IS SAFE



LOOK HERE for the SAFETY LEVER

The hammer cannot hit the firing pin or the cartridge. *When you pull the trigger* (only) this lever rises and carries the blow to the firing pin.

New York Office: 99 Chambers St.

As safe in the home as a kitchen table and just as important. You *may* be so fortunate as to never need the services of a revolver to defend your life, property and the lives of those depending on your protection, but you can't tell—no one of the hundreds robbed and murdered every year suspected that he or she would be the next.

IVER JOHNSON REVOLVERS

are made for your protection—*in every way*. The "Iver Johnson" is the original safety revolver, and the only one with a safety mechanism worthy the name.

Hammer, **$6.50**; Hammerless, **$7.80**. For sale by all Hardware and Sporting Goods dealers. Learn about them, anyway—it costs you nothing. If you will ask for it, we will gladly send you our bright little booklet, "Shots," together with our handsome catalogue.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

A MUTUAL RELATIVE.

A late story of Irish wit is located in New Orleans. An Irishman boarded a train in which every seat except one was occupied by two people. This seat had as occupants a young sport and a large, shaggy dog. The Irishman stood by the seat expecting that room would be made for him. The young man did not take the hint, but regarded the other, who was poorly dressed, with ill-disguised scorn. At last the Irishman remarked: "That's a foine-looking dog ye have with ye. What breed is it?"

"It's a cross between a skunk and an Irishman," was the sneering answer.

"Shure, then, it's a relative of both of us," was the instant retort.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

BUILDING PAPERS, ETC.

Write us for samples of our Building Paper



Plain Sheathing
Plain Straw Sheathing
" Fibre "

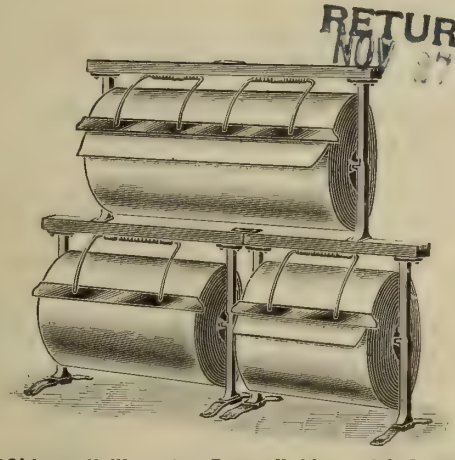


Tarred Sheathing
Tarred Straw
" Fibre



Asbestos Building Paper

Thin,	about 6 lbs.	100	Square	Feet.
Medium,	" 10 "	100	"	"
Heavy,	" 14 "	100	"	"

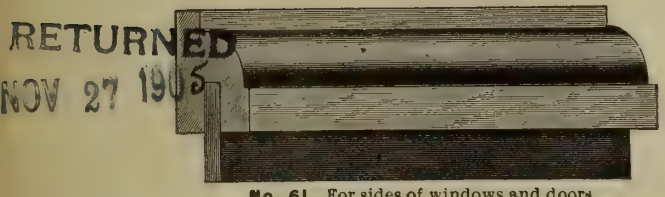


'Chicago" Wrapping Paper Holder—with Cutters
Length 15, 18, 20 and 24 inch
Form any combination. There are no extra parts used for combination.

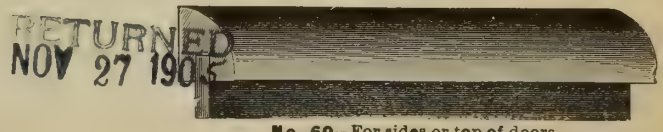


Felt Paper
Tarred Roofing Felt
Moth Proof Carpet ,,
Ready Roofing ,,

FELT WEATHER STRIP

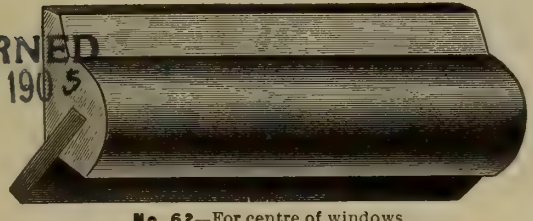


No 61—For sides of windows and doors.

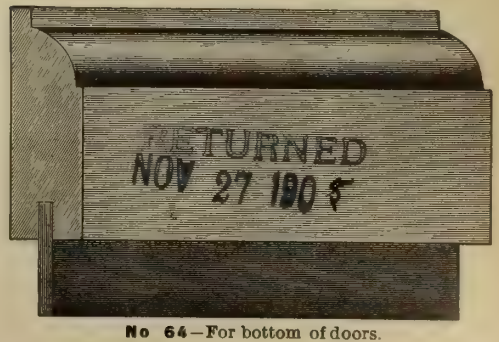


No. 60—For sides or top of doors.

Excludes all cold, wind, dust or rain



No 62—For centre of windows.



No 64—For bottom of doors.

See our General Catalogue

H. S. HOWLAND, SONS & CO., LIMITED Toronto

GRAHAM NAILS ARE THE BEST.

We ship promptly

Factory: Dufferin Street, Toronto.

Our prices are right

——Here is the——

"GOOD CHEER" RANGE

You Will Want

A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price

It Has a Full Sized

20-INCH OVEN

Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted



The "GOOD CHEER" KITCHEN QUEEN

THE JAMES STEWART M'F'G CO. Limited

Winnipeg, Man. ***Woodstock, Ont.***

STOVES AND TINWARE

CLEANING GAS STOVES.

A WAY in which stoves are cleaned by one of the leading gas companies, and done with marked success, is described in the Gas World, the company being practically able to reissue the stoves equal to new. First of all, the cooker about to be renovated is taken to the bench by a fitter, who removes the hot plate float (consisting of brass taps), brass oven cock and door. The remainder of the oven complete and hot plate are placed in a muffle, dimensions 4 feet 9 inches high, 3 feet 10 inches wide, and 4 feet deep, built of fire brick, the floor having fire brick tiles, 3 inches thick, for the oven to rest upon. The door is also of fire brick tiles, iron cases, which is worked by an overhead pulley. The muffle is heated by a furnace underneath in which coke and breeze are used, and it is got up to over 600 degrees. When not in use at night time the furnace is slackened by means of clinkering, so that the muffle is never allowed to get quite cold, which would soon unsettle the bed. The stoves are allowed to remain in the muffle for half an hour, on an average, and are then withdrawn, all dirt, grease, etc., having been entirely removed. Before they get thoroughly cold a stiff wire brush is used on the castings, which then look quite new.

While the process of burning off is going on the fitter takes the door to the polishing room for the bright parts to be polished. In this room there are used emery wheels, buffs, drilling machine and grindstone, worked by a six h.p. gas engine. The enamel plate of the oven door, the float and gas taps, are immersed in a large copper (capacity 120 gallons). This is heated in the same manner as the muffle. In order to make a strong pickle, 28 pounds of strong soap powder (Wiggins & Ryall's) is put into the copper and kept at boiling point while in use, and, as in the case of the muffle, cooled down during the night. The copper is cleaned out and the soap powder renewed twice a week. Having thoroughly cleansed the cooker, the fitter then takes the parts, as already divided, to his bench, and refits them. The taps, with the use of a little metal polish (after having been in the copper) come out splendidly. If found defective they are, of course, replaced. The castings are coated with a special dull black varnish, so as not to cause a smell when the stoves are in use. When fitted, the burners are all tried and allowed to remain alight, so as to give the stove a thorough burning off and testing.

CORRUGATED CONDUCTOR PIPE.

THE greater value of expanding (corrugated) conductor pipe and elbows over the ordinary or plain round variety in a northern climate is a fact not sufficiently appreciated by tinners, roofers, architects and the public in general. It is a well known fact that water expands considerably before entering the state of ice. When ice forms in a downspout or conductor pipe it exercises a great pressure on the walls of the pipe and elbows, so that if these are not of the expanding variety, they must burst by virtue of this pressure. To obviate this the expanding pipe and elbows have been introduced on the market and they have already proved a great success in the United States, where this variety is used almost to the exclusion of the plain round. Aside from their practical value, the corrugated conductor pipe and elbows are more artistic in appearance, the pipe is further offered in lengths of ten feet without a solder joint, while the elbows are made in one piece and galvanized after formation, so that they are absolutely water-tight. The elbows are offered in any material, in all sizes and in any style or angle as may be desired. The cost price is further such that it is a mooted question whether a tinner or roofer can afford to waste his valuable time and material in adhering to the handmade article. Attention is drawn to the advertisement of Ferdinand Dieckmann, Cincinnati, Ohio, in another column. All inquiries will be promptly replied to.

IMPORTATIONS OF TIN PLATE.

THE total value of all tin plates and sheets imported into Canada in the fiscal year 1904 was $1,461,811, against $1,751,507 in 1905, an increase of $289,696. Our imports from Great Britain in 1904 were valued at $1,215,700, against $1,206,906 in 1905, a decrease of $8,794. Our imports from the United States were $246,111 in 1904 and $544,611 in 1905, an increase of $298,490, or considerably more than 100 per cent.

The London Iron and Coal Trade Review has the following interesting note on the British tin plate trade in its relation to Canada:

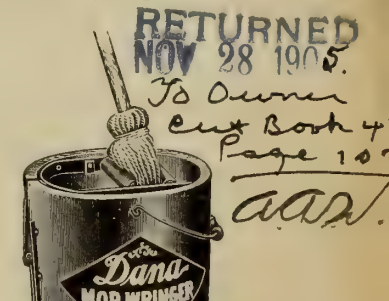
"The British tin plate trade, apart from the loss of so much of the American demand as has been effected by a prohibitory tariff, remains practically as invulnerable as ever it was. The total tin plate exports of Great Britain are still close on 400,000 tons a year. The total export of all the other countires of the world, the United States included, is less than 20,000 tons. One phase of the tin plate trade that is difficult to be understood is that of the imports into Canada. The Canadian market for British tin plates has not much improved of late years, although in view of the enormous extent of the tinned salmon trade and other branches of food and fruit supply we should expect it to increase materially. The total British exports of tin plate to Canada in 1904 were more than 6,000 tons under the exports of the previous year. This does not entirely correspond with the increased exports of tin plates by the United States in the same year, but there was a material advance of such exports in that year, and it is an easy thing to correlate the two facts. Indeed the American trade returns show that Canada did take a considerably larger quantity of American tin plates in 1904 than in the previous year. This would be a simple problem enough if the prices quoted in the two cases were approximately the same, but the official records of values show that the American prices, in 1904 at all events, were materially higher than the British. We are, therefore, driven to the conclusion that the American plates were taken because of the convenience of the source of supply and by means of the peculiar contracts made by American firms."

Under the circumstances an effort should be made to direct the entire Canadian tin-plate trade to Great Britain.

DANA MOP WRINGER.

THE dealer or jobber handling goods made by the Dana Manufacturing Company, 238 East 9th street, Cincinnati, Ohio, can count on the manufacturer to help move them every time. Everybody connected with the sale of the Peerless Iceland Freezer was helped by the strong advertising it received.

The same most excellent manufacturing organization (except that now it is



Dana Mop Wringer.

in its new factory buildings) and the same thoroughly tested selling organization is putting on the market an article appealing to the same class of people—women in the home—and handled by the same jobbers and retailers. The mop wringer will be properly presented to the women in the home, and as it is easy to operate the Dana Mop Wringer will appeal to every woman.

A distinct advantage the Dana has is that with it you stand in the natural position—both feet rest firmly on the floor all the time, at the start as well as at the finish. Then, too, it is strongly put up and labelled very attractively. Hustling dealers should write their jobbers for particulars.

ADDITIONS TO CLARE'S FOUNDRY

CLARE BROS. & CO.'S stove works at Preston have been largely increased in size during the past Summer by the erection of a large three story storehouse for the storage of patterns and other materials, as well as by a large addition to the foundry. The works are prominently situated on the Main street in Preston, the buildings being constructed of stone and having a

very substantial appearance. The site is adjacent to the river and has a large area. The electric railroad to Galt and Berlin passes the office door, while C. P. R. switches enter the works from behind, one siding bringing the raw material directly to the foundry door and another branch leading to the warehouse on the other side of the works from which shipments are made to all parts of Canada.

A representative of Hardware and Metal recently made a tour of the works and found them to be thoroughly up-to-date, the foundry being very large and capable of an immense output. The assembling rooms and tin shop in which Peninsular Stoves and Ranges and Hecla and Hilborn Hot Air Furnaces and Hot Water Boilers are put together are also roomy shops, giving the employes an opportunity of doing high class work. In the copper and nickeling rooms a dust gathering apparatus has been installed in order that the health of the workmen may be cared for.

Mr. Alf. N. W. Clare stated that the company had had an exceptionally good season and would have no surplus stock to carry over to next year. Preparations are being made for an increased business next season as manufacturers are looking for merchants to stock up early on account of the steadily increasing prices of iron. With the exception of the shut down of about two or three days the foundry will be kept running at its full capacity during the coming Winter.

MORRISBURG'S GOLD BRICK.

Editor Hardware and Metal:—Your various articles on the probabilities of the success of the proposed Canadian Tin Plate & Stamped Steel Co., of Morrisburg, Ontario, have aroused much interest in this vicinitv. The fact is the village has gone "factory crazy." By-laws Nos. 270 and 271 provide for furnishing to the promoter of this scheme 700 h.p. electric, to be delivered at some point within the corporation limits, also an unknown quantity of electric lights, as well as an unlimited quantity of water from the waterworks system, the by-laws to go into force when a lease of 1,100 h.p. of water is had from the Government. The lease so far has not been secured, and the by-laws say that until the lease is made they are null and void. The present lighting plant is taxed to its full capacity, as is the waterworks plant. The Government at present are only willing to lease 750 h.p. of water. It is a well known fact that 750 h.p. of water at the wheels will not generate 700 h.p. electric off transformers at some unknown distance. The debt of the corporation is $80,000. The Government asked the municipality to put up $17,000 to increase the intake at the head of the canal, that they might be able to supply 1,100 h.p., for which they ask the municipality to pay a rental for all time to come of $2,200 per year. They also ask them to put up $13,000, estimated cost of cutting the bank at the site of the proposed power house, and to assume all damages caused to shippers by any break while the work is going on, a definite amount of $30,000 in any event. The estimated cost of building the power house and equipping with machinery is $46,000, not counting one cent for wheel pits, power lines, lines for lighting, engineering expenses (so far expenses have been incurred to the amount of about $3,500), laying of water mains, etc. Careful estimates place the cost at $100,000 to $125,000, added to the present debt of the municipality would mean an indebtedness of from $200,000 to $225,000. The assessed value of the real property is under $500,000, a mortgage of from 40 to 50 per cent. of the assessed value. This is a fair statement of the conditions people are facing when they are asked to take stock in this company, and which the people who own property will face if the scheme goes on. Another phase is, should the power be developed the municipality must pay the Government $2,200 per year rent, and pay the cost of running the plant, wear and tear for 10 years, and not one cent of revenue. Should the scheme prove a failure, the municipality would have the power plant on their hands, and the only security they have for an outlay of $100,000 to $125,000 is the promise of the promoter to pay them $100 in case the mills do not run. These facts it might be well for intending investors to know before they invest in stock. So far the promoters would seem to be building expensive buildings at their own risk, as until the lease of 1,100 h.p. of water is acquired of the Government, the by-laws are null and void. The by-laws are the contract between the promoter and the corporation, and any assignment the promoter can make of his interest in this contract to the Canadian Tin Plate & Stamped Steel Co. must carry the terms set forth above. The promises stated to have been had from the Government by the promoter (unlikely as it would look) of putting a duty on tin plate coming into Canada (if it were done) would benefit the maker of these goods right at the base of supplies, and the proposed plant must go to the wall, as they could not bring coal and steel long distances and compete with mills more favorably located.

CITIZEN."

Morrisburg, Nov. 17, 1905.

DUTY ON ENAMELED WARE ASKED.

A. E. KEMP, M.P., Toronto, appeared before the Tariff Commission at London on Tuesday to plead the case of the association of the manufacturers of enameled steel ware. Mr. John McClary, head of the McClary Manufacturing Co., who introduced the deputaaion, said that in these days, when public opinion was so greatly excited against combinations of all kinds, they congratulated themselves at being out of jail. They were glad of the opportunity to state their case publicly, however.

The manufacture of enameled steel ware had been commenced, and was still being carried on, in the face of great difficulties, said Mr. Kemp, Canadian manufacturers of stamped tinware were forced to undertake this manufacture or go out of business altogether, for the enameled steel ware coming into the country from Germany was crowding their old-fashioned tinware out of the market. Vast sums of money were spent in new plants and in experimenting, and it had been necessary to destroy many thousand dollars' worth of goods after they had been produced. From 1892 to 1905, every dollar earned had gone into wages, real estate, plants and other expenses.

The request to the Commission was that the maximum rate which the new tariff allowed should be imposed on enameled ware. Three reasons were given to support this recommendation: Wages in Canada were higher than formerly. Wages paid by European competitors had decreased. In European countries cost of experimentation in new processes of manufacture, which bore heavily on Canadian manufacturers, was borne by the Government.

Mr. Kemp also recommended to Mr. Paterson's careful investigation the value at which imports of such goods were brought into this country from Austria. The agents conducted their business in a clever way, and this, with the fact that the invoices were made out in the Austrian language, made it difficult for the Customs officials to determine whether or not the proper selling price in the home market was entered in the invoices.

How Association Benefits Trade.

Surrounded by so many difficulties, the manufacturers had formed an association to adopt such methods of manufacture as would lead to the greatest consumption of the wares produced in Canada, with a view of having their plants occupied. There had at no time been any attempt to restrict production, but, on the other hand, the controlling factor, which had determined the policy of the manufacturers, was that the amount of their product which could be sold was capable of being indefinitely increased by cheapening the cost. The interests of the various manufacturers concerned in the association did not lie in raising prices, but in cheapening goods to the lowest price which could produce profit. Only in that way could sufficient goods be sold to enable the manufacturers to pay the high wages now ruling in the business to a large number of employes, which was necessary in order to operate continuously the extensive plants required by modern conditions of manufacture. In making different lines and grades of goods, it was necessary to come to some understanding in respect to the value of each grade, but there had been no pooling of interests. Each factory was run on an entirely independent basis. There was positively no discrimination in prices. A discount was allowed wholesale dealers which allowed them to sell to the retailer at the same rate as the manufacturer.

Protection Wanted on Stoves.

W. M. Gartshore, representing the McClary Manufacturing Co., asked that some specific duty as well as the present ad valorem duty be imposed on stoves. This was to give an additional protection to the Canadian manufacturer against his American competitor.



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH
JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write
JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada



VORTEX HOT BLAST COAL STOVE
for Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.
For Sale by
E. T. Wright, & Co., Hamilton, Canada.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

whose market being much more extensive, was enabled to reduce his cost of production to 15 per cent. less than the Canadian manufacturer. In shipping to the west the American shipper had an advantage of 20 per cent. The extended market also enabled the manufacturer in the United States to change his styles more frequently.

"There is enough competition among Canadian manufacturers to keep the prices down," Mr. Gartshore affirmed. "We are not afraid of the American manufacturer when he is busy, but when he begins to dump his surplus on our market."

"If American manufacturers can lay down goods, duty paid, in the Canadian west as cheaply as we can, they will control the market because of the great advantages they enjoy," said Mr. John McClary.

STOVE ITEMS.

Take the old stoves in exchange. They cannot be valued very highly, but the fact that you will take the old stove at any price will often be the means of making a sale. And then you can clean up the old stove, repair it and sell it for a good figure. The second-hand stove should not be pushed at the expense of the new, however. Only on those who will not buy the new should the old be urged.

The Albion Stove Works, Victoria, B. C., is producing about $1,000 worth of stoves weekly and intends making an effort to secure a share of the business in Manitoba and the Northwest.

TO MAKE THE STORE ATTRACTIVE

TO make the store attractive should be the supreme aim of every storekeeper. Watch every point of importance and have it right up-to-date.

Have you ever tried color lights for your evening window display? The soft, rich tone added from a deep red or green light makes many striking and very beautiful effects, and can be easily made.

There are a number of simple methods by which you can color your own lights to any shade desired.

One of these is the alum solution. Make a strong solution of alum water, and after carefully cleaning your globe, dip it in the solution. Have a rack to dry them on, and dry slowly and evenly. This gives you the plain white, frosted globe.

By adding cochineal, you have a red solution; tumeric makes a yellow; indigo a blue; a mixture of tumeric and indigo a royal purple.

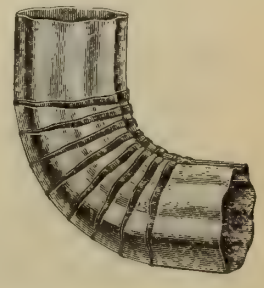
It may be necessary to dip the globes several times that they may have an even coating.

Another good way, simple and inexpensive, is to color a bottle of mucilage and carefully coat the globes with same.

If the colored lights have not been extensively used in your town, try them at once, and you will be quickly convinced that they are most effective in attracting the crowds that throng the streets in the evening.

BEST ELBOWS
— FOR —
CONDUCTOR PURPOSES
BEAR
TRADE MARK
F. Dieckmann
CANNOT BURST
— from —
ICE PRESSURE

Made in . . .
6 Materials.
5 Angles.
14 Sizes.
1,225 Varieties.



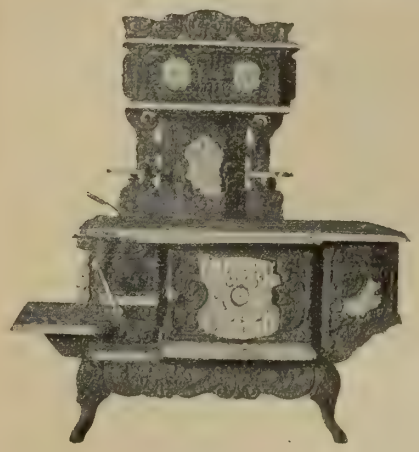
For Sale by the TRADE in Canada. Write for catalogue and samples to

FERDINAND DIECKMANN
1180-82-84 HARRISON AVE.
CINCINNATI, O., U.S.A.

FACTS FOR BUSINESS SEEKERS

The man who forges ahead in any business simply makes use of all the little factors which make for business success. Many successful stove and hardware dealers placed the

IMPERIAL OXFORD RANGE



on their floor as soon as we produced it because they recognized it as a winner right at the beginning. As practical men they saw that the Imperial Oxford's exclusive features would have telling effect on competition—saw that such a splendid range was sure to be a universal favorite.

You know that they were not disappointed.

The Imperial Oxford looks a first-class range all over. Its fine appearance compels a nearer acquaintance—the acquaintance that means dollars for you.

The Diffusive Oven Flue, exclusive to the Imperial Oxford Range.

Our Patented Draw-Out Duplex Grate.

Fire-box accurately proportioned, deep and straight.

Our Patented Draw-Out Oven Rack.

These very important features make splendid selling points.

Altogether, the Imperial Oxford is the highest class cooking apparatus manufactured at any price, and the easiest range to sell.

Our strong and systematic advertising helps you.

Our Guarantee Bond goes with every range we sell.

WE also manufacture Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Hot Water and Steam Boilers and Radiators, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

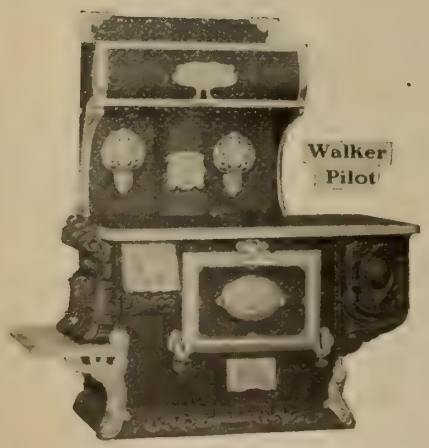
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The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER** 76

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

The Walker Pilot Steel Range



MADE IN 2 SIZES AND 6 STYLES.

Ovens 18 x 20 x 14

and

" 20 x 20 x 14

Steel High Shelves and High Closets.

6, 8, or 9 inch covers.

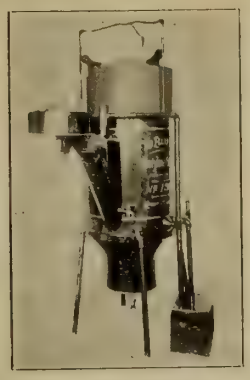
This Range complete with Oven Thermometer, Base, and Duplex Grates (removable without disturbing linings).

Retails at from $32 to $50

LET US SEND YOU FURTHER PARTICULARS.

The Walker Steel Range Company, Limited

Grimsby, Ont.



The Eclipse

The Light That Lights !

ACETYLENE

It you want the best light for th. least trouble and expense, us. acetylene. Unequalled for store, factory or house.

The Continental Heat and Light Co.

Montreal



FULLY ENDORSED

Sterne's Asbestos Stove Lining

is fully endorsed by men who have used it and who are capable of testing its merits. "I have not come across anything to equal it;" "it is giving great satisfaction," is the way most of the opinions run. You can sell this lining and make money. We are sure of that. Secure prices at once from

G. F. STERNE & SON, MANUFACTURERS, ***BRANTFORD, ONT.***

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.



The Firebox of THE EMPIRE QUEEN RANGE

is perfectly proportioned to the size of the oven, is fitted with the latest duplex grates and heavy sectional cast iron linings for coal, and separate grates for wood. In our 9-20 size we have the largest fire-box for wood to be found in any range on the market. The change from coal to wood, or from wood to coal, can easily be made without the aid of an expert.

Would you like to know more about **The Empire Queen Range?**

The Canadian Heating & Ventilating Co.
OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

ARK-EL-ITE
TRADE MARK

Have you ordered

ARK-EL-ITE ASBESTOS STOVE LINING

If not, you should order it. **ARK-EL-ITE ASBESTOS STOVE LINING** forms a more durable and economical lining for Cooking and Heating Stoves, Ranges, Hot Air Furnaces, etc., than fire-brick, and is especially adapted for Grates, Ranges, etc., where natural gas is used.

Fits any stove. Can be affixed in a few minutes.

Packed in heavy cardboard cases.
10-six-lb. pkges. in case, price $1.50

MANUFACTURED BY

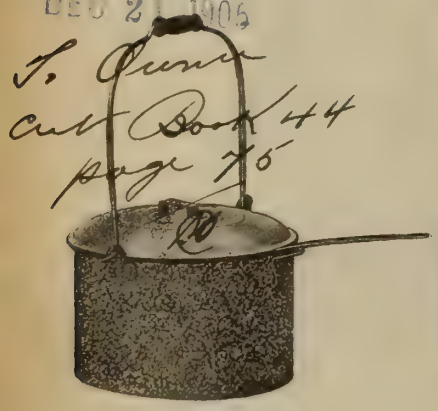
THE FRANCIS-FROST CO. LIMITED
TORONTO

Makers of the Celebrated "Ark" Brand Paints.

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DEC 21 1905
T. Quinn
Cut Book 44
page 76

Tri-Use Cooker

RETURNED
DEC 21



PATENTED



PATENTED

Every dealer should stock a few of these Cookers. They sell wherever introduced.

No well-appointed kitchen is complete without one, and after once using it a woman will not do without it.

Can be used in various ways, viz., as a double boiler for cooking cereals of all kinds, as a steamer for vegetables, puddings, stalebuns, bread or cake, or as two separate saucepans, etc.

Advertising matter for general distribution sent free to any dealer.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

The MacLean Publishing Co.
Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

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NEW ADVERTISEMENTS.

Dana Mfg. Co., Cincinnati, O.
Dieckmann, Ferd., Cincinnati, Ohio.

THE ALLEGED COMBINE PROSECUTIONS.

NOTHING has for some time attracted so much attention in business circles as the proceedings which have been taken in Toronto during the last few weeks against certain mercantile associations and combinations.

Associations, combines or agreements which are created for the purpose of depriving those who are not members thereof of the right to do business are conspiracies. Against such the law should be invoked. But there are associations and associations; agreements and agreements.

Every association is not based on conspiracy. Nor is every agreement. There seems, however, to be a danger of the contrary view being taken. To some people nearly every organization of business men is a dreadful something designed to do evil. The law officers appear to be catching the fever and to have suddenly conceived the idea that where there is an agreement among business men there must be criminal intent.

It is really becoming a serious matter. If there is any suspicion in regard to any organization or agreement let it be investigated, even if the parties thereto are reputable business men, but do not have them haled before police magistrates charged with criminal offences and treated as criminals.

Zeal for the enforcement of the law is a good thing in the representatives of the Crown and in the officers of the law. But that zeal must be governed by wisdom and tempered with justice.

Where there is undue and reckless competition the wisest thing that those suffering therefrom can do, be they retailers, wholesalers or manufacturers, is to come to an agreement to remedy the evil. There is nothing wrong about this. The thing is only an evil when it aims to do an injustice, and some organizations, we are free to admit, are aiming at doing an injustice.

But if business men cannot organize to remedy evils that exist in their midst, where is the line to be drawn? Shall lawyers and physicians be allowed to continue and maintain corporations, or union men fix and regulate the price at which they shall sell their labor? If one is deemed right, why not the others?

It appears to us that the situation demands action on the part of the Federal Government. Where there is clear and unmistakable evidence of conspiracy let the arm of the law be invoked. But otherwise the duty of the hour for the Government is to appoint a commission consisting of a lawyer and a business man or two to investigate the matter. It is better that this should be done, even though the process may be slower than that honorable and reputable business men should be haled before magistrates on charges of criminal conduct.

Injudicious zeal not only often worries and vexes those who are guiltless of criminal offences but defeats the ends of justice as well.

THE TARIFF INQUIRY.

ONE of the best features in connection with the sittings of the Tariff Commission in various parts of Canada is their publicity. The doors are wide open for manufacturers, workingmen, farmers, and faddists, to appear and present their views to the Commissioners. The whole country is made aware—if it cares to follow the evidence—of the reasons for tariff legislation which will ultimately affect the Government. If the Government are in reality affected by any other reasons, then they are not playing fair with the people. This is supposed to be the "brief" upon which they act; and we are all permitted to sit beside them and listen to the making of the "brief." Publicity—where genuine—is a great protector of public interest.

The framing of a "scientific tariff" on, at least, semi-protective lines, is a task of much delicacy and labor. It is impossible to lay down a straightedged theory and then hew away carelessly to that line. The actual condition of affairs in the country must be studied, and the various items fixed with a full knowledge of how they will affect all interests concerned. A tariff item is apt to be a double-edged sword. It may cut two ways. While protecting one industry, it is very likely to increase the expense of another. Consequently, the Government are pursuing the right course in endeavoring to collect all the information they can elicit before sitting down to the complicated and vitally important task of writing a new tariff.

A LEAD PIPE CINCH.

RECENT disclosures in the investigations into the "combines" draw attention to a phase of the rebate system which is worthy of comment. All modern business seems to be conducted in accordance with the Biblical quotation: "To him who hath shall it be given and from him who hath not shall even that which he hath be taken away from him." In accordance with this plan the multi-millionaire rides free upon the railways in his palace car, the politician and special favorite also rides free in the ordinary coaches, the preacher, journalist and commercial man travels at special rates, the general public pays full fare, and the penniless workman in search of a job rides on the bumpers, on the "blind baggage," or in a "side door Pullman," otherwise known as a box car.

Every branch of business is conducted on the basis of quoting the lowest rates to the buyer of the largest quantities. The T. Eaton Company gets a closer rate for advertising than is quoted the small dealer, and so it is all along the line. The custom of business practice has made this one of the fundamentals of modern commerce, and who will gainsay the business equity of charging the smaller buyer more than the purchaser of large quantities?

From this standpoint the rebate system of giving a discount of say 12½ per cent. to a buyer of $1,000 worth of goods and a discount of only 7½ per cent. to the dealer who only purchases $500 worth is perfectly justifiable so long as the fact is openly known to the trade that buyers of certain quantities can secure certain discounts. But there's the rub! The information is not generally known, and it is left to the small buyer to find out for himself what favors his larger competitor is given.

Suppose, for instance, that lead pipe was controlled by an association. The ordinary plumber or hardware dealer who purchases pipe gets the regular discount of 25 per cent., or whatever

the market may make it. But unless he happens to accidentally see a list of preferred buyers, or learns from one "on the inside," he might go on for years purchasing $500 or $1,000 worth of pipe without knowing he was entitled to a rebate of 7½ per cent., or whatever the manufacturers agree upon. The ones on the inside are supposed to keep the information to themselves, and when too many get there the association is likely to disband, only to re-organize soon after on another basis with a more limited preferred list.

It is not the intention of Hardware and Metal to condemn the organization of manufacturers, jobbers, or trade associations of any sort—organization is the keynote of modern industry—nor to criticize the system of giving rebates or regulating prices. But we draw attention to the necessity of trade publicity in trade agreements so that no inequalities may arise, and the small dealer will know how much of any line of goods he must buy before he is entitled to the rebates allowed.

OPPOSITION TO QUEBEC TAX.

IF anything were needed to prove the folly and shortsighted policy exercised in passing the three hundred dollar tax on non-resident commercial travelers for foreign houses, in the Province of Quebec, it would be found in the almost universal opposition it has aroused, not only in Canada but also in the United States and the Mother Country itself.

Not the least serious of the difficulties involved is the fact that the motive and extent of the tax will probably be misunderstood by those who have not had an opportunity of studying it. Indeed, cases of this description have already arisen, the Canadian commercial agent at Leeds reporting that the operation of this tax is causing him no end of trouble with the Yorkshire exporting firms, and is having a very retarding effect upon Canadian trade.

Naturally enough, the average exporter does not readily grasp the difference between a Provincial and a Dominion tax. Laboring under the impression that this tax is imposed by the central governing body, he asks why Canada puts a duty on his goods, and, at the same time, taxes his travelers. He claims that this treatment is unfair and in direct violation of the principle involved in the British Preferential Tariff.

Another difficulty is brought up by British exporters who have resident agents in the Province of Quebec, but have been in the habit of making occasional trips to this country and assisting their agents. These houses pay their agents either salary or commission, and they consider it a great hardship that the heads of their firms, in making these customary trips, would be liable to a large fine.

This subject was taken up at the Autumnal meeting of the Association of Chambers of Commerce of the United Kingdom, recently held in Liege, Belgium. A strong resolution was passed, deploring the action of the Quebec Legislature, and urging His Majesty's Government to lodge a protest with the Quebec Legislature in particular, and with all the colonial Governments, against this practice of taxing British commercial representatives in the colonies.

The British Board of Trade has also put itself on record as being opposed to the tax, claiming that the Quebec tax of three hundred dollars is more onerous than the commercial tax levied by any other country. Norway and Sweden have, indeed, higher taxes per annum, but, as they are payable monthly, they do not prove such a hardship as the Quebec impost, which must be paid in a lump. All the leading countries of Europe welcome foreign commercial travelers.

Canadian boards of trade are also cooperating to secure the abolition of the tax, and the powerful Canadian Manufacturers' Association has passed resolutions condemning it.

In the face of so much opposition, and the approval of but a few selfish firms who are benefited by the exclusion of competition, it would seem that the only popular step open for the Quebec Legislature is to gracefully withdraw the bill.

HIGHER PRICES NEXT YEAR.

READERS of Hardware and Metal are familiar with the condition of affairs in the metal markets, but, if they do not happen to deal in heavy goods extensively, it may not have occurred to them that this strong market will affect them materially.

But so many staple hardware lines are manufactured from raw material, which is constantly advancing in value, that retailers must be prepared to pay much higher prices for such goods next year.

In discussing this question the other day, one of the largest tinware manufacturers in Canada expressed his opinion that all the goods made by his firm would be sharply advanced for next season. He explained that most of the manufacturers put in good stocks of raw material before sheet metals began their recent meteoric rise. And so, owing to strenuous competition, none of the firms involved have withdrawn their prices, nor are they likely to until forced to replenish their stocks. They frankly admit that their present attitude is not one of philanthropy, and as soon as they are forced to come into the market for fresh supplies they will be compelled to advance their own prices to the retailer, as the present strength of the metal market is such as to preclude any possibility of closer quotations for a long time to come.

Furthermore, all articles manufactured from Canada plates, black sheets and galvanized iron, will also be subject to amendments in price as soon as present stocks run out. One of the largest Canadian interests is now stamping all invoices sent out with the words, "We will issue a new catalogue on January 1st, when all prices will be changed."

When confronted by these facts, the progressive retailer will not be long in deciding that he will do well to stock up in anticipation. But he should not overdo the thing. Many a merchant has overloaded himself with unsaleable goods under similar circumstances. Buy now, is our advice, but buy wisely and well.

TIN PLATE OR GOLD BRICK.

MORRISBURG is up against a pretty stiff proposition, according to the letter published on another page written by a citizen of that town. The writer strongly commends the position taken by Hardware and Metal in opposing the proposed establishment of a higher duty on tin plate in order to aid what is clearly a "promoter's enterprise" located at Morrisburg. The Iron Age and other American papers connected with the metal industry have given the promoters considerable encouragement, but the strength of the position taken by this paper is now being generally recognized. As the writer says, Morrisburg has gone "factory crazy," losing sight of everything in the endeavor to get a factory started.

Having failed to look into the probabilities of the enterprise being carried to a successful conclusion before passing the by-law granting the company aid, the town will be lucky if it escapes from the mix-up without a heavy bill to pay. The Government is not likely to grant the aid said to have been promised the company in the shape of a duty on tin plate. Even with it, as we have pointed out, the success of the enterprise is very problematical.

In the United States Investor, a very reliable financial paper published in Boston, an article appeared recently giving a history of the Eastern Trust Company of New York, which, they state, was promoted by Messrs. Allison and Meldrum, the company being liqui-

dated two years after its formation at a loss to the stockholders. This experience shows the necessity of serious consideration of the Morrisburg enterprise by intending investors.

NO MORE FRANCHISES.

ONE of the most commendable moves yet made by the International Waterways Commission in their worthy and laudable investigations in connection with the water power and water levels of the Great Lakes is their recommendation to the Canadian and United States Governments that no further water power franchises using power affecting the level of the lakes be granted, this to hold until the data now being collected be submitted. The following is the text of the resolution :

"Resolved, that this commission recommends to the Governments of the United States and Canada that such steps as they may regard as necessary be taken to prevent any corporate rights or franchises being granted or renewed by either Federal, State or Provincial authority for the use of the waters of the Niagara River for power or other purposes until this commission is able to collect the information necessary to enable it to report fully upon the conditions and uses of these waters to the respective Governments of the United States and Canada. (Signed) J. P. Mabée, chairman Canadian section ; O. H. Ernst, chairman American section."

"Resolved, that in the opinion of this commission no further rights or franchises should be granted or conferred regarding the uses or diversions of the water flowing out of Lake Superior by either the Governments of the United States or Canada until all data and information are in the hands of the commission that may be necessary to enable it to make suggestions for regulating the excess of these waters, or that if such rights or privileges be granted they be subject to any regulations that may be adopted by both Governments. (Signed) O. E. Ernst, chairman American section ; J. P. Mabee, chairman Canadian section."

These should receive the approval of all interested in the industrial and commercial advancement of both countries, as the harboring of one of the greatest assets we possess means everything to the future manufacturing interests in this country.

Many towns in the Northwest are arranging for monthly bargain days. A large number of northwestern merchants made money on this little scheme in 1904. It is certain that 1905 will see the monthly bargain day double in popularity as a trade builder for the town. What are the merchants of your town doing along this line ?

SUCCESSFUL JOBBERS AND SALESMEN.

No. 7.

A FINE type of the clear cut American business man is Mr. James A. Ham, whose likeness is herewith presented and who represents Thos. Robertson & Co., Limited, dealers in plumbers' and steamfitters' supplies, heavy goods and metals, Montreal.

It is no exaggeration to say that Mr. Ham is a born salesman, and early in life he began to cover the Central and Western States in the plumbing and heating business, representing such large firms as the L. Wolff Manufacturing



James A. Ham,
Representing Thomas Robertson & Co., Montreal, in Eastern Ontario and the Ottawa Valley.

Company of Chicago and Jas. B. Clow & Sons of New York.

Five years ago, however, Mr. Ham came to this country and has since then represented Thos. Robertson & Co., Limited, Montreal, one of the largest houses of the kind in Canada. For one year Mr. Ham covered the Province of Quebec with great success, after which he spent a year calling on the trade in the Maritime Provinces. Another year was spent in doing special work, covering practically all of Canada between Windsor, Ont., and Sydney, C.B. For the past two years he has been established in Eastern Ontario and the Ottawa Valley, a territory which he hopes to cover for many years to come.

Mr. Ham is loud in his praises of Canadian buyers, asserting that they have always been very courteous, and that he has enjoyed doing business with them. He looks for a continually increasing trade on his ground.

Looking back over the twenty-five years of his life on the road, Mr. Ham traces with great satisfaction the marvellous development in the plumbing and heating business. Not very long ago a modern farm house was almost unheard of, while to-day there are thousands of them. And as the tendency nowadays is all for sanitary methods, an even greater advance is expected in the plumbing and heating of all kinds of houses in all parts of the country.

An interesting feature of the evolution which the trade has undergone since Mr. Ham became identified with it is the remarkable reduction in prices. To-day he is selling the most up-to-date and best finished product at a cost less than that commanded by the crudest article twenty-five years ago.

Mr. Ham has succeeded because of his magnetic personality and enthusiasm for his work, no less than because he has always been fortunate in representing first class houses.

LAKE NAVIGATION EXTENDED.

AN unprecedented extension of rates for navigation on the upper lakes has been decided upon by the marine underwriters. The customary date of closing is December 5th, but this year, owing to the extraordinarily large crop of wheat produced in the Northwest, which must be moved to the east, insurance rates have been extended seven days, to December 12th.

The thousands of bushels of grain which are still being delivered daily to the elevators at Fort William and Port Arthur total up a quantity which cannot possibly be handled in the customary time.

Were the insurance rates to close December 5th as usual a very serious state of affairs would result, for most of the grain would in that case have to be hauled by the railways all the way from Fort William. But with the extension of rates the steamers will be able to take the wheat to such points as Depot Harbor, Kingston and Buffalo for distribution.

As is to be expected the rates will increase during the extended period per ratio of the regular increase, December 1st to 5th. Only once in the past (four years ago) have the underwriters granted a similar extension, and at that time the period covered was much shorter than it will be this Fall.

More and better use of the show window and less ranting against the tactics of competitors would put some despondent dealers on Easy street.

PERSONAL MENTION

Quebec.

CHAS. BISSELL, representing the Preston Metal Shingle & Siding Co., Limited, Preston, Ont., was in Montreal on Saturday, and called at the office of Hardware and Metal.

O. C. Selby, of Drummond, Ont., took a trip to Montreal this week.

A. Lalonde, tinsmith, of Alexandria, Ont., visited Montreal this week.

W. J. Tucker, general merchant, of Clarence, Ont., visited Montreal recently.

C. Leblanc, hardware merchant, of Joliette, paid a visit to Montreal a few days ago.

Mr. Cruickshank, of the Library Bureau of Canada, Ottawa, was in Montreal recently.

P. Filion, tinsmith, of Ste. Therese, was in Montreal within the past few days on a purchasing trip.

J. J. Sophus, of the firm McLean & Sophus, Montreal, was confined to his home through illness last week.

Mr. Evans, of the Quebec Railway Light & Power Co., Quebec, was in Montreal on business this week.

Geo. Beauchemin, of Beauchemin & Co., machinists, etc., Sorel, visited Montreal during the present week.

P. Lariviere, proprietor of the foundry at St. Ours, came to Montreal one day this week to purchase some supplies.

C. O. Gervais, of C. O. Gervais & Frere, St. Johns, Que., called on some of the Montreal jobbers a couple of days ago.

T. J. Storey, vice-president and general manager of the Canada Carriage Works, Brockville, visited Montreal this week.

L. P. Venne, hardware merchant, St. Catherine street east, Hochelaga, (Montreal,) is greatly extending his premises.

Mr. Bond, of S. Bond & Co., general merchants, Odessa, Ont., was among the business visitors to Montreal during the week.

Jean Roux, proprietor of the saw and grist mill and electric light plant, Ste. Therese, paid a visit to the Royal City this week.
street.

Canavan Bros., Montreal agents for the Josiah Fowler Co., of St. John, N.B., have moved their office from 40 Jacques Cartier square to 13 St. John

C. D. TenEyck, manager of the Canadian office of E. C. Atkins & Co., saw manufacturers, was in Montreal last week, and called on Hardware and Metal.

B. & S. H. Thompson & Co., Limited, Montreal, have received a large shipment of marble on the steamer Jacona, which has just arrived at the local port.

R. H. Cowan, manager of the Traders' Co., Buckingham, and J. E. Vallee, vice-president of the same company, were in Montreal recently in connection with their business.

Walter Sadler, of Sadler & Haworth, manufacturers of leather belting, Montreal, is suffering from an attack of typhoid fever, and is confined to the Glengarry Hospital of that city.

Wilkinson, Heywood & Clark, Limited, manufacturers of paints, varnishes, etc., are opening an office at 300 Notre Dame street west, Montreal, under the management of Francis C. Reynolds.

Caverhill, Learmont & Co., Montreal, are now sending out tags on all their guns, showing that the gun has been inspected and tested. In case of complaint it is only necessary to return the tag.

J. B. Atchison, of Cornwall, has secured the contract for building the Cornwall Electric Railway offices, which are already well under way. The building will be of brick, 70 feet long by 35 feet wide.

F. G. Dixon, of the Hadfield Steel Co., Sheffield, Eng., who has been traveling through Canada for some time, left Montreal for New York and Boston last week. He is on his way home to the Old Country.

Before separating for their various homes, the Canadian travelers of the Sherwin-Williams Co. presented Mr. C. C. Ballantyne, the popular and able manager of the Canadian division, with a diamond scarf pin.

The Locomotive Machine Co., of Montreal, closed for half a day this week out of respect for Albert J. Pitkin, president of the American Locomotive Company, whose funeral was held in Schenectady the same afternoon.

The annual meeting of the Canadian Rand Drill Company was held at Sherbrooke last Friday. A remarkably good record for the past year was shown, and the president was authorized to proceed at once with the enlargement of the plant at Sherbrooke.

Ontario.

Thomas Scott, buyer for A. W. Moore, St. Catharines, is on the sick list.

Wells & Dawson, hardware merchants, Fort William, have dissolved partnership.

Mr. Gilpin, hardware merchant, St. Mary's, has sold out to the St. Mary's Hardware Company.

A. B. Jardine, manufacturer of dies and stocks, Hespeler, was a visitor in Toronto last Friday.

Louis Payette, of Messrs. Warden King & Son, Montreal, was a visitor in Toronto a few days ago.

Andrew W. Mann, of the Canada Brass & Supply Company, London, spent several days in Toronto this week.

Mr. Pedlow, Jarvis, formerly in the hardware business at Hagersville, is looking for an opening to re-enter business.

W. P. Stevens, of the Empire Manufacturing Company, London, was in Toronto during the past week giving evidence at the plumbers' investigation.

S. T. Hedley, of the James Morrison Brass Manufacturing Co., Toronto, was duck-shooting near Oshawa this week. Thirty-two ducks in thirty minutes is the record he made on a former occasion—but he didn't say who held the watch.

B. Gerry has this week sold his hardware and stove business at Wingham to Mr. Bishop and Mr. Brewer, of Parkhill, and the new firm will take possession as soon as stock-taking is completed. Mr. Gerry will go into the coal and wood business at Wingham.

W. R. Higgins, hardware merchant, Peterboro, has a splendid souvenir of an adventure early one morning recently. On his way down to the store he saw a large loon and procuring a rifle he returned and was successful in bringing down the rare bird, now having it on exhibition in his store window.

William L. McCuaig, bookkeeper of the Ontario Lantern Company, Hamilton, died last week after a short illness of appendicitis and complications. The deceased came from Montreal about two years ago with President Grose, and was appointed bookkeeper. He was 26 years of age, unmarried and popular and respected.

Geo. Hubbard, who has been with J. H. Glover, Aylmer, as head clerk in the hardware business for the past few months, has resigned to take a position with G. H. Clark & Co., Niagara Falls. Mr. Hubbard is a first class salesman and his new employers, being keen to recognize his worth, are willing to pay for merit.

Maritime Provinces.

John W. Addison, formerly a hardware merchant at St. John, N.B., died last Saturday of lung trouble.

Lewis J. Hesslein has established himself as a manufacturers' agent at Halifax, N.S. He is well recommended and should make a success of the enterprise.

The first monthly meeting of the Maritime Nail Works since reorganization was held a week ago, among those present being Messrs. Capewell and Williams, of Hartford, Conn., representing the Capewell Nail Works of Hartford, which concern recently acquired a controlling interest in the Maritime Nail Works. At the meeting Fred Elkin resigned his position as secretary of the company, and Stanley Elkin was appointed in his stead.

Western Canada.

Plans are now being prepared for Messrs. McLennan, McFeely & Co. for what will be one of the very largest wholesale warehouses in Vancouver. The building will have a frontage of one hundred and seventy feet on Cordova street, and nearly the same on Columbia avenue. It will cost in the vicinity of $80,000.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 74.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Cotton Rope is up to 20c., and **Sash Cord** has been advanced to 30c.

Summerlee Pig Iron is up to $22.50.

Scrap Zinc has advanced to 4c.

Ingot Copper is now quoted at 18½c. to 18¾c.

Tin—An advance is considered imminent.

TORONTO.

Enamelware—New quotations are listed.

Pig Lead — Another advance is considered possible.

Ingot Copper—Prices have increased slightly.

Cement—Lower prices are being quoted.

Sisal Bed Cord—Advanced 5 per cent.

WINNIPEG.

Steel Horseshoes have been advanced 10c.

Shot has been advanced 25c. per cwt.

Canada Plates have been advanced 25c. box.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 24, 1905.

ALTHOUGH fine weather is stimulating trade in districts reached by water and would continue to do so until the close of navigation, business generally seems to be quiet. Of course, seasonable goods are moving well, but even in these lines a touch of cold weather and a fall of snow would enliven matters considerably.

Price changes this week have not been numerous, but it has been found necessary to raise the figures on cotton rope and sash cord, the former of which is now quoted at 20c. and the latter at 30c. Strictly half-and-half solder is also much stronger, the minimum price obtainable being now 21c.

The run on skates continues to be phenomenal and that is the line most in evidence in all orders now being sent out from the local warehouses. Sleigh bells, snow shoes, horse blankets and horse shoes are also well to the fore.

Axes—Good orders are being filled, some of the wholesale houses reporting a heavy run. Our prices are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—The volume of business is largely determined by that of the foregoing article. We quote: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—The nearness of the Christmas season is quickening sales. We quote: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—There is a fairly good turnover in this line. Our prices are: Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—Trade has been somewhat quiet, owing largely to the unseasonable weather. Everybody is awaiting the advent of snow. We quote: **Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists: copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.**

Screws — Business is fair. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; **flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.**

Bolts and Nuts—These goods are moving fairly well, though no remarkable flutter is evident in the market. We quote 3-8 and smaller, 60 to 10; 7-16 and larger **55 to 5.**

Horse Nails—This is one of the most active lines at present. We are quoting: C brand, 40, 10, and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P.B. brand, 55 per cent.

Wire Nails—Business is keeping up well at the price as recently advanced. We quote from $2.10 to $2.20 per keg, f.o.b., Montreal.

Cut Nails—Price remains at $2.20 per keg, f.o.b., Montreal.

Horse Shoes—A fine turnover is reported this week. We still quote: P.B. **New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4: No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60. Toeweight, all sizes, 1 to 4, $6.85.** Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Rifles and shot guns are still selling in good numbers. Ammunition is also being well inquired for. Our quotations are as follows: **Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per** hundred lbs. We quote discounts 10 per **cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.**

Building Paper—Business continues moderate and the slack season is being warded off by the continued fine weather which is very favorable to building operations. Prices remain as before.

Cement and Firebrick—Nothing unusual has transpired during the week so far as cement is concerned. Small jobbing orders are still to the fore, as all contractors are doing their utmost to complete the work now under way before the weather breaks. There are no large inquiries however. A tremendous movement in fire brick has been going on, the leading interest in Montreal reporting exceptionally large sales during the past couple of months. Our quotations are as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; **ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to** $21, American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags; $2.05 in barrels in round lots.

Coil Chain—We give prices: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Skates—This is perhaps the best selling hardware line just now. All the local jobbers are flooded with orders for nearly all grades and sizes. Prices range from 25c. to $2.50, according to quality.

Sleigh Bells—Sales are keeping up well, although colder weather would no doubt stimulate trade in this line. We quote the following prices: Back straps, 30c. to $2.50; **body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.**

Horse Blankets—Our prices are: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snow Shoes—The supply is becoming rapidly exhausted and prices have been advanced on some grades. We quote from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, November 24, 1905.

NO changes in prices have taken place during the past week and business is reported to be very active, shipments of heavy goods being especially large, the movement being active on account of the desire to stock up before the winter freight rates come into force. There is much talk of combines amongst the retailers, but all are so busy at present that trade is not effected in any way by the proposed investigation into agreements between manufacturers, jobbers and retailers.

Cutlery and silverware continue to meet with large sales and there is also considerable doing in shot guns, rifles, cartridges and ammunition. Skates are also commencing to move more actively and sleigh bells, leather and cotton mitts are also being caled for in increasing quantities.

Axes and Handles—Dealers are sorting for the winter trade and shipments are quite large.

Cutlery and Silverware — Christmas business continues active and many sorting orders are being given.

Sporting Goods—Shotguns and ammunition are still being called for.

Lawn Mowers—Orders are not being placed so much at present as a month ago, most Fall orders being booked.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chain is being included in most orders being placed. Our quotations are: 1-4 inch, $6.50; 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Manufacturers are busy and prices firm. Our quotations are as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Prices are steady and business fair. We still quote: $2.42 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire—The average business for this season is being done.

Wire Nails—Prices are quite firm, some dealers quoting $2.10 and some $2.15.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths' orders are very satisfactory and shipments are large.

Horseshoes—Trade continues brisk prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—Some sleigh bell orders are still being sent in and skates are in more active demand.

Screws—The market is very firm with prices unchanged.

Rivets and Burrs—Trade is active with prices unchanged.

Bolts and Nuts—Quotations are very strong, but no advance has been made as yet.

Cordage—Quotations continue as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; Standard, 9 1-2c. Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are weakening, although light stocks will not allow them to decrease much. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick— Business is more active. Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Shipments are lively owing to the heavy call for winter goods. Prices are the same.

Hides—The local market for hides is settling to more normal conditions and it is generally believed that the winter season, whilst expected to maintain somewhat of a higher character, will be more on a natural basis.

Reports from Chicago still denote great eccentricity in that market. Prices are still maintained on a high parity, but have developed a weaker character since our last report, but there is no new feature which is expected to influence the Canadian market. It will be seen that our prices are revised on a basis more according to that ruling, previous to the late fluctuations of the domestic trade.

Hides, inspected, steers, No. 1		0 12
" " " No. 2		0 11
" " cows, No. 1		0 11½
" " No. 2		0 10½
Country hides, flat, per lb	0 10	0 11
Calf skins, No. 1, selected		0 13
" " No. 2		0 11
Lamb skins, best city slaughter		1 05
Deer skins, green		0 12
" dry		0 22
Moose hides, green		0 07
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, per lb	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb	0 22	0 24
" extra "	0 24	0 25

The American Radiator Co. is to open a branch factory at Hull, England.

Port Stanley and Chippewa, Ont., are considering the question of installing waterworks systems.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 24, 1905.

IRON and steel products are now so much in demand that it is becoming daily more difficult to fill orders. Consuming manufacturers are even offering premiums for prompt deliveries, and without great satisfaction at that.

Local stocks of tin are being depleted rapidly with the result that the market has toned up greatly during the past week. Even now, importers are quoting a price which would leave jobbers an impossibly small margin at present figures, if they had to replenish their supply. Favorable prices are now being quoted on American tin plates for deliveries the first half of next year, and considerable quantities have been booked.

Copper is a little stiffer, the price quoted last week holding good now, only for large quantities. Pig lead, as was noted in our "Last Minute Metal Marakets last week, is being quoted 5c. higher than the old prices. Even this is considered a fairly easy price under existing conditions, the probability being that still further advances will be made before long.

The pig iron situation shows little change. All shipments for this year are now in, and considerable quantities are piled on the docks waiting to be carted to the various warehouses. Of course, nearly all the large consuming interests are stocked up for the winter, but satisfactory sales are, nevertheless, being made right along.

Orders from points which can be reached by water are being hurried forward on the last boats of the season, and buyers everywhere will soon be at the mercy of the railways' winter rates.

Canada Plates—Good orders are being received and prices are kept firm. We quote as follows: 52's, $2.50; 60's, $2.55; 75's, $2.60; full polished, $3.60; galvanized 52's, $4.00; 60's, $4.25.

Copper—The tone is greatly strengthened this week and previous figures are now only obtainable on large lots. We are quoting: Ingot copper, 17 3-4c. to 18c.; sheet copper, 24 3-4c.

Ingot Tin—Importers have once more advanced their prices so that as soon as jobbers are forced to replenish their stock they will find themselves unable to sell at existing prices. In the meantime, however, we are quoting from 36 1-2c. to 37c. per lb.

Pig Lead—Another sharp advance over last week's figures has brought the price up to $4.10 to $4.20 per hundred lbs.

Boiler Tubes—We quote: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—The situation is not exciting, although sales are quite satisfactory for the season. Most of the foundries throughout the country are stocked

for the winter and orders from now on will be merely for small lots. We give the following prices:

"Dom.," No. 1.	$19.50 to $20.00	delivered	Montreal.
Usual difference in price for lower grades.			
Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19.00	"	"
" No. 3	18 50	"	"
" No. 4	18.00	"	"
Londonderry	19.50 to 20.00	"	"
Carron No. 1	22.50	"	"
" (special)	21.50	"	"
Summerlee No. 1	22.50	"	"
Clarence No. 1	19.50	"	"
" No. 3	19.00	"	"

Tool Steel—We are quoting: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Colver's, 10c. to 20c.; "Air Haradening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel— No further changes in price have been made, but the strong tone of the market is being steadily maintained. Sleigh shoes, $2.07 1-2; tire, $2.22 1-2; spring, $2.75; toecalk, $2.77 1-2; machinery iron finish, $2.17 1-2; reeled machinery steel, $2.75; mild, $2.07 1-2 and upwards; rivet, $2.07 1-2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Trade is normal and prices remain unchanged. Our quotations are as follows: Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets — We still quote as follows: 28 gauge, $2.25; 26 gauge, $2.20; 22-24 gauge, $2.15; 19-20 gauge, $2.15; 8-10 gauge, $2.30.

Antimony—Business is rather quiet at present and concessions are obtainable on the following prices: 14c. to 14 1-2c. for Cookson's.

Tin Plates—The market is very strong yet. Favorable prices are now being given on American tin plates for delivery first of next year. We quote: Cokes $3.75, charcoal $4.00.

Terne Plates—The demand remains as before and the price is steadily held at $6.75.

Ingot Zinc—The market is firm with an upward tendency. Present price is 6 3-4c. to 7c.

Sheet Zinc—The prices we have been, and are still quoting, are considered pretty low and jobbers will certainly be forced to advance as soon as their stocks run out. It is impossible for them to purchase new stocks and make any margin at the present quotations, which are as follows: In casks, 7 3-4c.; sheet, 8c.

Bar Iron—No further change has taken place in the conditions and we are still authorized to quote $1.97 1-2, f.o.b. Montreal.

Old Material—Little change is to be remarked in the market this week. The only price amendment is in scrap zinc, which is now quoted at 4c. instead of 3 3-4c. The rubber situation is still somewhat uncertain, but reliable quotations are expected to be soon forthcoming. We quote: Copper wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 3-4c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12: stove plate scrap, $9; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto November, 24, 1905.

INGOT copper is the only metal which has been advanced in price during the week, although tin is very firm and an advance is looked for in a few days. Jobbers are endeavoring to stock up as heavily as possible before navigation closes, but it is difficult to secure stocks of several lines of metals.

There is an active movement in the United States to transfer all the steam railroads into electric lines and sentiment in this line is becoming stronger in Canada. This will mean enormous consumption of iron and copper and the work will necessarily be spread over a long period of years. While there will be little difference in the iron industry by the change, the use of electric power will mean an enormous increase in the consumption of copper, very little of which is now used by the steam railroads. The increasing use of copper in this direction is something which must be reckoned with in forecasting prices of this metal in the future.

Pig Iron—Prices continue firm and light stocks are reported by the mills on the market. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	18 50
" No. 2, "	18 00
Midland, No. 1, "	18 50
" No. 2, "	18 00
Radnor, at furnace	31 50
Londonderry, at furnace	17 00

Bar Iron—Business is very lively with manufacturers asking time to make shipments. We quote $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin Plates— Demand is active with prices very firm.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Little business is offering owing to high prices. We quote as follows: Pig lead, $4.25 per 100 lbs., and bar lead $4.80 per 100 lbs.

Zinc Spelter—The market is more active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—An advance of 25c. is reported owing to advances on outside markets. We quote: Ingot copper, $17.75 per 100 lbs., and sheet copper, $21 per 100 lbs.

Antimony—The demand is fair, with stocks in hand light.

Old Material—The high prices for new metals is creating a better demand for old material and prices are strengthening. Dealers' buying prices as follows: Heavy copper and wire, 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—No change is reported, prices being steady. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N.P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, November 23, 1905.

THE bookings of finished iron and steel continue exceedingly heavy in all lines and thus far this month are nearly up to the rate of October. That month was a surprise after the extraordinary record of September, which was not very far from double the actual capacity of the mills. It is quite unprecedented that there should be such a volume of buying at this season of the year, when usually the works are eager for Winter work.

The strain in all directions is tremendous and prices are kept down only by main force. During the week the leading interest advanced tin plate 10 cents a box and the sheet makers put up prices on sheets $2 per ton for black and galvanized. It is understood that the American Sheet & Tin Plate Company has now 92 per cent. of its sheet capacity and 70 per cent. of its tin plate capacity in operation.

Conferences among the wire manufacturers have resulted in a retention of current values, and in the plate trade an interchange of opinion has led to the continuance of the policy of holding prices uniform. Premiums, however, are paid with increasing frequency.

In the structural trade the inability to make deliveries is still the conspic-

uous feature. The new mill at Chicago is running, but only on single turn.

A feature of the markets recently has been the demand for structural material and for plates from Canada, and quite a good business has been done in that direction.

There is increasing evidence of a shortage of pig iron for steel making purposes. The Steel Corporation has purchased only a moderate quantity since the sellers are holding their metal at an advance. Other interests, however, have taken several lots in the Pittsburg district, among them being a steel plant in the Philadelphia district which has bought from 6,000 to 8,000 tons at $17 at Valley furnace.

In the east a demand for a considerable quantity of basic pig has made its appearance, due to the retention of metal in the Pittsburg district, which thus far has been delivered to the east. It is hoped that some accumulation toward the end of the year, when the steel works naturally slacken their output, while the blast furnaces continue in operation, may lead to a very much desired easing up of pig metal.

There have been some sales of Virginia basic pig to western steel works during the past week which netted the furnaces $16.50.

Among the rail sales is that to the Illinois Central Railroad, involving 34,000 tons; Colorado Southern, New Orleans & Pacific, 17,000 tons; Beaumont, Sour Lake & Western, 9,000 tons, and the Alaska Central, 5,000 tons.

The representative of the leading producers of foreign structural material reports that thus far the purchases for importation foot up to 40,000 tons, the price having advanced during the movement from £5 1s to £5 10s., c.i.f. Deliveries are made in six weeks.

The principal transaction in domestic structural material during the current week has been the closing of a contract for 30,000 tons of bridges for the Harriman roads. Thus far this month the American Bridge Company has booked 60,000 tons.

LONDON METAL MARKETS.

From Metal Market Report, November 22, 1905.

Pig Iron—Cleveland warrants are quoted at 53s. 3d, and Glasgow Standard warrants at 52s., making prices as compared with last week 6d lower for Cleveland warrants and 4d lower for Standard warrants.

Tin—Spot tin opened firm at £153 5s., futures at £152 5s., and after sales of 240 tons of spot and 160 tons of futures closed firm at £153 7s. 6d for spot and £152 7s. 6d for futures, making price as compared with last week £1 5s. higher on spot and 17s. 6d higher on futures.

Copper—Spot copper opened steady at £76, futures £74, and after sales of 400 tons of spot and 400 tons of futures closed easy at £75 12s. 6d for spot and and £73 12s. 6d for futures, making price as compared with last week 7s. 6d higher on spot and 17s. 6d higher on futures

Lead—The market closed at £15 8s. 9d, making price as compared with last week, 2s. 6d higher.

Spelter—The market closed at £28 10s. making price as compared with last week unchanged.

MINES AND METALS.

Canada's mineral production has increased 600 per cent. since 1886.

* * *

Capital invested in Canadian mining amounts to $104,000,000.

* * *

Nickel was accidentally discovered in Sudbury in 1882. Canada has produced $35,000,000 worth of nickel.

* * *

Yukon placers have produced more gold than any other placer mines in the world.

* * *

The Granby Company, Grand Forks, B.C., have placed orders for important additions to their crushing and hoisting plants. These additions consist of a mammoth ore crusher of the Farren Bacon jaw type. The capacity of the crusher will be 1,400 tons to 8-inch cube every ten hours, and the shipping weight of the machine will be 120,000 lbs., the heaviest single piece weighing 75,000 lbs. The Granby Co. already have two crushers of this same size and type in operation. The capacity of the electric hoist will be a load of 10,000 lbs. Both the crusher and hoist are being built by the Jenckes Machine Co., Limited, Sherbrooke, Que.

* * *

The new zinc reduction works at Frank, Alberta, commenced operations last week. A large quantity of ore was retorted and made into pig zinc, the ore coming from the Goodenough mines at Kaslo, B.C.

CANADA'S ZINC RESOURCES.

Mr. Alfred C. Garde, M.E., Nelson, B. C., one of the members of the Commission recently appointed to inquire into the zinc resources of British Columbia, has just returned from the west. He states that the report of the Commission is in course of preparation. They have been at work for the last two months and a half investigating the zinc deposits, the quality of the ore, and method of treatment. Their work has been so satisfactory that it will be continued by the Department next Spring. The price of zinc has greatly increased of late years owing to its much wider use in the various arts and for electrical and galvanizing purposes.

There are deposits in Ontario which will probably be investigated later. In British Columbia large shipments were made this year, but the producers are at a great loss through having to ship the ore to the United States or to Europe for treatment. It is hoped that soon this can be done in Canada.

Speaking of the general mining outlook in British Columbia, Mr. Garde said the copper industry was steadily going ahead. The Boundary country was producing largely and profitably. The Granby Company, which had the biggest plant, was one of the most encouraging industries of the Province. The lead mining had improved materially through the aid of the bounty.

The hardwareman should always find time to see to the window advertising. Of what profit is to to spend time and money on printing ink and neglect the show window?

British Columbia Trade News

Vancouver, Nov. 17, 1905.

PLANS for improvement of that portion of False Creek, as the inner harbor of Vancouver is called, are being formulated by the trades and industries committee of the Vancouver City Council. The object to be attained is by dredging and filling in, to secure a large frontage on water not now available for vessels. This frontage, which is all on property owned by the city, would then be leased for factory and other sites, the rentals being devoted to paying off interest and sinking fund charges on the bonds which would have to be issued to cover the cost of the proposed improvements. This matter has engaged the attention of the city for many years, and now that the Dominion Government is engaged in preparing a plan for the improvement of that portion of False Creek over which it has jurisdiction, the other work is likely to be undertaken. A very valuable asset will be practically created for the city from what is now useless tide flats, while inducements to industries will be very important.

* * *

There has been some satisfactory result attained after long months of work in the Southern Alberta oil fields by the Western Oil & Fuel Co., whose expert, R. M. Yeager, announces that on well No. 3, in camp No. 3, they have at last struck oil in paying quantities. The depth at which the oil was struck has not been announced, but the quality is said to be excellent. There are a number of companies operating in the same locality, and all have been handicapped by the want of transportation facilities, there being neither railroads nor trails in.

* * *

Though debarred by injunction in the courts from working at the eastern portal of its tunnel, eight miles west of Midway, in the Boundary district, the Great Northern is pushing operations from the western portal, and by the time the tunnel is completed it is their hope that they will have concluded expropriation proceedings by which they will have access to the eastern end. Grading west and north of the disputed territory is being pushed rapidly up the valley of the Similkameen River to Princeton and Hedley, and east of the tunnel the grade is within a few miles of the site, but the legal difficulties have stopped operations at that point. The first round was won by the Great Northern in the courts on a misunderstanding, and it looked for a time that armed opposition from the men employed by both railways would lead to a serious clash. Trouble was averted by the discovery that the order of the court did not give the Great Northern the right to cross the disputed land. The railway then withdrew its men to await successful expropriation proceedings, which, of course, the C.P.R. will oppose at every cost.

* * *

The attention of the City Council of Vancouver is being engaged by the submitted reports and plans of the city engineer, Mr. Clements, for the new high level system, to serve the higher

portions of the city. The cost, which would of course cover a period of three or four years in being expended, contemplates raising three-quarters of a million of dollars. Alternative water supply has been applied for by the city, in view of the difficulties in negotiating for exclusive control of the watershed of the Capilano River, from whence the present supply is obtained.

* * *

An immense scheme of reorganization of the whole water system of the city of Victoria is another large public improvement contemplated. The city proposes to go to Goldstream, the source of supply for the Esquimalt water works, but some difficulties as to securing a record of the water in opposition to the Esquimalt Company and the B. C. Electric Railway, which uses the same water for power to operate the street car lines and lighting plant in Victoria, have delayed action. The Victoria city fathers look to action next Spring. The proposed remodelling of the system in the city will give a thoroughly up-to-date and capable water works, and the cost will be half a million dollars at least.

* * *

To-day the Boundary Falls smelter, near Greenwood, is being blown in, after a thorough overhauling. Large dumps of ore from the Phoenix camp have been sent down to the smelter, and with liberal supplies of coke on hand prospects for a busy season at this plant are bright. The Boundary Falls smelter is about two miles from Greenwood. At Greenwood the British Columbia Copper Co.'s smelter of 600 tons daily capacity is also running full blast, and the directors are considering doubling its capacity, as the ore being raised at their mines cannot be handled. The big smelter at Grand Forks is running full time since its enlargement, so that the quantity of ore being reduced in the Boundary district alone is very satisfactory.

* * *

The new tannery of the Fraser River Tannery Co., opposite New Westminster, is to be ready for operation in a short time. A very large and complete plant has been erected. American capital is interested.

* * *

The Waterous Engine Works, of Brantford, has been awarded the contract to supply a new 800-gallon fire engine for addition to the Vancouver city fire department's equipment. This was awarded after competitive bids had been twice called for. The price was $5,000, the Canadian Fire Engine Co. having bid $5,200. On the first bids the Waterous people were $5,700, but were high, and as the fire chief reported in favor of the Waterous engine the new bids were called.

* * *

Lumber trade in Vancouver and on the Coast generally is very active for the time of year. Naturally cars are scarce on the Coast until after the wheat has been moved forward from the prairie provinces. Local demand is still very good, while exports, both foreign and to the Canadian market, are very satisfactory. Recent increase of $1 per thousand in the price may not be the last. Logs have jumped up until $8 and $10 per thousand may be the ruling figure, the former being now what is asked by loggers. As there is constantly increasing demand for lumber it is quite possible that next Spring when the logging operations are run full swing it will not be possible to keep all the mills going. There are a number of mills, especially on the Fraser River, not yet running full capacity. These are soon to be ready and will add their quota to the demand for logs.

* * *

Hardware circles are fairly quiet, demand for building material not, of course, being so heavy now. Prices are steady and firm. The recent advance of 10 cents in bar iron base has had a corresponding stiffening effect on all iron manufactures. The stocks are, of course, largely from the Old Country, in iron and steel, bar, sheet, plate and wire, but most manufactured goods from eastern manufactories.

* * *

Mr. J. S. Larke, Canadian Trade Commissioner to Australia, who sails to-day on the Moana, very pointedly wanted to know why British Columbia had been neglecting the Australian market of late. Lumber from Puget Sound and other manufactures which might be shipped from British Columbia were being sent by Washington State.

* * *

Owing to the request of General Freight Agent Greer of the C.P.R. for an additional thirty days time, after having asked for ten days, in which to file an answer, the wholesale trade and other shippers are left in a quandary as to how to act. They feel that the recent promulgation of new rates from Montreal and eastern points to Edmonton, giving that city all or more than the ordinary privileges, has shut out the chance of the coast cities selling goods there and competing.

FUR MARKET REPORTS.

THE raw fur season of 1904-05 which closed last May might be considered, on a whole, as being one of the most satisfactory and successful ever experienced by the trade. This applies to every one in the trade from the trapper clear through to the consumer. Different articles had their ups and downs, which may always be looked for, but the ups had decidedly the best of it. The unusually good demand for furs last season was a natural healthy demand, which accounts for prices being so well sustained up to the present time, and forecasts such bright prospects for the coming season of 1905-1906.

Even in the face of all the good conditions existing, and the very bright prospects for another good season ahead, there never was a season where the trade should watch itself so closely as seems imminent this season.

There is no denying the fact that furs as a whole are on a reasonably high level of value, and that the consumer, which is the public at large, is willing to buy furs at the present reasonably high basis, both in this country and in Europe. The success of the coming season does not seem to depend upon the natural conditions, as the natural conditions are all right. Stocks are lighter than usual in nearly all kinds; there has been a natural growth in the demand for furs, both in the climates where the severe winters call for them as a necessary wearing apparel, and in others where fashion demands them as a necessary part of a lady's wardrobe. With good crops at home and abroad the people will have money to spend and will spend it for furs up to a certain limit. The termination of the Russian-Japanese war should bring Russia, one of our best customers, more actively into the market. Again we say every condition is favorable and propitious. About the only thing that could spoil a good season, judging from the present conditions, is the over-zealousness of the trade. Should speculation and reckless buying occur in attempts to carry values to too high a plane, reaction and declines are almost sure to result. Our advice, "Don't kill the goose that laid the golden egg." The public, upon whom at last we depend to buy each season's catch, has done and will continue to do its part if not imposed upon. We advise country collectors to buy freely, using caution in buying the Summer and early caught skins. Buy on basis of present values and ship to market frequently, as nothing posts you so well as actual results. We don't consider it advisable to speculate this season. Buy freely on market basis and ship frequently and you will be sure to have a good season. Prices are starting in pretty high, but if not carried to extremes we predict another record-breaking fur season.

UNIQUE PLAN.

ONE hardware dealer in a town across the line takes the following somewhat unique method to get in touch with the various special lines his business makes it necessary for him to handle, and secure an occasional good advertising suggestion with very little trouble. Each employe at the time he is hired is required to file a paper stating what he has worked at in his past life and what the line of business into which his place of birth first brought him. These files are frequently consulted, and when some special line of advertising is to be prepared the assistance of these clerks is called for. For instance, when the copy is being made up for the sale of plows or some other line of agricultural machinery, all clerks who have been reared on a farm are called upon to give in a list of the chief difficulties which beset the farmer in the use of the plow; its usual defects; the points where, under special conditions, it seems to fall short of satisfactory service. If the subject is builders' hardware the carpenter's son is at a premium; for drillers' tools, a clerk who has some personal knowledge of practical well-drilling is a bonanza. The idea is to get the advertising written from the standpoint of the consumer, one of the difficult things for the manufacturer or dealer to do. It takes the man who has been on the job himself to know just what his successors want and what they frequently find; and no one else is on the job of plows quite so well as the fellow who has stood between the handles "when the wind was strong."

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada.

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Nov. 24, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

CONTINUED mild weather is allowing a long open season on the lakes and a great amount of heavy goods is being brought in by lake and rail routes. Business is active, both in shelf and heavy goods and collections are reported as greatly improved. There are several price changes to note this week and all are advances. Steel horseshoes have been marked up another 10 cents. Shot has advanced 25 cents per cwt., and Canada plates command 25 cents per box more than they did last week.

Game Traps—There is still a brisk demand for game traps. Prices are maintained steadily as follows:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—Wholesale prices are steady at the following figures:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Bluestone—As mentioned last week, the price for 1906 delivery has been announced to be $5.75 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb		$3 00
Plain galvanized	6 to 8	3 39
"	9 2 50	2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		3 00
Staples		3 50
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—There has been a further advance of 10 cents on steel horseshoes. Prices are now quoted as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—An advance of 25c. per keg went into effect the first of the week. Prices are quoted as follows:

Pressed spikes,	¼ x 5 and 6	$4 60
" "	5-6 x 5, 6 and 7	4 25
" "	⅜ x 6, 7 and 8	4 10
" "	7-16 x 7 and 9	4 00
" "	½ x 8, 9, 10 and 12	3 90
" "	⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9.00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits—Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz	$8.75
Grass " per doz.	1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Royal Canadian, per doz	$30.05
R. B., per doz	34.07

Files—Discounts are quoted as follows:

" Arcade "	75 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is still very active in all lines of building paper. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c
" " tarred	80c

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—The price has been steady since the advance noted last week. We quote:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 75
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Vises—Prices are quoted as follows:

" Peter Wright," 30 to 34	14½c. per lb.
" " 35 to 39	14c. "
" " 40 and larger	13½c. "

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN NEW GLASGOW, N.S.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

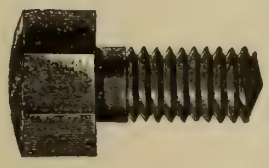
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6 The "1904" sheep shearing machines are sold at $13.60.

Ammunition, Etc.—Shot has been advanced 25c. per cwt. Prices and discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	20 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.

Loaded shells:

Dominion Eley's and Kynoch's soft, 12 gauge.	
black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 50
Chilled	7 00
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10

22 and 24 gauge	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—The price has advanced 25c. per box. We quote:

Canada plate, 18 x 21, 18 x 24	3 50
Canada plate, 20 x 28	3 75
Canada plate, full polished	4 25

Sheet Zinc—There has been a sharp advance and the price is now $8.50 for cask lots and $9.00 for broken lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—Prices are steady at the recent advance. We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 55
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline—We quote:

Silver Star, per gal	21c.
Sunlight "	22c.
Eocene "	24c.
Pennoline "	25c.
Crystal Spray "	24c.
Silver Light	22c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine — White lead is advancing. Prices are quoted as follows:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.00
26 to 40 "	2.25

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

Operations on the big power works dam at Fort Frances will be pushed all Winter. Work on the retaining wall across the canal is progressing steadily and the big coffer dam below the falls is slowly being extended and filled. The tower for the Fort Frances end of the big cable way which will span the river has been raised and is being braced and strengthened, and the one for the Minnesota side is framed and ready to raise. The tower already in position is 106 feet in height.

BUSINESS METHODS AND SUGGESTIONS

THE extension of credit in a retail establishment is obviously wholly dissimilar from the methods employed in a wholesale house, although the definite objects are practically the same. The class of goods is different, the amount purchased varies, and the class of customers who purchase are not as a rule acquainted with business methods, whereas the customer of a wholesale house is constantly brought in touch with ideas and systems employed by such houses.

Cash vs. Credit.

A large number of retail stores are running business to-day on a strictly cash basis, and, although this is a much safer and more satisfactory way, where a store has the monopoly, and can afford to be independent, still a certain amount of trade will undoubtedly turn to the store which carries the monthly account. It should be the aim of such a store to secure as large a number of credit accounts as possible, provided only first-class accounts are opened.

When an account has been opened with a customer it is only natural to expect to hold the trade of that customer. He will more easily make purchasest at a store which carries his account, whereas if he were obliged to pay prompt cash it would be immaterial to him where his supplies were obtained, provided quality and price were satisfactory, the result being that he would go from store to store to purchase his requirements, as no one store would have any hold upon him.

The percentage of loss on account of bad debts must be kept down and collections watched even more carefully than in a wholesale business.

The Customer.

The customer looks at the price and quality of the goods purchased, he also expects courteous treatment, promptness and accuracy on the part of the clerks employed—a good account may be, and is no doubt very often lost simply through lack of interest displayed on the part of the salesmen, especially in some of our large stores.

Extending credit in a retail business is more of a personal matter than in a wholesale house; the person in charge should be in close touch with every department of a retail business.

The credit man should be tactful, diplomatic and be able to read human nature and recognize the fact that he is not dealing with business men.

A retail merchant who desires to have his bad debts reduced to a minimum should be familiar with the conditions which exist in the community in which he is extending credit, such as strikes, removal of factories employing a large number of men, etc. He should also take into consideration a customer's position, source of income, prospects, etc.

The merchant may often find it a very difficult and delicate task to obtain the necessary information about a customer which he desires, but by a personal conversation, certain facts may be drawn out skillfully and tactfully, so as not to offend a prospective customer. Perhaps the buyer is well known in the community in either a professional or a business way, but if information cannot be obtained in any other way, the commercial agencies will furnish it.

The clerk who sells a buyer about to open an account or who is unaware that such a buyer has an account already, should use a great deal of tact and common sense so as not to offend a customer with inquiries as to his account, as a good account may be turned away at once.

Collection.

A limit should be placed upon the purchases of doubtful customers, so as to have the account brought before the notice of the person in charge just as soon as that limit is reached.

It is not only necessary to use judgment in regard to opening a new account, but the account must be watched carefully afterwards.

Collecting of overdue accounts is a delicate business, as if a customer feels that the retailer is dunning him for an account, he will, although perfectly good for it in most instances, feel inclined to buy elsewhere until he has paid off the account.

Accounts should be rendered exactly in accordance with instruction, i.e., using the title Mr. or Mrs. as the case may be.

Overdue Accounts.

Overdue accounts should be collected promptly for three reasons:

First—The loss through "bad debts" will be reduced to a minimum.

Second—The customer will feel more inclined to buy if his account is paid, but the request for settlement must be made judiciously.

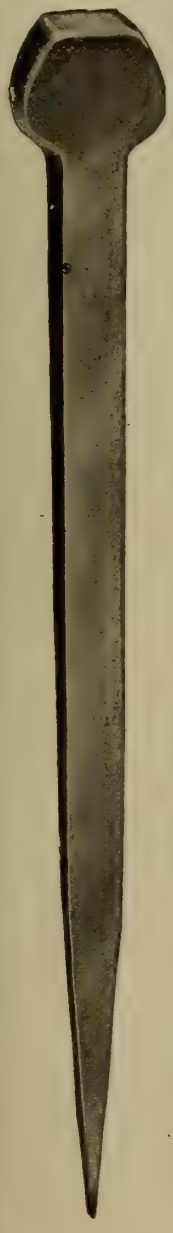
Third— It requires capital to carry overdue accounts, which often means a considerable loss, through bank interest.

A FRIENDLY CHAT.

ONE thing every storekeeper ought to do occasionally is to call his clerks together and say to them something like this:

"You and I want to make more money in this store. But in order to do that we must do more business. Now I want suggestions from all of you, about anything you think we can do to increase trade and gain new customers. Or, if you see any waste going on that we might save, I want you to tell me. I want each one of you to keep your eyes open, use your brains, and think of something that will improve this business for your sake and my sake. If there is any one of you who does not care to try to improve this business, we don't want him here. I would rather get rid of him and divide his salary among those who do care. Now as soon as a suggestion comes to your mind, let us have it, and we will see if we cannot all of us make more money."

THE "C" BRAND



On a box of Horse Shoe Nails with our name, means to the purchaser that he shall receive the best, and "made in Canada."

Forty years is a long period of manufacturing experience in the production of Horse Nails. You get the benefit of it all, when you buy the "C" brand.

The best material known or used by any maker in the world for making Horse Nails, is Swedish charcoal steel nail rods. We use this exclusively.

The "C" brand nails will stand more hard work and outlast any "cold process" nail made in the world—bar none.

Don't compare prices, compare quality. The best costs the most to produce, and always sells for the best price.

Remember, that the recollection of the quality will remain long after the price has been forgotten.

Your orders and preference for the "C" brand respectfully solicited.

CANADA HORSE NAIL COMPANY

Established 1865. MONTREAL

Did you ever stop to think how many **HARDWAREMEN** read any one of our large city dailies? If you have a business for sale or wish to engage a clerk you will not be content to have your advertisement seen by men in any one locality.

HARDWARE AND METAL is not a Montreal, Toronto or Winnipeg paper. It is an **ALL CANADIAN NEWSPAPER,** and reaches each week practically all the men engaged in the Hardware, Stove and Tinware and Plumbing Trades from the Atlantic to the Pacific.

Your message will be carried **quickly.** HARDWARE AND METAL is mailed Friday, and all subscribers in Ontario should receive their copy on Saturday. Travellers invariably count on reading the paper each Saturday.

If you want anything in which the Hardwareman or Plumber would be interested, insert a **Want Ad.** in HARDWARE AND METAL.

RATES: 2c. per word First insertion
1c. " Subsequent insertion

THE TARIFF COMMISSION

AT the closing sessions of the Tariff Commission in Toronto last week and the opening meeting in London, divergent views were presented, deputations of working men and farmers appearing to protest against higher protection on the articles consumed by them while more manufacturers desiring to off-set foreign competition joined in the demand for higher duties. The Massey-Harris Co. came into direct conflict with the farmers who had asked that the duty on farm implements be lowered, the company's representatives asking the commissioners to "even up" all the duties on that branch of industry to 25 per cent. This would effect mowing machines, harvesters, reapers, cultivators, ploughs, harrows, horse rakes, seed drills, manure spreaders, and weeders, which are now taxed 20 per cent. Other requests included one that the duty on extra parts be raised from 20 per cent. to 45 per cent., equal to United States tariff. Senator Jones maintained that the increased duties would not result in any higher price to the users in Canada.

Mr. Thomas Findley discussed the request for a duty on cream separators, saying the present eight or ten factories could now supply the Canadian market. The importations had increased from $216,000 in 1900 to $674,000 last year.

Discontinue the Rebate.

Some readjustments of duty were asked by Mr. John Cowan of the Ontario Malleable Iron Co., Oshawa, but the largest question he raised was a request that the rebate on malleable iron duties on goods exported be discontinued.

Mr. Cowan asked that the duty on castings in the rough and upon malleable iron and steel castings be made 30 per cent. instead of 25 per cent.; on hardware for builders' use an increase from 30 per cent. to 35 per cent. and that the duty on malleable iron castings for agricultural implements be increased from 20 per cent. to 25 per cent. He complained that the industry in Canada is not as prosperous as it should be and the product last year was 17,000 tons, while the capacity of the factories was 25,000 tons.

A general duty of 40 per cent., instead of 25 per cent., was asked for pulleys of all kinds for transmission of power, grain elevator machinery, transmission machinery, and finished iron work of all kinds, by Mr. C. F. Wheaton, manager of the Dodge Manufacturing Co., to meet the American competition.

A request that steel balls be put on the free list until the demand warrants their being made in Canada was made by Mr. W. J. Murray, of the Chapman Double Ball Bearing Co., and Mr. T. A. Russell, manager of the Canada Cycle & Motor Co., large users of that article.

Mr. Donald J. McKinnon asked for an increase in duty from 25 to 35 per cent., or a specific duty per horse-power, on gas and gasoline engines, together with the transfer to the free list of such parts imported as are not made in Canada. The imports in 1904 of $127,235 grew to $194,074 in 1905. The output of the seven factories in Canada might be $1,250,000.

Want Sheet Copper Free.

A protest against the request for a duty on sheet copper was made in a petition read by Mr. W. E. Booth, on the ground that there is no copper mill in Canada, and one could not be economically established, and a duty would seriously handicap their industries, which used it as a raw material, the total consumption being 1,000 tons yearly. The following companies signed the petition: McClary Manufacturing Co., London; Thomas Davidson Manufacturing Co., Montreal; E. T. Wright & Co., Hamilton; Metal Shingle & Siding Co., Preston; Pedlar Metal Roofing Co., Oshawa; Galt Art Metal Co., Galt; Kemp Manufacturing Co.; Coulter & Campbell, Metallic Roofing Co., Fletcher Manufacturing Co., N. L. Piper Railway Supply Co., Booth Copper Co., Toronto; Winnipeg Ceiling and Roofing Co., Winnipeg; and McFarlane and Douglas, Ottawa.



Mr. Thomas Dexter,
Of H. S. Howland, Sons & Co., Toronto, one of the representatives of the Canadian Wholesale Hardware Association at the recent convention at Washington, D.C. [Photo received too late for last week.]

Mr. Thomas B. Lee, general manager Rice Lewis & Son, as a merchant, asked that the articles which are admitted free for manufacturers for use in their factories be free to others who want to import them.

Messrs. E. Fielding and Edwin Hill presented petitions from some twenty glass dealers in Toronto, London and Montreal, asking for the abolition of the British preference on common window glass, and the imposition of a duty of 10 per cent., or a graded scale from 15 to 50 cents per 100 feet, instead of 15 per cent. and 7 per cent. preference as now. The reason assigned was that the only British firm exporting to Canada is Pilkington Bros., who, with jobbing offices in Canada, put the other dealers at a disadvantage, who have to go to other countries and import at double the duty. Mr. George Kerr and Mr. Frank Baylis, for Pilkingtons, replied that their firm sold to anyone, and they would take orders now.

A. W. White, of George White & Sons, manufacturers of farm implements, complained that American manufacturers had been shipping machines invoiced for Customs purposes at 35 per cent. off the cost. These goods were billed to their branch houses throughout the States at 35 per cent. off the regulation selling price, and these transactions were quoted as bona fide sales when they were only shipments to agents, to whom the goods were not really sold. Mr. Paterson said that he would instruct his department to make a searching inquiry.

Joe Chamberlain's Screws.

Screws shipped from the factories of Joseph Chamberlain in Birmingham and entered into Canada under the preferential tariff caused the Coulter Screw Company of London to appeal to the Tariff Commission for free raw material. The general duty on this commodity was 35 per cent., but having to pay a specific duty of $7 a ton the protection was lowered to 15 or 20 per cent. All had gone well until the introduction of the British preference, when the British manufacturers, particularly those in Birmingham, had become alive to the Canadian market and were threatening to wipe out the Canadian manufacturer. The remedy suggested by Mr. Coulter was that certain lines of iron which he could not secure in Canada and which were in fact made in only one American mill be put on the free list.

C. H. White, of the London Rolling Mill Co., asked that if the duty on steel billets, his raw material, which is now $2 a ton, were raised, the duty of $7 on iron and steel bars be increased. The present duty was satisfactory, and he asked no change. They were protected against unfair American competition by the dumping legislation, and they were willing to concede the preference to the British manufacturer, as he is hampered by distance. Mr. White also asked for a lower duty on bituminous coal.

Mr. Wm. Scarlet, for the pump-makers, asked that 10 per cent. be added to the present duty of 25 per cent. on steel pumps.

Mr. G. F. Mann, representing the cement dealers, protested against the duty imposed last July on cement bags. They thought the 25 per cent. duty on cement quite sufficient.

The handle manufacturers of London, St. Thomas, Strathroy, and Tilbury asked, through Mr. John Stevely, for a better grading and classification of handles imported from the States, so as to prevent them being entered at an undervaluation.

Valves and Castings.

An increase from 30 to 45 per cent. was asked by the Kerr Engine Company of Walkerville, during the sittings of the Commission at Windsor, on brass and iron valves and castings, as competition with the United States is very keen. There is a possibility of greater competition from Great Britain, where labor is cheaper than here, but the United States worker can do an equally big business in a much smaller area. Mr.

H. O. Kerr, who presented the petition, complained of freight discrimination, and quoted the following rates obtained to-day on iron valves in less than carload lots: Detroit to Toronto, 18 cents; Walkerville to Toronto, 30 cents; Detroit to Montreal, 31 cents; Walkerville to Montreal, 44 cents.

PACKING ACCOMMODATION.

A MONTREAL jobber recently showed a representative of this paper a series of interesting correspondence with one of their customers relating to the non-arrival of a small purchase. The customer wished the goods sent to a neighboring house to be enclosed with a package from that firm for shipment. The trouble arose through the fact that the latter house would give no receipt for the parcel and the former one did not feel justified in leaving unreceipted a valuable purchase. Annoyances of this kind arising from enclosures are of almost daily occurrence and jobbers have wrestled to adjust the problem satisfactorily. The practice of sending goods to be packed to other houses is of untold benefit to retailers in effecting numerous savings. The manufacturing and jobbing trade hardly regard this practice as an evil and are constantly imposed upon by unreasonable demands. The desire to accommodate their customers has led to concessions of a ridiculous nature. The extra expense entailed is considerable. Larger cases, increased cartage, more help, time and labor are necessarily entailed. In these days of changing style and quick demand retailers often defeat their own object by insisting upon this practice, as delays and misunderstandings are altogether too frequent.

A rigid inquiry throughout the trade fails to reveal any house that refuses to give this accommodation to its customers. However, the methods employed in tracing these inclosures vary greatly and some concerted action is essential to lessen the difficulty. In general the impression prevails that since the goods are not from its own house there need be no attention paid to their proper handling. In many cases there is also no system in checking these goods.

The chief obstacle in the way of effectively performing this service is the refusal to give a receipt by more than one reliable house. This policy is extremely short-sighted, as a receipt practically relieves the firm receiving the goods from all further responsibility if the wording is clear. If trouble arises through non-arrival of the goods to the customer the firm has only to look up its receipt and trace the shipment to prove that it is not responsible.

Ignoring the inconveniences caused by this practice in the matter of delayed shipments, etc., the advisability of a receipt deserves earnest attention. The chief objection to giving a receipt lies in the fact that the firm has no knowledge of the contents or value. There are various way of getting round this difficulty, one receipt in use having a double form which allows space to give names of the firms from whom the goods were received and to whom addressed, as well as a rough description of the goods. Following this comes the important part, which reads as follows: "Contents and value unknown. It is distinctly understood that we are not to be held responsible for the safety of the above in any way beyond enclosure with our shipment." Another large jobbing firm uses the following: "As the above parcel is forwarded by us merely for the convenience of customers, it is understood we are not responsible for its contents or safe delivery." Another jobbing house which does not sign for parcels has a triple method of checking in and out and all records can be immediately found. Where care in the receiving and packing rooms is practiced, and an inventory of all packages on hand is made at short stated intervals, there is little likelihood of any confusion arising. In fact one house states that since 1903 they have never lost a parcel.

The favorite method in large houses is to give a receipt from a duplicate book when the goods are received. This is then entered and the goods are transfered to the packing room, where a receipt is given to the receiving room. The packing room enters the acknowledgement of their arrival in an enclosure book, stating who from, who for, and the date received. Further, the list of all parcels inclosed is entered upon the bottom of the invoice.

Jobbers and manufacturers seemingly regard this accommodation to their customers as an obligation for them to buy the bulk of their purchases from the house furnishing such accommodation. The fact remains, such favors cost a great deal of money and cause vexatious delays and needless unpleasantness. It is not conceded that the practice can be eradicated, but retailers are serving their own interests when they do not make an imposition of such a favor. A regular practice of this kind should be condemned by all concerned. An occasional accommodation is all right, but there is a limit to all good things.

THE OLDEST WORKING GRINDER.

A REPRESENTATIVE of Hardware and Metal, while recently going through the works of George Butler & Co., Sheffield, England, noticed an old man at work despite his 83 years of age. The old fellow, James Sadler by name, commenced razor grinding when 13 years of age, and is still hale and hearty enough to spend four or five hours daily at his favorite work, three sons, one being 58 years old, assisting him at his wheel.

When he first entered the cutlery trade Sadler worked for Sir Frederick Thorpe Mappin, and went to Messrs. George Butler & Co. some 30 years ago, working there ever since. As may be guessed, he has ground thousands and thousands of razors in his time. When he gets into a reminiscent mood he has some interesting tales to tell. The great Sheffield flood is very fresh in his memory, and on that disastrous occasion he saw a stable full of dead bodies, The trades outrages, too, are well remembered by this veteran, and he was personally acquainted with most of the men who were punished for the despicable deeds they committed. In his younger days Sadler traveled by the old stage coaches, and he is one of those veterans who can boast of having journeyed in this manner as well as by water and rail. When he was 80 years of age a few of his friends entertained him to supper and presented him with a walking stick.

siding

Our Sheet Metal building materials work architectural wonders.

"Metallic" Sidings have all the advantages of brick or stone, none of the disadvantages of wood and many points of superiority over other metal sidings which the dealer will not be slow to recognize.

"Metallic" Sidings are very light, strong and rigid; never sag, warp or buckle, no knots or splits, as with woodless paint, required. They can be had in galvanized or painted steel, simulating stone or brick most perfectly. They resist fire and last a lifetime. Price low, quality unequalled.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto **Winnipeg**

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

FOR SALE.

SET of good tinsmith's tools. Wallace, 135 Dalhousie St., Toronto. [57]

HARDWARE and Stove business; town 4 000; one opposition; best reasons. Box 293, HARDWARE AND METAL, Toronto. [4]

AGENCIES WANTED.

MANUFACTURERS' AGENT desires correspondence with manufacturers of hardware specialties who want live intelligent representation in Western Canada. Address P.O. Box 702, Winnipeg, Man. [47]

WANTED.

WANTED—Two first-class tinners for furnace work; $3.25 per day, eight hours; steady employment. Apply The Wm. Ralph Co. Vancouver, B.C. [51]

WANTED—Position as salesman by hardware man with twelve years' experience; would like connection with manufacturers selling to the Canadian wholesale hardware trade; best references. Address K, 607 Ave. Hotel de Ville, Montreal. [49]

A FIRST CLASS hardware man is wanted as manager by a well established house; a good salary will be paid and all correspondence will be treated confidentially. Address Box 295, HARDWARE AND METAL, Toronto. [47]

WANTED—A partner to take half interest in old established hardware business in central Eastern Ontario and manage it; must invest at least $3,000; full particulars on application. Box 297, HARDWARE AND METAL, Toronto. [49]

WANTED — Agents all over Canada to sell hardware, safety razors, useful novelties, warmers, pipes, etc.; state lines specially interested in. Write G. Bishop, Mary-Ann Street, Birmingham, England. [48]

FOR SALE.

OLD ESTABLISHED HARDWARE BUSINESS in one of the best Manitoba towns; first-class wheat district; good stock and buildings; paying trade; suitable terms; a fine opportunity for anyone wishing to go into the business. For information apply to **The J. H. Ashdown Hardware Co., Limited**, Winnipeg, Man. [46]

B. A. GRAUTOFF & CO.

8 Fenchurch Bldgs., LONDON, E.C.

General Merchants and Commission Agents for all classes of goods, British and Continental.

Cable Address—"**Grautoff, London.**" Liebers Code.

MINING LAW REVISION.

IN accordance with the suggestion of the Minister of Lands and Mines, meetings are being held in the various mining divisions of Ontario to consider in what respects the mining law should be amended to provide for existing needs. As was to be expected, the resolutions passed by the people of one locality do not in all particulars coincide with those passed at a meeting in another locality. At one point the uppermost interest may be that of speculative claim-holders; at another it may be that of prospectors, and so on. Another cause of disparity of views as between sections is difference in mineral production. Where iron ore is the most important content of the local deposits a policy will be recommended that may appear to be at variance with the sense of the people who are considering what is best for the development of the nickel-copper deposits of their neighborhood. The resolutions of the several district meetings, however, will come before the convention which is to meet in Toronto on the 11th.

SELL THE LAMPS

That produce the **most Light** at the **least cost.**



SHELBY USEFUL LIGHT LAMPS

DOWNWARD LIGHT TIPLESS LAMPS

We quote special prices to the hardware trade.

ONTARIO LANTERN & LAMP COMPANY, LIMITED

Hamilton, - Ontario

Buy the Best.



HERCULES

Sash Cord.

Star Brand Cotton Rope

Star Brand Cotton Clothes Lines

Star Brand Cotton Twine

For Sale by all Wholesale Dealers.

Hardware Store Business Methods

Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

Cloth bound, Price, postpaid **$1.00**

The American Hardware Store

A Manual of Approved Methods of Arranging and Displaying Hardware.

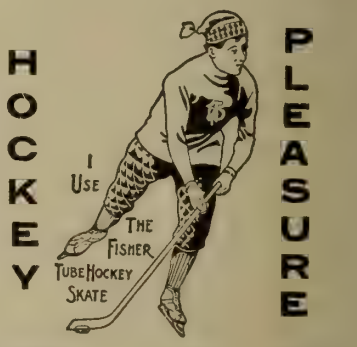
By R. R. WILLIAMS, Hardware Editor of the IRON AGE.

This book is descriptive of the best methods of accommodating and displaying the large variety of goods which are carried in stock in representative American and Canadian hardware stores. Copiously illustrated, and worth many times its cost to every progressive hardware dealer.

Cloth bound, 6¾ x 9¼, 576 pages. Price, postpaid. **$3.00**

ADDRESS TECHNICAL BOOK DEPARTMENT, MacLEAN PUBLISHING CO. LIMITED TORONTO

The Fisher Tube Skate



STRONG LIGHT NEAT

Dealers

DON'T MISS BUSINESS. You may not have stocked our skates.

We have provided for the rush season.

WE CARRY FULL LINE OF SHOES with our patent hook. We can give mail orders quick despatch.

Skates attached to shoes complete.

When ordering state size of shoe usually worn.

THE A. D. FISHER CO., Limited

34 Richmond Street East

TORONTO

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
Drummond, McCall & Co.
MONTREAL, QUE
or to
Canada Iron Furnace Co.
MIDLAND, ONT Limited

Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc. etc.

LOW-GRADE CORDAGE.

DURING past season considerable dissatisfaction has been caused by the sale of a so-called manila rope. It is difficult to distinguish real merit of a rope until it has been in use for some time, and for this reason many dealers have been imposed upon by unknowingly purchasing this bogus manila rope. The following extract from a recent issue of the Cordage Trade Journal is worthy of consideration :

"High grades of manila fibre have advanced out of all proportion to the fair current grade, and the stock that should go into bolt rope is much higher in proportion to-day than the ordinary stock. Considerable of the current business has been for the best grade of manila rope, and some members of the trade think that a re-action from the cheap grades of so-called manila rope is setting in, citing a number of incidents where dealers have declared that the dissatisfaction, caused by accidents and monetary losses, arising from the use of cheap bogus manila rope, has made them resolve to handle only a first grade of manila in the future."

THE INVENTIVE FACULTY.

IT'S human nature to be inventing or tinkering with something, from a story to the tariff; and the hardware clerk who hasn't some pet improvement up his sleeve shows that his mind is on some other subject than this work.

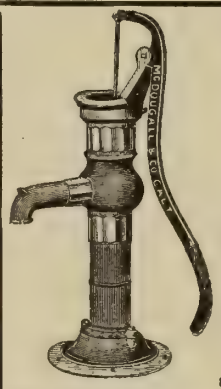
Perhaps nine-tenths of the inventions placed upon the market have no practical value other than as novelties; but of the other tenth, some of them are money-makers and most of the simple ones from which the greatest returns are apt to come originate in unexpected places.

One thing is pretty certain, that when a man sets out to improve a machine he is pretty apt to understand the machine he wishes to improve. Nothing else, except the professional pride that does not always come to a clerk at the beginning of his career, will set his attention so closely in the direction of any special line, as will the idea that he can think out some improvement to his material advantage.

The hardware dealer who allows it to be understood among his employes that he is on the alert for valuable mechanical suggestions from them, to help develop any that are worthy, will not often have to make the last part of the proposition good, but he will create for himself an attentive, observing and intelligent lot of clerks, and always has before him the possibility of a first chance at that unexpected little device that will make a fortune for himself and his ingenious employe.—Hardware.

J. Shipton, a Vancouver electrician, plans the installation of an electric lighting plant in the town of Ladner, on the south bank of the Fraser River, near the sea coast.

MACHINERY STEEL
IRON FINISH
SINGLE OR DOUBLE REELED
COLD ROLLED
Large assortment in stock.
Close Prices for Import.
A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen handle our
ANTI-FREEZING PUMPS.
They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.
Do you handle our PUMPS?
Write for catalogue and prices.
The R. McDougall Co., Limited
GALT, ONTARIO.

GET IT! GET IT!
B. K. MORTON & CO.'S
B.C. BRAND DRILL STEEL
Just the steel that suits the purpose.
Just the steel that sells.
Agents—
E. G. PRIOR & CO., Victoria, B.C.
BAINES & PECKOVER, Toronto, Can.
D. W. CLARK, P O. Box 521, Toronto, Can.
Canadian Representative

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

PAINT, OIL AND BRUSH TRADES

THE PRICE OF KEROSENE.

RECENTLY Hardware and Metal received a communication from a manufacturing concern in Michigan, stating that they had found it impossible to do business in Canada on a profitable basis owing to the high price of kerosene oil. The company manufactures an oil heater which has won great popularity in the States, but the high retail price of coal oil in Canada does not encourage many people to use it as a fuel. While investigations are being made into trade "combines" it might be worth the effort to look into how the oil trade is centralized and the price of coal oil, gasoline, etc., kept up to figures far higher than paid by consumers in the United States. A correspondent in the Toronto Globe last Saturday has taken up the subject, giving the following comparison of prices now paid with those prevailing seven years ago :

"Prices paid by refiners for crude oil in the first half of 1898 are compared in the subjoined data with prices during the early half of the present year. The wholesale prices for lamp oil during the same periods are stated. The question has been raised whether the difference in price represents profit to the oil company or increased cost of handling by the tank system.

"Refiners paid in 1898 $1.40 per barrel of 35 gallons, and in 1905 $1.26 per barrel, that is fourteen cents per barrel less was paid in 1905 than in 1898.

"Lamp oil delivered to retail merchants by the single barrel cost eleven cents less, two cents per gallon allowed for empties when returned and 2 per cent. off for cash, in 1898. In 1905 the price delivered by tank wagon was ten cents per gallon, spot cash, making an advance in price from 1898 of one cent per gallon and no discount.

"Gasoline delivered by the barrel, 1898, fourteen cents per gallon; 1905; nineteen cents per gallon.

"Benzine delivered, Toronto, 1898, seven and one-half cents per gallon; 1905, nine and one-half per gallon.

"Fuel and gas oils in 1898, three and one-half cents per gallon; in 1905, three and one-half to five cents per gallon.

"Lubricating oils from five cents to ten cents per gallon higher in 1905 than in 1898.

"Refined oil in barrels, delivered at Quebec, 1898, twelve cents per gallon, freight prepaid, no charge for barrels. The lowest price heard of delivered in Quebec in 1905 was fourteen and one-half cents per gallon, same grade of oil, in barrels.

"The price of oil in 1897 was relatively the same as the cost of crude oil. Any dealer or consumer could buy at above prices who sent an order to the National Oil Co., Petrolea, at the date given. But now refiners sell only to their own agents, who are a class of middlemen appointed and paid by the refiners, and these men attend to the delivery to retail merchants.

"It is doubtful if there is one merchant in Toronto who could say what the price of crude oil is to-day or what it has been any month this year or what it was in 1898. The same may be said about the cost of refined oil, the merchant knowing next to nothing about it. He has no trouble of risk, as he carries only a few gallons stock, the oil is dumped into his tank as he wants it, he pays his cash for what the little slip calls, and that is all he knows about it. In proportion to the price he pays he adds his percentage of profit and so regulates his price to the consumer.

"It is clear that the consumer and producer have to pay to keep up this expensive method of bulk delivery. The consumption of lamp oil alone in Canada is about 24,000,000 gallons per annum, and the profit on it amounts to about half a million dollars per annum —rather a large sum to pay for a system that is supposed to be cheapening the cost of oil."

ATTRACTIVE WINDOWS PAY.

THE decoration of the store window is looked upon by a great many dealers from the standpoint of what it costs, the time of the clerk, etc., and not from the beneficial results, such as the increase in business, that may arise.

They have as yet to be convinced, shown in dollars and cents, that a well arranged window display is a paying investment, that it is one of the best paying advertisement any dealer can use to attract and maintain trade. This has been proven time and again by dealers all over the country, and to those who can't see anything in having well kept and attractive windows we would say, give the method a trial and, like many others, you will be convinced it is a good business policy.

The proof is seen from the fact that the brightest store in the block is always the attraction. Those in a hurry will stop and look at a well-lighted and well-dressed window, and in many instances the stopping means a sale.

Imperial Turps.

We do not claim it is pure Southern Turpentine, but we do know it is safe to use, and does not contain any injurious properties. This is more than we would like to say about some of the so called PURE in the market at present.

Manufactured only by

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

Are You Thinking of Sending

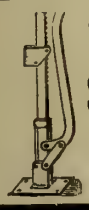
us a paint order? Are you going to specify the same goods as last time? Have you ever carried our

ALUMINUM PAINT

It is a first-class article, giving excellent results on Radiators, Registers, Steam Pipes, Gas Ranges—in fact, all kinds of Iron and Metal Work.

Put up in gals., half-gals., quarts, pints, and half pints. Let us quote you prices.

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.



COVERT MFG. CO.
Troy, N.Y.
Steel Carriage and Wagon Jacks
Harness Snaps, Chain, Rope and Web Goods, etc.
SOLD BY ALL LEADING JOBBERS.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

Subscribe to the
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for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**
Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.
SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

GLUES AGAIN

Our **IMITATION FRENCH MEDAL GLUES** are of such high class and are so suitable for Export that we would like to quote you. Export trade in this line is growing rapidly, and we pack in casks or cases as preferred. Quality unrivalled.

GROVE CHEMICAL CO., LTD., Appley Bridge, Lancashire, Eng.

TRADE WITH ENGLAND

Every Canadian who wishes to trade successfully with the Old Country should read

"Commercial Intelligence"

(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)
Moreover, regular subscribers are allowed to advertise without charge in the paper. See the rules.

OILS

Raw Linseed
Boiled Linseed
Pale Boiled Linseed
Pale Refined Linseed

"DOMINION" BRAND
OILS GUARANTEED GENUINE.

Canadian Agents—
J. A. BERNARD,
21 St. Peter Street., Quebec
HOMER TAYLOR,
Temple Bldg., Montreal

FRED'K FENNER & CO., LTD.
PENINSULAR HOUSE, MONUMENT ST., E.C.
LONDON, ENGLAND.

FILLING AN EVER-PRESENT NEED



It's surprising the extent of the Paint and Varnish trade. Scarcely a home but has two or three occasions in a year to get a "tin." This occasional call of one man and another means extensive business.

"Island City" Brand

Paints and Varnishes are more likely, by virtue of their excellence, to be the favorite than any other brand. And then think of the **big** orders! It seems but common-sense to have **"Island City" Brand** Paints and Varnishes in stock. Of course you have them!

P. D. DODS & CO. **Toronto, Montreal, Vancouver, Winnipeg**

"QUI VIVE?"
"WHO GOES THERE?"

"Canada Paint!"

SEARCH THE WIDE WORLD

And you will search in vain for better decorating material than that made by

THE CANADA PAINT COMPANY

The largest shippers of Painting Material in the Dominion of Canada.

AT HOME AND ABROAD THE "ELEPHANT" WHITE LEAD IS IN THE FRONT RANK.

Pure Colors
Triple Strength Colors
Amberite Exterior Finish
Amberite Interior Finish
Oxidised Decorating Enamels
Snow White Zinc
Varnish for all Purposes

EVERYTHING FOR THE PAINTER

FOR SAFETY, ECONOMY AND COMFORT SEE THAT EACH PACKAGE BEARS THE NAME OF

THE CANADA PAINT COMPANY LT'D

NOTE:—Let this be your passport through life "CANADA-PAINT"

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, November 24, 1905.

ALL staples are in steady demand at the same quotations as last week. Business still keeps up with a rush, although it is expected that by the end of the week shipments will resume their normal condition.

Linseed oil has been swinging too and fro, occasionally stiffening in price and then easing off. At present it is a little stronger, but not sufficiently so to warrant any change in quotations.

Gum shellac is steadily advancing on import orders from Calcutta, but it is not thought that this will make any material difference in the Canadian market for some time.

Turpentine—Prices are still maintained at last week's figures, without any fluctuation. We quote as follows: Single barrel, 98c. per gallon. Two barrels or over, 97c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—The market has been fluctuating somewhat during the week, but the strength at time of writing warrants us in keeping the last week's readings unchanged. We give prices as follows: Raw, one to four barrels, 45c.; five to nine barrels, 44c.; boiled, one to four barrels, 48c.; five to nine barrels, 47c., f.o.b. Montreal. Net 30 days.

Ground White Lead—The price as advanced last week may soon have to be amended again, as the feeling locally is that this has not been sufficient to meet the rapid rise in the primary markets. We quote as folows: Best brands Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead — Our quotations, which are considered cheap under the circumstances, are as follows Barrels, $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—The high tone noticed last week is being rigidly held and we are still quoting the following prices: Pure dry in casks, 7 1-2c.: in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.: in 100 lb. kegs, 7c.

White Zinc (ground in oil)—The advance made last week is still being held. 25 lb. irons, 8c. to 10 1-2; No. 1, 6 3-4c.; No. 2 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barre's, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Our prices are as follows: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—In spite of conditions in the primary markets we are still quoting the following prices: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75; and smaller quantities, $5.50.

Gum Shellac—This article is now being quoted higher on import orders, but the Canadian market is hradly likely to feel the effects of this for some time yet. We quote the following prices: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish—Splendid demand is keeping local producers busy shipping orders. We give the following prices: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—We quote from $1.20 to $1.40 per gallon.

Castor Oil—Advances have again been made in Europe amounting to 3-4 of a cent, but as local stocks are good the prevailing price is from 7 1-2c. to 8 1-2c., according to lot.

Refined Petroleum—Conditions remain as before and prices are still as follows: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—There is still, and there will be all winter, a great scarcity of most sizes. Shipments have not been up to expectations and as nearly all the boats are now in there is little hope of increasing stocks in Montreal before next spring. We quote: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

When the window "pull" is the right one, the dealer won't need a social "pull" or a political "pull." Give us the window "pull" every time.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Nov. 21, 1905.

LAST week's prices continue unchanged, although linseed oil producers have notified their customers that the present prices cannot continue after the first of the year. An increase can, therefore, be looked for. Turpentine is weaker from the Southern markets, but stocks are light locally and we have no change to report. White lead and kindred articles remain very firm with no changes since our late report.

Business continues very active for this time of the year and many orders are being placed by dealers who desire to have their stocks replenished before the expected advances are made in the early part of the new year.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75; ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V., M., in casks, $6.50: in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gallon lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c. to 48c.; boiled, 50c. to 51c.; 5 to 9 barrels, raw, 46c. to 47c.; boiled, 49c. to 50c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, $1; 5-gallon lots, $1.10, f.o.b. point of shipment, net 30 days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Dealers are laying in their winter supplies and shipments are large. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

COTTONSEED OIL.

MR. J. W. ALLISON, chairman of the bureau of publicity of the Interstate Cottonseed Crushers' Association, in a recent address before the Texas crushers, said: "You have always been told that cottonseed oil, being a non-dryer, was unsuited as a vehicle for paint, and could not compete with linseed oil, which, even today, at the lowest value in its history, sells for nearly two-and-a-half times the value of your oil, and yet there is not, I am informed, a manufacturer of ready mixed paints in the country who is not, directly or indirectly, a buyer of cottonseed oil. I have seen myself, since being here on this visit, a house painted entirely with crude cottonseed oil that dried well, and it compared today most favorably with any linseed oil job of one-half the age. You are told that cottonseed oil, for the same constituent reason that prohibits its use in painting, and being rich in gums, is not a lubricant, and yet I have it, on no less an authority that the personal assurance of one of the leading directors in that company, that the North German Lloyd Steamship Co. buy annually about 6,000 barrels of cottonseed oil, which at their own plant at Bremerhaven, and by their own process, they convert into a high-class but economical lubricant. Do you presume that the greatest steamship line in the world, touching at all the ports where mineral and animal oils are the cheapest, and requiring a lubricant reliable under the severest conditions known to mechanics, is buying cottonseed oil for any other reason than that it is the best and most economical to be had?"

WALL PAINT AND MICROBES.

THE bactericidal effect of wall paints has been studied lately by Dr. Beaufils, of France, according to the following method: A layer of paint having been spread out on wooden boards or glass plates, a culture of microbes was placed on this layer after being dried, and the plate thus prepared was kept in the laboratory protected against dust. At regular intervals some microbe colonies were removed and spread out on an appropriate medium or used in inoculating animals. An unpainted check-plate served to ascertain the action exerted by the paint on the vitality and virulence of the microbes, this action being shown generally to be distinctly bactericidal while varying according to the nature of the painting. The colors of enameled porcelain are, for instance, found to be much more active than oil colors, especially in regard to the bacillus of tuberculosis. The fact that these paints exert a constraining action on the latter bacillus would seem to be the most important practical result of these researches.—Scientific American.

Harping The Same Old Tune

regarding the merits of

ANCHOR LIQUID HOUSE PAINTS

ANCHOR BRAND
H&P
REGISTERED
TRADE MARK

still continues to increase their sale. These are the Paints in which the only WHITE LEAD used, is

BRANDRAM'S B. B. GENUINE

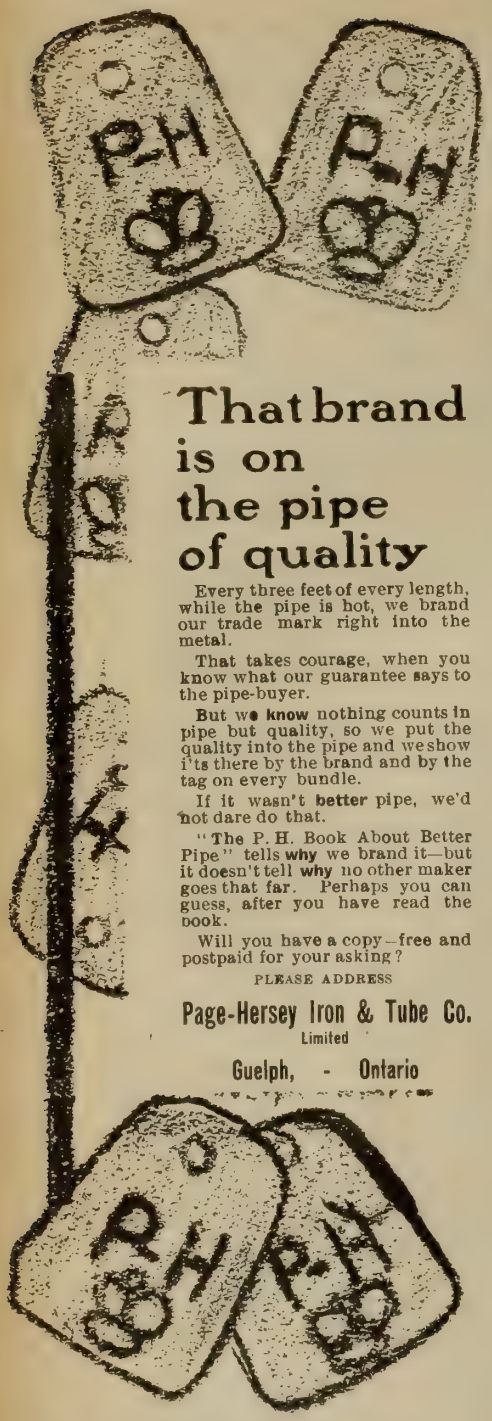
the world's standard for the last 187 Years.

BRANDRAM BROS & CO.
BRANDRAM'S B. B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG



That brand is on the pipe of quality

Every three feet of every length, while the pipe is hot, we brand our trade mark right into the metal.

That takes courage, when you know what our guarantee says to the pipe-buyer.

But we **know** nothing counts in pipe but quality, so we put the quality into the pipe and we show it's there by the brand and by the tag on every bundle.

If it wasn't **better** pipe, we'd not dare do that.

"The P. H. Book About Better Pipe" tells **why** we brand it—but it doesn't tell **why** no other maker goes that far. Perhaps you can guess, after you have read the book.

Will you have a copy—free and postpaid for your asking?

PLEASE ADDRESS

Page-Hersey Iron & Tube Co.
Limited

Guelph, - Ontario



Iron Roof Cresting

Finials

Iron Fencing

DENNIS WIRE AND IRON CO.

Send for Catalogue. LONDON, ONT

When you answer an advertisement mention this paper.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

A NEW iron field opened in Algoma is said to be the most important in the history of the Dominion. The ore is partly bessemer, with a large tonnage, running from .06 to .07 in phosphorus, too high to be bessemer, but up to about 61 per cent. iron. The deposits are located along the west side of the Vermillion River in Nipissing district, and extend for thirty to forty miles, much of the distance in an unsurveyed part of Algoma. The distance to the village of Killarney, on the north shore of Georgian Bay, is about sixty miles. If the statement prove true that this discovery is second in importance to the mining world to that of the Mesaba range alone, it argues a career of prosperity for our iron interests undreamed of a year ago. A railway can be run to the district connecting with the deep waters of the great lakes, making a rate to Cleveland and other lower lake ports of about $1 per ton, or sixty cents a ton less than the rate from Duluth.

Bickford & Mackay will erect a knitting mill at Dundas.

The Ontario Asphalt Block Company may remove from Walkerville to Stratford.

A new industry to manufacture the Hanson Car Coupler is to be started at Madoc.

The Turnbull Elevator Co., Toronto, will erect a three-story factory to cost $6,000.

The capital stock of the Pembroke Electric Light Co. has been increased to $150,000.

The J. C. Graham Lumber Co., Winnipeg, will erect a large warehouse in that city.

The Empire Wall Paper Co. of Toronto intends to open a branch of the business in Winnipeg.

The Galt Knitting Co., Galt, are erecting a large concrete addition to their other works.

Mr. J. P. Smith will erect a factory in Vancouver for the manufacture of mining machinery.

Weibe & Rompel, Laughan, Sask., are erecting a flour mill there with a capacity of 125 barrels a day.

Representatives of an Ohio concern manufacturing hay presses, etc., have been looking for a site at Guelph.

The capital stock of Strathcona Coal Co., Fredericton, N.B., has been increased from $120,000 to $200,000.

It is the intention of W. H. Snyder & Co., manufacturers of the Berlin piano, to enlarge the capacity of their plant in the near future.

The Robertson Machinery Company has recently been organized at Welland to manufacture hoisting machinery and contractors' plants.

The C.P.R. has taken over on a long lease the Tillsonburg, Lake Erie & Pacific Railway and will operate it as part of their Ontario division.

For the purpose of establishing a gas plant at Manitou the Manitoba Gas Company has been granted incorporation with an authorized capital stock of $7,500.

Two steamers having a tonnage of 7,000 each, to be launched next Spring, are to be built in England to the order of a Norwegian firm this Winter for the St. Lawrence coal-carrying trade of the Dominion Coal Company.

The town of Cornwall has passed a by-law to loan $20,000 without interest to Thomas McGill and a company formed by him for the manufacture of chairs. The loan is to be repaid by installments within the next twenty years.

The new Singer Sewing Machine factory at St. Johns, P.Q., is now nearly completed, and represents an outlay of about a million dollars. Unlike other plants of the company, this will be the only one where the famous Singer machines will be made complete.

The Cataract Power Company will soon be able to furnish 13,000 more horse-power to industries in Hamilton. It has completed the electric line from Hamilton as far east as Bronte but will not be able to connect with the Mimico line into Toronto till next year.

The Canada Tap & Die Company has purchased the Clark-Demill building at Galt and will commence as soon as possible the manufacture of taps, dies, screw-cutting tools and other machinery. The promoters are interested in similar industries in the United States.

The Standard Paper Company have been negotiating with Cannington for the establishment of a paper mill there. The company want right-of-way, cash bonus of $10,000 to build an electric railway for their own and public use. The company will undertake to build a mill to employ steadily from 40 to 50 men.

The Government bounty on pig lead produced in Canada has been reduced owing to the standard price of the lead in London. The bounty was formerly 75 cents per hundred pounds, providing the total did not exceed $500,000 a year. The increase in price in London has caused a reduction in the Canadian bounty.

A suggestion is made that Canada shall cancel the subsidy to the Canada-Australian line of steamers, on the ground that the recent regulations regarding the valuation of imports by the Australian Commonwealth is a discrimination against Canadian trade. The subsidizing of a direct line to New Zealand is advocated instead.

W. M. Dougall, president of the Kootenay Power & Light Co., estimates the cost of installation of the new machinery at Bonnington, on the Kootenay River, B.C., together with the pole lines, will be about $1,000,000. The company will have 28,000 h.p. for industrial purposes and expects the lines into the Boundary will be ready for transmission purposes in March or April.

Work is being rushed by the Canadian Navigation Co., Toronto, to make room for the new 22½ mile an hour express steamer for the Niagara Navigation Co., which will be launched in six weeks. The company during the past two weeks have secured the contract for a new pas-

senger steamer for Muskoka Navigation Co., a car ferry for the Grand Trunk with a capacity of 28 loaded cars, and a steamer for the down-the-rapids route of the Richelieu and Ontario Navigation Co.

The Dominion Iron & Steel Company has just received a contract from the Boston Elevated Railway for a sample shipment of rails to be used on the curves of that line. The maximum wear of the ordinary steel rail on the curves of the "L" road is forty-three days, but it is confidently expected that owing to its exceptional wearing quality the Sydney rail will show, as a result of the experiment, an advantage of at least fifty per cent. over the material hitherto used.

A complete reorganization of the Montreal Street Railway Company has been decided upon by the directors. It is intended that the capital of the company will be increased from $7,000,000 to $12,000,000 and the value of the shares to be increased from $50 to $100. At the present time the Park and Island Company are indebted to the Montreal Street Railway Company over $800,000, and it is intended that the Montreal Street Railway buy out the Park and Island Company altogether and refund all the money owed. The Park and Island Company is controlled by the Montreal Railway Co.

Companies Incorporated.

Cobalt-Merchants Mining Company, Toronto, share capital $200.000, purpose to do the business of a mining, milling, reduction and development company. The directors are H. B. Wills, R. Falconer and W. Vandusen, all of Toronto.

The Shirreff Manufacturing Company, Brockville, share capital $50,000, purpose to manufacture carpet sweepers, step ladders and other wood and metal articles. The directors are: C. J. Shirreff, G. A. Shirreff, W. P. Shirreff, W. M. Osborne, and B. R. Shirreff, all of Brockville, and G. A. Shirreff, of New York, N.Y.

The Silver Gulch Mining & Prospecting Company, Cobalt, share capital $75,000, purpose to carry on the operations of a mining, milling, reduction and development company. The directors are L. H. Timmins, T. J. Harwood, of Mattawa, R. A. Cartwright, Belleville, W. C. LeHeup, Cobalt, and D. A. Dunlap of Haileybury.

The Margaret Mining Company, the Annie Mining Company, the Louise Mining Company, the Annabella Mining Company and the Isa Mining Company, all of Toronto, share capital of each to be $40,000, purpose to carry on the operation of mining, milling, reduction and development companies. The directors of all the companies are H. M. Chance, Philadelphia, Pa., A. Easken, and H. Armstrong of Toronto.

The license of J. M. Kohler, Sons & Co., of Wisconsin, has been revoked to do business in the Province of Ontario.

The Big Dipper Mining & Milling Company, Peterboro, share capital $2,500,000, purpose to carry on the business of a mining, milling, reduction and development company. The directors are: S. Sager and J. S. Waldron of Peterboro, J. M. Fletcher and J. J. Tisdale of Buffalo, N.Y., A. J. Reed, E. R. Wilson, B. F. Hayward and G. H. Bradley, all of Bolivar, N.Y., and J. Jamieson, Barrie, Ont.



No. 31. OSHAWA, ONT. Nov. 25, 1905

The attention of the trade is now centred on our latest manufacture:

FIREPROOF
PARTITION STUD

Builders are interested because it will be a boon to them (the price of lumber is high, fire insurance rates also)

Hardwaremen everywhere should be interested because from them the studding will be bought.

We are also making a

SHEET STEEL
FURRING STRIP

which, used in conjunction with our **Fireproof Partition Stud** and **Perfect Metal Lath,** is "ideal" for buildings.

No Hardwareman can afford to go along without carrying these manufactures. You, no doubt, are already equipped with our **Roofing, Siding, Covering, Ceiling,** etc.

Make your stock complete by ordering a quantity of the **Studding, Furring** and **Expanded Metal Lath.**

The Pedlar People
of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

EXACTNESS

is essential to successful rifle-making. We believe that and act accordingly.

THE HAMILTON RIFLE

MODEL No. 23

is an illustration of exact workmanship. It is not made in the ordinary way. That is the reason we are prepared to guarantee it. We make the barrel of **MODEL No. 23** by patents exclusively owned by us. The process brings the metal to the highest degree of hardness. Then, the rifling is done by a system which ensures uniformity in every barrel. Think of it! **MODEL No. 23** goes on the market to retail at **$3.50**—mere pocket money—and yet it is a rifle for men.

Have you ever spoken to your Jobber about the "so-good, so-cheap" **HAMILTON RIFLES?** If he cannot supply you with a stock, write us direct.

THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**



SHOW FRAME

given away free with an order for three half-dozens Shears as illustrated above. May be procured through all leading Wholesale Hardware firms.

STREET PAVING and SIDEWALKS a SPECIALTY

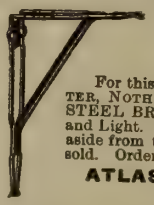
SILICA BARYTIC STONE CO.

OF ONTARIO Limited

Head Office:
Ingersoll, Ontario.

Wat-r Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Walter Mills, General Manager
Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U. S. A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables—
"Machinery," Newport.

Emlyn Engineering Works
NEWPORT, MON., ENGLAND

EXPERIENCED ADVERTISEMENT WRITERS

who are open for a situation are requested to register their names with the MacLean Publishing Co., at any of their offices. Inquiries are occasionally made by manufacturers and wholesale houses who contemplate establishing their own advertis ng department.

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"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
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THE IMPERIAL CEMENT CO., Limited
Makers of the Celebrated Brand
"IMPERIAL" PORTLAND CEMENT
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Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
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Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

Business Changes

Ontario.

R. J. Harmer, blacksmith, Fullarton, has sold out.

W. L. Taylor, agricultural implements, Peterboro, har assigned to Henry Rush.

There was to be a meeting of creditors on the 21st of Guenette & Frere, hardware merchants, Hawkesbury.

Quebec.

W. Houston & Co., plumbers, Montreal, registered.

A. B. Littel, blacksmith, Waterville, has been succeeded by Wm. Carrier.

Guenette Freres, hardware, Montreal, are offering 30 cents on the dollar cash.

Western Canada.

Wm. Murphy, tinsmith, Saskatoon, has been succeeded by Jason Graham.

The J. A. Falconer Co., hardware, Goodlands, are selling out to A. Fletcher.

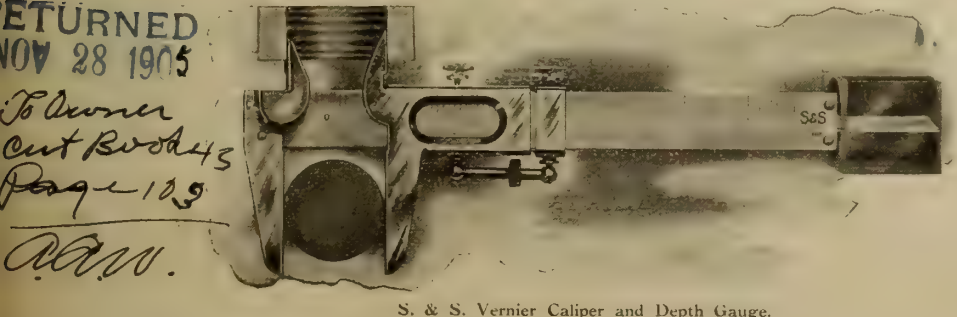
R. J. Rutledge, agricultural implements, Lauder, is selling out to F. G. Jackson.

New Brunswick.

John W. Addison, hardware merchant, St. John, deceased.

VERNIER CALIPER.

SCHUCHARDT & SCHUTTE, 136 Liberty street, New York, offer the S. & S. vernier caliper shown in the accompanying illustration, which also demonstrates the method of ascertaining accurately inside and outside diameters and depths. They are made in full polished, with and without horizontal adjusting screw and in the same styles in full nickle plate. The instrument is 6½ inches long over all, closed, the end depth gauge having a capacity of 3 13-16 inches. The style illustrated is graduated in sixteenths and fiftieths of an inch, the vernier attachment enabling the user to get positive measurements to the thousandth of an inch. Similar calipers are also furnished with



S. & S. Vernier Caliper and Depth Gauge.

graduations and verniers for readings to 1-128 inch and 1-10 mm., metric measure. There can be no confusion in determining results, as all three styles of gauges are read from similar scales and verniers. For carrying, leather pockets with metallic snap buttons are furnished. The four tools list but $2.25, $2.55, $2.90 and $3.15 each, according to finish and whether or not they have the adjusting screw; subject to trade discounts. This caliper can be obtained in Canada from McLean & Sophus, Montreal.

CLOTHES LINE FASTENER.

A NOVEL clothes line fastener shown in the accompanying cuts is made from steel, enameled. Figure 1 represents the line after having been put up, with the surplus line coiled. After passing the line over the yoke at the top of the fastener it is pulled taut and is automatically held by the fastener. As an intermediate fastener the device is illustrated in Figure 2, which shows how two lines can be fastened without drawing them through the yoke. To unfasten the line the top of the fastener is touched, when it will be instantly released. The device is offered by the West Michigan Machine & Tool Company, Grand Rapids, Mich.



Fig. 1.—Clothes Line Fastener.



Fig. 2.—Intermediate Fastener

Study the different methods of furnace heating so that you can tell the possible customer what kind he should use for his particular purpose.

The Welland County Lime Works Co. of Port Colborne are building a power house in which they will install an electric light plant and gas engine.

KEEP BUSY.

A busy appearance about the store is a good method of impressing customers that your store is the place to trade.

Everybody likes to be with the majority, and if your clerks and yourself are always busy it creates the impression that you are doing a large business.

The habit of gossiping with people who enter is to be strongly condemned, as it makes your place a loafer's resort.

Give your customers to understand that you have enough business to attend to to keep you busy and must reserve your time for that. It is unnecessary to insult anyone to make this plan a success, as all persons are in the habit of giving credit to a busy man of being a successful man.

NEW HOTEL FOR CORNWALL.

Travelers who cover Eastern Ontario will be glad to learn that Cornwall is to have a fine up-to-date hotel. When the improvements now being made to the Clifton House are completed, there will be twenty-two bedrooms, and the sample rooms are designed to be large, airy and well lighted. The building will be steam heated throughout, and when finished will be run under the management of J. R. Duquette, formerly proprietor of the Algonquin Hotel, Stanley Island. The contract for remodelling the hotel has been let to J. B. Atchison of Cornwall.

SOME FINE SHEARS.

H. Boker & Co. are putting on the market a new line of "Tree Brand" shears, and will give, with an order for half a dozen each of the three shears illustrated, free of charge, an oak cabinet showing one 7-inch medium shear, one 8-inch straight trimmer, and one 9-inch bent trimmer shear, with full nickeled blades and japanned bows. All leading wholesale firms are handling same.

BUILDING AND CONSTRUCTION

THE WONDERS OF BUILDING.

THERE are no greater wonders of the age than are to be found in the building trades.

More wonderful things are being done with lumber to-day than were dreamed of a few years ago.

Greater wonders are being accomplished in the general construction of buildings. A few years ago all of the strength of the structure was in the outer walls, to-day the outer walls may be nothing but a coat for the inner structure, which will stand just as well without the wall as with it.

Greater wonders are being wrought in the designing and preparation of brick. Nothing in the way of color or originality of design seems to be beyond the possibility of the manufacturers.

Great wonders are being accomplished in interior construction, arrangement and decoration.

But probably the greatest wonder of the recent years in building is the rush to the fore that has been made by cement. It is but a few years, comparatively, when cement was very little used and very little understood. To-day whole buildings, from foundation to roof, every feature, with the exception of doors and window frames and glass, are being made of cement. To-day cement is mixed on the street and poured into moulds, which, when removed, leave the finished structure standing. Great bridges are being constructed in the same manner. Building blocks are being made, thousands to the minute, by ponderous machines, to take the place of stone. They are made in all sorts of shapes and designs.

Where cement was scarcely known a few years ago, it would now puzzle the builder to erect a structure without it.

REFRIGERATOR AND FURNACE

THE ice man and the hardwareman were discussing the ins and outs of business, says the Hardware Dealers' Magazine. "There is one thing that has struck me time and again," said the ice man, "and that is that there are either a lot of fool architects in New York City, or that they have an interest in an ice plant on the side.

"In lots of private houses where I serve ice, the refrigerators are set directly over the furnace; built in so that only the flooring and the ceiling of the cellar are between the hot furnace and the well-warmed refrigerator. I can spot one of these misplaced boxes by the amount of ice consumed—just double that required in other houses where a hot fire and ice are kept apart.

"No, I don't make any complaint or explanations to the man who owns the house. I just keep my mouth shut and go on feeding the old thing with ice."

"That's a pretty good story," laughed the hardwareman. "You said you wanted a pair of ice tongs?"

"Yes," responded the ice man, "and good and heavy ones, too."

"How are these?"

"Not heavy enough, by at least two pounds."

"But they are mighty good tongs, strong and light," explained the hardwareman, "and will hold all the weight you can carry."

"You don't seem to catch on," said the ice man. "Every time I deliver a cake of ice, I weigh it, don't I?"

"I suppose so."

"Well, it hangs to the tongs when it is weighed. The total is so much, tongs and all. If the tongs are light I lose just so much each time they are weighted, don't I?"

"You do," said the hardwareman.

BUILDING NOTES.

The Miramichi Lumber Co. will build a saw mill at Chatham, N.B.

G. Attridge will build a house and stable on King street, Hamilton, to cost $3,500.

Plans for the new post office at North Bay have been approved, and tenders have been called for at once.

Work has been commenced on Vancouver's first wheat elevator, on the site which Messrs. Hall & Son, of Winnipeg, secured from the C.P.R.

It is the object of a number of capitalists in Montreal to erect a large theatre on St. Catherine street.

The G.T.R. have purchased a site at Fort William, on which a large warehouse will be erected very shortly.

A new seven-stall roundhouse is being erected by C.P.R. at Estevan, Man., to replace the building destroyed by fire.

Stewart & Whitton, Hamilton, are preparing plans for the reconstruction of the Commercial Chambers. It is estimated this will cost about $8,000.

Chas. J. Boon, Toronto Junction, has commenced work on a large solid brick building, 45 x 128 feet, and four storeys high, for an American brush company.

The Bank of Toronto is to erect a new building in Toronto. It will be four storeys high, built of stone, brick, steel and concrete, and will cost $130,000.

J. Finlay, Norwood, intends erecting a new concrete factory, 65 x 85 feet, next season. Norwood Council will give the firm a fixed assessment, the only inducement asked.

Plans for the extension and improvement of the Windsor Hotel, Montreal, have been approved, and the work will commence as soon as weather will permit next Spring.

The Brantford Ice Co., Brantford, intend to erect a large ice house. A fine plant of machinery for elevating ice will be installed, and the capacity of the building will be 8,000 tons.

Jean Warren intends to construct a new hotel at Point au Pic, on the property formerly occupied by the cottage of Judge Routhier. The new hotel will be known as Chateau Murray.

A. E. Young, Saskatoon, has purchased two lots on the corner of Twenty-second and Second streets, and, with Mr. W. H. McBeth, will erect a two-storey cement block next Spring.

The city permits of Winnipeg show an increase of over $1,000,000, and they continue to increase. Permits were issued last week by the building inspector for structures valued at $25,000.

The total cost of building erections at Swan River, Man., during the year is $55,000. This village has passed the experimental stage, and with the splendid surrounding country its future is assured.

Plans are being prepared for the construction of the new City Flour Mills, St. Thomas, for George Adcock, on Southwick street. The main structure will be four storeys high, besides a ten-foot basement.

W. J. Pendray & Sons, Victoria, have commenced building a new factory on the wharf where the old building used to stand. The brick building is also being altered in order that the soap-making machinery may be installed.

Messrs. G. M. Hanson & M. N. McKusick, of Calais, are to erect at once, near Charlotte Station, a new steam saw mill, which will be equipped with all modern machinery necessary for the manufacture of long and short lumber.

The Nordheimer Piano Co., Toronto, have decided to start work on the additions to their factory this Fall. The building will be 45 x 28 feet, and will be four storeys high. It is understood that an American firm, manufacturing brushes, will occupy a portion of the building.

Permits have been granted in Hamilton for the following: J. McNeil, brick house, $2,000; W. Noble, four frame houses, $4,000; Dr. Brown, brick house, $2,500; Ald. Main, two frame houses, $2,000; R. Stewart, brick house, $1,250; J. E. Barrett, brick house, $1,900; W. Cross, brick addition to store, $1,500; Thomas J. Rousell, brick house, $1,600; and J. A. Armes, brick house, $2,100.

Over $40,000 worth of permits have been issued at the City Hall, Montreal, for building. The Brothers of the Sacred Heart will build a residence on Fullum street at $10,000; L. C. Papineau will put up two houses on Drolet street at $8,000; David and Dubreuil a tenement house, three-storeys, on Frontenac street, at $8,000; and Mr. Gunnings a four-house tenement on Amherst street to cost $9,000.

There is every indication that the town of Cobourg will be kept busy in the building line during the balance of this year and next Summer. A new public school is to be built, estimated to cost $25,000. W. H. Howe has plans ready for the erection of a large residence. Frank Abbott, of Pittsburg, has commenced the erection of a large brick residence. Mr. Martin is erecting a double brick house, and Mrs. Haskell, of Chicago, has purchased the Queen Street School and will transform it into a Summer residence.

We Know Our Business

DOMINION BRAND
TARRED FELT

Which is to make the best on the market in

TARRED FELT, ROOFING PITCH, COAL TAR

If you know your Business

You'll try our "DOMINION BRAND"

LOCKERBY & McCOMB, 65 Shannon St., Montreal

PROUD OF HIS COUNTRY

AND ITS INSTITUTIONS is the dealer who can with confidence, in selling an article, say to his customers: "This is made in Canada, and neither the Yankees nor any other people can produce anything better."

Conditions have changed in recent years, and are changing. "This is imported" is not cutting much figure now-a-days. The **Made-in-Canada** article is what is wanted by both trade and people. Especially is this true of **Church's Cold Water**

ALABASTINE

as is evidenced by the rapidly increasing demand from year to year.

ABSOLUTELY NECESSARY now to stock very early in the season this Permanent and Sanitary Wall Coating, that **HARDENS WITH AGE**, to insure having it in store when the early spring rush of house renovating comes on. The logical conclusion is **Order Now** from jobber or direct. Spring dating. It is **BUSINESS** to do this, and not have to say: "Just out of that shade." All tints and white in stock, together with a good supply of advertising matter is necessary.

THE ALABASTINE CO., Limited, - - Paris, Ont.

THINK IT OVER

Many offices are badly lighted and unhealthy as the result of improperly-constructed buildings. Alterations to the buildings, tending towards a remedy, usually mean a big outlay of money. But the necessary daylight can be gathered from the sky and diffused throughout such buildings by

MAXIMUM LIGHT GLASS

Perhaps the owners of the badly-lighted buildings haven't given the matter much consideration. Most likely they would if they could be shown that the adoption of a **certain** daylight-increasing system would be profitable to them.

Any Hardwareman can make a strong case why MAXIMUM LIGHT GLASS should be taken in preference to all other systems, because everything is in its favor—all victories, no defeats.

MAXIMUM LIGHT GLASS can gather daylight passing down light shafts and diffuse it throughout long rooms, can be placed in as ceiling lights, applied to lean-to skylight, and **is the only glass that when placed directly in the window sash is effective.**

Secure samples and prices immediately and prepare for trade.

Sole Canadian Agents

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

IT'S WORTH WHILE

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



J.M.T.

MANUFACTURERS

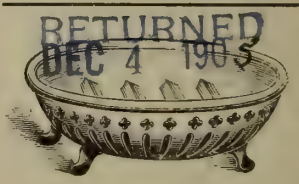
and Dealers in a full line of

THE J.M.T. INJECTOR gives best results—efficient, durable and fully guaranteed.

ENGINEERS' AND PLUMBERS' SUPPLIES

Goods that are made to last, to look well and please your customers.

IRON AND BRASS PIPE AND PIPE FITTINGS
STEAM TRAPS



Soap Dishes
Towel Bars
Tumbler Holders

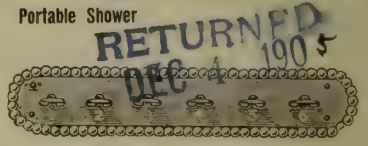


Bath Room and Lavatory Fixtures

No. 6368

Showers from $9.50 upwards

Portable Shower



Tooth Brush Holder

THE JAMES MORRISON BRASS MFG. CO., LIMITED 89-97 West Adelaide St. **TORONTO**

PLUMBING AND STEAMFITTING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

Article XXI.

TESTING A PLUMBING SYSTEM.

WHILE we have not yet by any means dealt with all the details of a plumbing system, which would no doubt be dealt with in a volume on the subject alone, before touching upon the question of applying a test of any kind, still we think it is well in view of the character of the preceding articles upon the subject to say something of the tests that are used for the purpose of discovering any defects that may exist in a system, but which may not be apparent to ordinary observation.

The testing of a plumbing system is divided into two classes viz., first, the test which should be applied to all of the piping systems, including the soil and waste pipe, break syphons, etc., before the fixtures are connected and the test which is applied to the entire system after the fixtures are in place and all of the connections made.

The first test is called a hydraulic test and is made as follows: First the tops of all taps, and the ends of any other openings from the soil pipe system into the house, are closed up tight and soldered over, this being done either by gently beating both sides of the pipe together and soldering one straight seam across or by fitting in a piece of lead the full size of the opening, and in such a way that it may readily be removed again when the test has been completed, and soldering same to the inside circumference of the pipe, but in the opinion of the writer all openings which are very far below the top of the stack should be closed in the former way, as it is stronger than the latter and much less likely to leak when the pressure is exerted from within.

Capping up having been done, it is necessary to fill the stack with water and this is usually accomplished by entering a testing plug into the mouth of the cast iron pipe just outside the foundation wall and securely fastening same to withstand the strong pressure that will be exerted from within when the stack is full of water and, having a 1-2 inch hose cock screwed into the testing plug, the water is turned on through a hose, either from the pressure, or, if the latter is not available, then from a hand force pump, and the water is forced in until it flows out over the roof through the top of the stack, when the cock in the testing plug before mentioned is closed off, thereby preventing the escape of water except through any leaks which may appear and which, as will be apparent, may easily be traced, and the necessary repairs made, so that every portion of the piping system will be absolutely tight before any fixtures are installed.

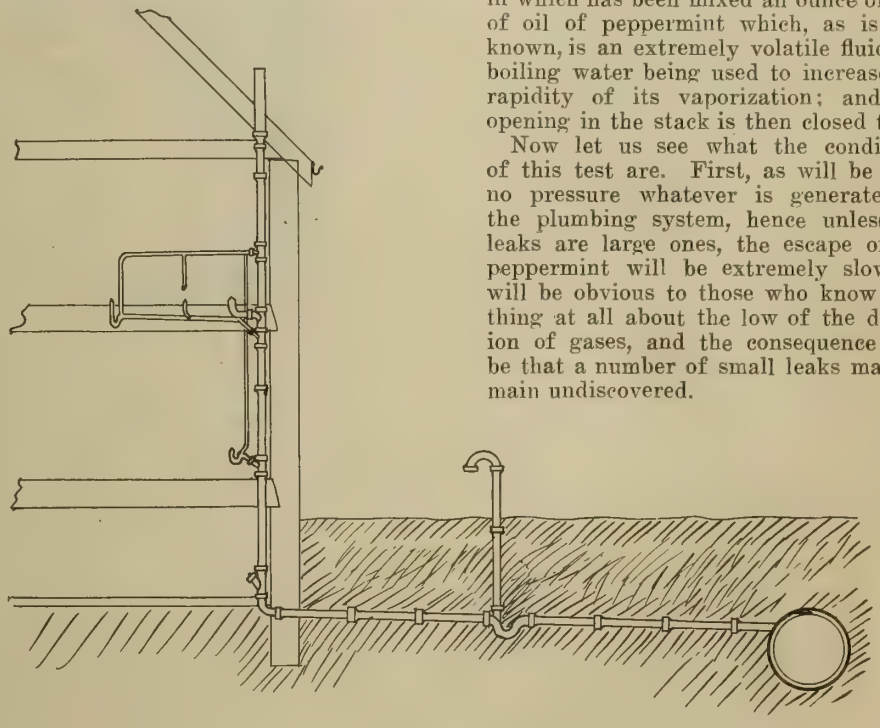
After the hydraulic test has been successfully applied and the leaks, if any, repaired the various connections for fixtures are carefully opened and prepared for the final connections which must be very carefully made for the reason that, as will be obvious, it is impossible to apply any test to the complete system, with the fixtures installed, which will be as strong or as likely to "show up" defects as the test which we have applied to the stack and branches, so that in making the joint to the fixtures, and especially to the closet, great care should be exercised.

As will be apparent, the test to be applied to the completed system must be of such a nature as to expose any existing defects without using enough pressure to affect the water in the pipes, but still sufficient pressure to create a movement of the air in the pipes toward any place where it may escape, and so expose the defects.

There are two methods of final testing which may be used, but in reality only one that is positive and hence only one that can be recommended.

The first method and the one which is seldom used by up-to-date plumbers, except in a "pinch" when the proper facilities are not available for making the other test, is what is known as the peppermint test. It consists of first closing up all openings except one, preferably the top of the stack, and then pouring in through the latter opening about a half gallon or a gallon of boiling water in which has been mixed an ounce or two of oil of peppermint which, as is well known, is an extremely volatile fluid, the boiling water being used to increase the rapidity of its vaporization; and the opening in the stack is then closed tight.

Now let us see what the conditions of this test are. First, as will be seen, no pressure whatever is generated in the plumbing system, hence unless the leaks are large ones, the escape of the peppermint will be extremely slow, as will be obvious to those who know anything at all about the low of the diffusion of gases, and the consequence may be that a number of small leaks may remain undiscovered.



If, however, the odor of peppermint is noticed in a room then the plumber has to go over all of the piping, fixtures, etc., "with his nose" and even then may not succeed in locating the defect because all the air in the room will be charged with the odor so that on the whole the peppermint test must be condemned as being altogether unreliable, and should never be used because the feeling of security, false though it be, given to proprietors whose plumbing has been tested by it without showing defects, may result in exposing themselves to dangers about which they know nothing and which may terminate with disastrous results.

The other method of final testing and the only one which can be recommended, is what is known as the smoke test and if properly applied can be depended on to expose any defects that may exist.

The smoke test is a process by which the entire system of piping is filled with a dense heavy smoke from smoul'dering oily waste, the odor of which is instantly detected if present in a room and it is bound to escape from the piping in the building, if any leaks exist, for the reason that, unlike the peppermint test, it is put into the system under a slight pressure.

The machine used for collecting the smoke and introducing it into the system is very compact in form and has a small copper receptacle into which the smoul'dering cotton waste is placed. This ocpper vessel is surrounded by another about an inch longer in diameter and the space between the two is filled with water so that when a third vessel with a top, but no bottom, is slipped down into the space between the first two vessels mentioned, the water makes a seal which prevents the smoke escaping except through an opening in the bottom of the first receptacle, to which a 1-4-inch hose is attached.

Connected to the first mentioned receptacle also is a small double-acting bellows which forces the smoke therein contained out through the hose before mentioned and this nose being connected to the "foot vent" rising above the ground, and which is connected to the house side of the trap, as shown in the accompanying sketch, conveys the smoke first into the house drain and then up through the soil and waste pipe and all their branches.

When smoke is seen coming out through the top of the soil pipe above the roof in considerable volume, the latter opening is closed up tight and the bellows on the smoke machine kept moving until enough pressure is generated to float the cover of the fire receptacle, which, as was said before, floats between the latter and the outside casing, and if this cover remains floating the plumber has the evidence that there is no escape within the building.

If, however, the pressure so obtained cannot be maintained, then it is only necessary to look over the system to discover, not by the sense of smell alone, but by actually seeing the smoke escape where the leaks are.

It is advisable to keep all windows and doors on the side of the building on which the smoke machine is being used closed because of the danger of the smoke which from time to time escapes from the machine itself blowing in through these openings and so creating a false alarm.

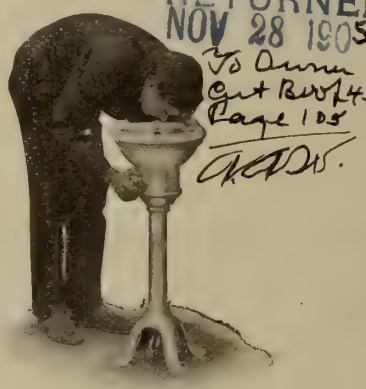
HYGIENIC DRINKING FOUNTAIN.

WE present our readers herewith an illustration of the Hygienic Regal Porcelain Drinking Fountain with self-closing controlling valve, which has recently been placed on the market by the Haines, Jones & Cadbury Co., of Philadelphia, U.S.A. The fixture is a modification of their continuous flow Hygienic Drinking Fountain which they have been selling for some years.

The main advantages of the self-closing attachment are two. In the first place it prevents the wasting of water, as the fountain flows only when self-closing valve is held open, as shown in the illustration. Secondly, it is often desired to cool the water supplied to the drinking fountain. Where there is a continuous stream the water can be only slightly cooled by passing through the ice box, but where the water only flows as required, opportunity is offered for the water in the pipes to cool while the fountain is not being used.

The sanitary features of the Hygienic Drinking Fountain commend it for use in schools, railway stations and public buildings of all kinds. The water supply is regulated by a lock key stop (shown in the illustration near the floor) and issues as a miniature fountain from the top of the brass jet pipe and overflows into the bowl. The user drinks from the top of the spray, so that the mouth is not brought in contact with any of the metal parts, but only with the stream of running water. In this way all danger of spreading contagious diseases by

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Hygienic Drinking Fountain.

contact with drinking cups or other metal parts is entirely eliminated.

The Hygienic Drinking Fountain is furnished with a Regal porcelain bowl on a bronzed iron standard, and the brass jet pipe, strainer, waste and supply pipes to floor and lock key stop are all nickle plated. Those interested in drinking fountains for public places are invited to correspond with the Haines, Jones & Cadbury Company at their offices in either Philadelphia or San Francisco, where further information and prices will be gladly furnished. Please mention Hardware and Metal.

DECORATIVE LIGHTING.

MANY suggestions have been made as to what is the best possible way to treat a room from a decorative point of view, in order to get the most pleasing result, and oddly enough no one has touched on the vast field offered by the lighting fixtures which to-day can be gotten up in such unique and artistic designs.

At one time the style or pattern of the chandeliers was considered immaterial, provided they gave satisfactory light, but fortunately in recent years, realizing what an essential feature the chandelier is in carrying out successfully a certain desired result, decorators and those interested in interior treatment have put particular stress on this point. This has resulted in some very happy effects, and since they are as much a part of the interior decorative scheme as any of the other furnishings, a few words apropos of their use should be timely. In order to obtain best results it is well for those who contemplate building homes to plan their lighting very early in the course of the construction of the home, so that the electric wires can be most advantageously placed. Very often one finds after the house is almost completed that the wiring is not at all suited to the use of some design or scheme which he would like very much to adopt, all of which might have been avoided had more than passing attention been given to the electrical installation.

Being preoccupied with so many things which seem more immediate and pressing, we are prone to leave this to the discretion of a contractor who places the wire outlets throughout after a set rule, which, while it no doubt lights a house satisfactorily, very seldom lends itself to the application of unique lighting effects, such as the spirit of the period demands.

The tendency to-day is to avoid stiffness in design, and as almost all residence lighting is now done with electroliers, it makes it possible to overcome that unsymmetrical and clumsy appearance produced by the old-fashioned gas fixture, and where it is deemed necessary to have some gas, in the event that the electricity fails, this feature is taken care of by an emergency jet, which usually appears as a part of the chandelier ornament. The prevailing sentiment seems to be toward the simpler patterns, since designers have demonstrated that rich simplicity and graceful elegance can be obtained with severe lines properly assembled, which is more gratifying to the eye than the ornate designs formerly so common.

The effectiveness of the light fixtures is materially enhanced by the range of possibilities offered in the color and finish of the metal. Electroplating has now reached a degree of perfection whereby it is possible to reproduce all the antique colorings, and some of the verde greens and Pompeiian bronzes are so cleverly executed as to be hardly distinguishable from the genuine. One can readily appreciate what this means toward the successful completion of a harmonious decorative scheme.

It is a much-mooted question as to whether side or centre lights best light an apartment. The living room in the modern home, which supplants our old "sitting rooms," is usually large, and should be provided with both a centre and side light, the number of the latter depending upon the size of the room, and to be so placed as not to destroy valuable picture space.

Often a reading table occupies the centre of the room, and the chandelier over it will give the best results when supplied with a hanging dome to deflect light downward upon the table. The wall fixtures will give general illumination throughout. These should be sufficiently shaded to protect the eye, but not so much as to lose the light.

A reception room should have side lights only, and of a delicate character, those in which silk or cut beaded glass shades are employed being most effective. These rooms are usually small, and a centre fixture should be avoided,

as it has a tendency to produce that stuffy oppressiveness or overcrowded feeling which is to be avoided in a room of this character.

The hall should have a centre electrolier placed close to the ceiling. Art glass effects, in which the source of light is concealed, are good. When large, an additional bracket or two is desirable.

In the dining room it is essential to have a centre or dome fixture, and here is an opportunity to adopt one of any number of different schemes, all of which are practical. When candelabra are not used, the fixtures should hang low over the table, and be so arranged with either the fringe or a diffusing plate as to bring the light below the level of the eye when seated at the table. A very pleasing arrangement for dining rooms is a Tiffany art glass dome, in brick or scale detail, with crystal cut bead fringe, supplied with four side runners attached to the ceiling, from which are suspended art glass shades in harmony with the centrepiece. Wall brackets to correspond should be placed at either side of the mantel or buffet. Lights should also be placed in the buffet to reflect upon its contents, but concealed from view. This adds very much to the richness of the china and glass display.

Chamber lighting has always been a serious problem. The desire here is to get good light into the dresser glass, and this is usually best accomplished with a side fixture, one on either side of the dresser, arranged to swing, and with the bulb at an angle of 45 degrees.

Where a cheval glass is used, a fixture which comes from an opening in the wall directly above the glass, with a small dome over the light, is an ideal means of lighting the entire figure as one stands before the glass. This, however, must be sufficiently high to be out of the way and not obstruct the reflection. A single ceiling cluster in the centre of the room completes the necessary bedroom fixtures.

There is an apparent lack of attention given to the design of fixtures intended to light the veranda. This is one of the first things the visitor sees, and since first impressions count for so much, is it not important that this should be particularly good? For a simple country house or cottage with a small veranda, a Paul Revere lantern with polished horn or mica lining is satisfactory. The perforated ones of the same period are impracticable, giving off so little light.

Another novel effect can be obtained by suspending a regulation ship's lantern from a yardarm. This will show to best advantage when placed directly on the corner of the house, if sufficiently protected by the eaves from the action of the weather. For the mission house, a true copy of the mission bell in glass, suspended on a single chain, will be appropriate and pleasing. This bell globe idea, combined with roughly executed hand-wrought or hammered iron electroliers, can be aptly applied to lighting the interior of the mission house, which is so much affected in Southern California.

The electrolier of to-day can be in itself a work of art, and should be in entire harmony with the other decorations about them, and reflect in each case the style of the rooms in which they are placed.

As a whole, the fixtures can be made to form a series of marvelously artistic additions to the general decorative scheme. By the selection of various metals harmoniously put together and combined with the correct tones in art glass, they supply a note of brilliant color, and in some cases form the most attractive feature of a room.

Most people who build pretty homes now devote much time to reading and the study of every step which goes to complete the whole, and thereby succeed in getting a very happy and pleasing result; but the bringing of a residence to a satisfactory finish in every respect cannot be accomplished without much thought and attention, and the writer would suggest that those who contemplate building make up their minds to give much time to the personal supervision of all details, if they hope to find a finished product as they had planned.—Carl Roesch.

WATER SUPPLY FOR PUBLIC USE.

WITH the decrease in surface water supply, due to cutting down the forests and meteorological changes, the population has increased enormously, cities have grown together, the country population has become more dense, and the danger of pollution of surface streams of water has increased a hundred-fold. As the years go on, and population and industries multiply, the question will become a more and more important one.

Filtration has not proved as successful as some of its enthusiastic promoters had hoped. Such plants usually cost many times over the expense of a good artesian supply. In one of the finest interior cities, using about twenty million gallons, it was found that, everything figured in, filtered water delivered to the user actually costs four to five times as much as would an air lift supply.

Artesian or Well Supply.

Many of our interior sections must depend upon well water, and there are few districts where an ample supply is not to be secured from wells properly made. This water is generally pure and wholesome. It is also of uniform temperature the year round—cool and pleasant in the summer, because the underground pipe and soil temperature remain uniformly low. In Winter, well water, being warmer than that taken from lakes and rivers, is not so apt to freeze, and from all considerations of temperature and purity, well water is greatly to be preferred. Many cities located on rivers having a gravel bed formation find that, by placing wells of suitable construction far enough back from the bank, there is a natural filter bed, leaving the water perfectly clear, even when the river itself is chronically muddy. When river or other surface water is good the wells may be drilled close to the edge, the water flowing down from the top of the wells.

Even when the supply near the surface is either scanty or unsafe, it is usually possible to sink driven wells to greater depths, thus "casing off" all suspected water and drawing only from deeper rock or gravel veins removed from all danger of surface contamination. The natural head from lower veins often maintains the water near the surface so that power only need be expended for moderate lifts.

There are not many underground formations where wells should be located close together. Such wells may affect or rob each other, and it is usually best to spread them out on a line across what is known to be the underground flow. Some finely creviced or tight rock formations have a strong head with but little capacity, and wells in such formations, if pumped hard, yield but little additional water. They should be scattered and pumped moderately, maintaining a low and economical lift. In other cases, one well in a group will give as much water as all together, and more territory must be drawn on. This introduces difficulties in detached pumping units and labor cost, which are well met with the air lift, as an economical central air compressor can be put in at the main pumping station and operated by the usual engineering force and the air piped to any distance or in different directions, and to any number of wells, no matter how scattered. In this way the entire corporation area is available for a supply. Air transmission is safe and clean; it is simple and easily controlled. There is little or no wear, and, once adjusted, the wells need no attention for years, the control resting in the speed maintained at the central station.

Uses for the Air Lift.

City and town water works, asylums and hospitals, plantations, railway water tanks, irrigation, private country houses, pumping mines, ice manufactories, breweries, cold storage and packing houses, textile mills, dye works, bleacheries, sewerage installations, dry docks, seaside water works, stock farms, etc. In fact, anywhere and everywhere that clear and abundant water is needed.

In many cases private water companies and cities have installed water meters to measure the amount used by manufacturing concerns, and the cost of water has therefore risen to such a point as to become one of the considerable expenses to any manufacturing plant. The insurance companies have also placed restrictions on such establishments and have made demands which make it desirable to have an independent water supply.

At the present time, after an extensive experience, two general systems have been devised for this purpose. One, known as the "Deep Well Pump System," for which a working pump is used, and the other the "Air Lift System," which employs compressed air to raise the water, by means of its inherent expansive force and the difference in specific gravity between compressed air and water.

The air lift involves the use of an air compressor, located where the expense of attendance is least; an air receiver adjacent to this compressor; a pipe line for conveying the air from the receiver to the wells; one or more wells drilled to a depth proportionate to the height of the lift and the depth of the water strata below the surface; air and water pipes running down inside of these wells, about one-half their vertical length being submerged when at work, representing the pumping apparatus proper. —From "Water Lifted by Compressed Air," published by the Ingersoll-Sergeant Drill Co., 11 Broadway, New York. Copies sent free to any reader who mentions Hardware and Metal.

PLUMBERS' TRIAL POSTPONED.

EVERY week develops a new sensation in the trials of the cases against the various branches of the plumbing trade for "conspiracy in restraint of trade." Last Friday the criminal cases were again brought before the Assizes, several witnesses being called by the prosecuting attorneys, amongst these being Messrs. B. J. Morris, secretary of the Central Supply Association, Thomas A. Stevens, of the Empire Manufacturing Company, London, Andrew Mann, of the Canada Brass & Supply Company, London, J. A. Berridge, builder, Joseph Harrison, ex-member of the Master Plumbers' Association, and others. Messrs. Stevens and Mann were cross-examined closely by the prosecuting attorneys in an endeavor to show that they were working in agreement with the Master Plumbers' Association not to sell to non-members of that body. Letters were produced showing that they had urged non-members to join the association. Agreements seized in the Central Supply Association's offices were also produced and the witnesses asked to identify them. The evidence of Josepn Harrison dealt with the School of Science job performed by Purdy & Mansell and W. J. McGuire & Co., the former doing the heating and the latter the plumbing. Mr. Harrison swore that $2,000 was added to the contract price, the money going to the association. Other evidence went to show that builders, etc., found it hard to secure plumbing supplies, jobbers refusing to sell to any but recognized plumbers and steamfitters.

* * *

Several incidents at the Assizes are of interest, particularly the action of the prosecuting lawyers in attacking witnesses as if they were criminals of the deepest dye. Secretary Morris refused to be brow-beaten and stated that he could not be induced to perjure himself by the attorneys. Mr. Mann, of London, did not come out of the cross-examination so successfully, being induced to contradict himself. Judge Clute granted a motion made by the lawyers for the defence that the Daily Globe be ordered to appear before the court because of the publication of grossly unfair comments on the case made after the plumbers' lawyers had appealed to the press for fair play in the reports of the trial. The newspapers have already found the accused guilty and as the judge seems to take an equally strong stand against them it would appear that nothing remains to be done except the passing of sentence and the naming of the fines. But the defence has yet to be heard and there may be some different evidence given when the case comes up again, an adjournment having been taken by the Assize Court from last Saturday to Monday, the 27th inst.

* * *

The sensation of the week was the confiscation of the books of Jenkins & Hardy, 15½ Toronto street, on Saturday last. Officers were placed in charge of the vaults and acting on the advice of solicitors the firm refused to allow their books to be interfered with. Crown Attorney Curry, however, took forcible possession and had an expert open the vaults. The books were seized and Mr. Curry is making a thorough examination of them in the hope of finding incriminating evidence. Messrs. Jenkins & Hardy were formerly secretaries of the Plumbing Supply Association and are now said to be secretaries of about 40 trade associations. Mr. Curry claims that there are about 70 "combines" in Toronto and other offices are being watched, it is said, in order to prevent papers being removed before the Crown officers have a chance to seize them. The wholesale grocers, the plasterers, other branches of the building trades, etc., are amongst the sections charged with having "combines" to govern trade. Nothing has yet been said of making a raid on the Bankers' Association, which sets prices, discounts, etc., on drafts and other financial documents, nor upon the Law Society, which is one of the closest corporations in existence, having a system of discipline few care to face. The trade in law is also restricted in numerous ways.

* * *

The cases against the plumbers and Jenkins & Hardy came up before Police Magistrate Denison on Tuesday but as the Crown Attorney had been unable to make a thorough examination of the latter firm's books an adjournment was taken until Tuesday, 28th inst. The week is therefore free of court investigations and the newspapers have the field to themselves.

* * *

The probable investigation of other "combines" tends to further confuse the issue against the plumbers, and public opinion, ever fickle, may look at the plumbers' investigation in a more rational state of mind on account of the widening of the investigation. In this case it may not be necessary to consider the proposition of asking for a change of venue if the plumbers feel that they cannot secure a fair trial at the present Assizes. There is some talk of the possibility of the cases dragging out until the public get tired of them. This is unlikely, however, as while Crown Attorney Curry has said the investigations may go on for six months or a couple of years, the cases now before the courts are likely to be threshed out completely at the January Assizes, if not sooner. This is well, as if there are any points in which the plumbers must change their plan of organization, the sooner it is done the better it will be for the trade.

* * *

Men's reputations are suffering on account of the newspaper notoriety and it would appear to be a wise move on the part of the members of the different associations to make a full and frank statement of their position in the press. The various details of the organizations will come out in the course of the investigations and the prosecuting lawyers and daily press will put the worst possible construction upon the evidence given. Only the supposedly damaging points in the minute books will be brought in as evidence by the Crown and favorable points will be overlooked. In this way the judge and the general public will have their minds poisoned before the accused have an opportunity of bringing out their defence.

Legal suits for the restoration of monies said to have been charged on contracts performed are to be entered by such firms as Warwick Bros. & Rutter, according to the press reports. On this job it is understood twelve plumbers and twelve steamfitters received "I. O.U.'s" for $50 each, making $1,200 as the sum the contractor will be sued for. In very few cases were the "I.O.U.'s" paid by the successful tenderers and in some cases the amount of the "I. O. U.'s" was struck off the price of the job. This, however, will not prevent considerable litigation resulting on this point.

* * *

The daily papers are calling upon the Provincial Government to proceed against the M.P.A. for the $2,000 added to the School of Science contract and the Dominion Government is asked to tear down the tariff on plumbing supplies in order to allow the dumping of American goods on the local market in competition with the Canadian made lines sold by the supply houses. The Dominion authorities are also called upon to appoint an official or commission to investigate the establishment of combines.

* * *

In Hamilton, London, Ottawa and Guelph the papers are making capital of the investigation in Toronto and endeavoring to prove that everyone who has had dealings with plumbers has been robbed. Men who demand a fair wage or a fair profit in their own business evidently consider that the plumber should do business on a one per cent. margin of profit and be able to pay his grocer, printer or butcher whatever the latter consider a fair margin.

* * *

It is difficult to sum up the case as it is looking more like a Chinese puzzle than ever. From the plumbers' standpoint the situation is a trifle more favorable than it was a week ago but the opening up of an investigation into other alleged "combines" may bring about a situation even more acute than at present exists.

COMBINED STEERING AND PROPELLING APPARATUS.

AN apparatus which is designed to steer and propel a steamer without the use of a rudder, and to reverse or check its speed without stopping the engines, has been invented and patented in Canada, United States and Great Britain, by S. W. Jennings, electrical contractor, 4 St. Antoine street, Montreal.

Expressed briefly, the principle is that of a pair of screws, one immediately behind the other, which revolve in opposite directions, but with the blades so arranged as to exert a propelling force in the same direction. These screws also furnish the means of steering, by being turned in an orbital motion, which thrusts the stern of the boat in whatever direction required.

This new invention is applicable to any style of engine, whether gas, triple expansion, or turbine. Indeed, as will be seen, the ideal system would be a vertical turbine engine situated right above the propellers, thereby making a direct drive.

The drawings, however, show the ap-

plication of a regular horizontal shaft drive. A hollow vertical shaft enters the stern above the water line and encloses a solid shaft which is connected with the steering gear. This solid shaft is held in position by supports from the hull, as is seen in the drawings, and close to the bottom a cross shaft is fixed, on which the screws revolve. The screws, which should run on roller bearings, are connected by bevel gears with the upright shaft, which, in turn, is driven by the horizontal shaft in the same manner. These two shafts are quite independent of each other in action, and friction between them is reduced as much as possible by ball bearings where they come into contact.

The solid upright shaft is connected with the pilot house in much the same way as the rudder, in the present system, an arrow on the indicator showing the exact direction in which the shaft is turned, and, therefore, the direction in which the boat is being steered. Whenever this shaft is turned, the screws are also turned in an orbital motion, thus driving the stern in this way or that, and changing the direction in which the ship is going. When it is found necessary to reverse, the shaft is simply turned half way around, without stopping the engines, and, as the blades will then be pulling the boat backward, the reverse motion will be accomplished almost immediately. If a sharp turn is wanted, the crank is turned about one-quarter around, with the result that an active force drives the stern around without propelling the boat forward. As this is far more effective than the mere dragging action of a rudder, it is claimed that a ship can be turned completely around in her own length. If it is desired to check the speed of the boat without stopping the engines, all that is required is to let go the steering wheel, thereby causing the engine to drive the propellers orbitically.

An important point in connection with this new invention is the fact that, by its adoption, bilge water will be practically a negligible quantity. The entrance of the main shaft is above the water line, and a tube screwed into the boat there runs up to the crown, which is even with the load line. Thus, a boat will have to be loaded up to above the load line before any water will be admitted into the hold, and even then the pressure will only be in proportion to the depth of the water above that.

Among the advantages claimed for this apparatus may be mentioned the obvious fact that it gives the power of two propellers with the draught of one. It will be inexpensive, the additional cost for a 30-foot boat being only about $50. The engines need not be stopped for the reverse or any other action, while the momentum may also be stopped without interfering with the engines.

Finally, the rudder is done away with, and the boat can be turned in its own length without any careening action. This latter claim has been substantiated by the tests Mr. Jennings has made with his small model, which was made without a keel and with a round bottom, so as to invite a careening action, if such were possible.

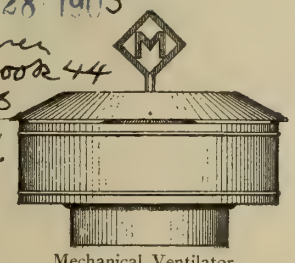
It is understood that a company is about to be formed for the manufacture of this apparatus, and much interest will be taken in its outcome.

MECHANICAL VENTILATOR.

VENTILATION is being brought more to the fore with each succeeding year. The subject is a refuge for doctors, and a matter which is meeting with the constant pleas of health officers and the sanitary bureau. The better educated of the people of the day are commencing to realize that ventilation poorly conducted is conducive to pneumonia, tuberculosis, skin diseases and even indigestion, and that unless ventilation is carefully looked after, the doctor's visits become more regular. The tremendous impulse given to the better airing of our houses will soon become general and will undoubtedly tend to prolong the vitality of the average man. There is a general movement in favor of practical ventilation of some kind, and the argument of the ventilator is plausible.

The molecules composing air are more mobile than those composing water. They slip over each other with the greatest rapidity. It is therefore the effort of makers of stationary ventilators to design them so that all outside currents of air are converted into air move-

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Mechanical Ventilator.

ments parallel with the lines of the flue openings, viz., upwards.

The greater portion of the time, however, there is practically no outside movement of the atmosphere. At such times the stationary ventilator should offer practically as good an opening from the flue as though it were an open pipe. Two requirements are necessary; the outside air should not be able to get down the flue; two, the ventilator should be an open pipe when the air outside is stationary.

The construction of the Mechanical Ventilator is shown in the accompanying illustration. It is to be noted that there is very little deflection necessary for the air to pass out of the openings. A wide range of openings and a large number are provided. These characteristics enable the Mechanical Ventilator to exhaust the air from the interior when the outside air conditions are still.

Considered as a mechanical injector, there is said to be no possible direction from which outside air currents can strike the Mechanical Ventilator without becoming converted at once into an aid for exhausting the air in the building through the flue.

The Mechanical Ventilator is said to be absolutely storm proof and not penetrable by water, sound or any of the outside elements which might come down the flue. It is subject to nothing except an upward draught. Special attention is called to the circular opening between the outside band and the outside cover rim. A great part of the success which has attended this ventilator is due, it is said, to the novel construction of these features.

This ventilator is manufactured by the Mechanical Metal Manufacturing Co., 369 Bourse Building, Philadelphia, Pa. The manufacturers will be pleased to furnish additional information upon request. When writing for their booklets mention Hardware and Metal.

WILL IT STOP RAINING?

IN these days when policemen's blue papers are about as plentiful in Toronto plumbing circles as raindrops are in Vancouver in Winter time, there is much speculation as to what will happen next. Events follow events so fast that the plumbers are wondering when the end is to be. A reporter called on Secretary Meredith the other day and asked him if he thought a settlement was likely to be reached soon.

"All I can say," said the Master Plumbers' secretary, "is to tell you a story illustrating how I feel about it. When we were down at Atlanta a few months ago Fred Armstrong went out driving one morning in an open carriage. He had on his light white togs and looked very swell. When he got out in the country several miles it started to rain. Fred did not know whether to go on or turn back. He saw a countryman plodding along in the distance, so he drove up to him.

"'Now, my man,' said Fred, 'can you tell me if it is likely to stop raining?'

"The countryman paused a moment, surveyed the outfit in silence and replied, 'Wa-al, it always has.'

"Now," said Mr. Meredith, "that is what I'll say to you."

PLUMBING NEWS.

A banquet was held in Moose Jaw on Tuesday, November 21st, to celebrate the completion of the new waterworks, sewerage and electric light system in that thriving town.

Sheldon & Sheldon, Galt, have just completed the installation of a new heating system for the Gurney-Tilden Co.'s buildings at Hamilton.

The Kerr Vegetable Evaporating Co. are installing an electric light plant at Canning, N.S.

S. Shepard has opened an electrical supply store at 177 Sparks street, Ottawa.

A small fire occurred in the plumbing shop of G. Julian, Ottawa, last Monday. About $100 damage was done.

Announcement of the establishment of a new company to manufacture cast iron radiators in Toronto will be made shortly. A manufacturing site has already been secured.

The Canadian District Heating Company, Limited, which has been incorporated with a share capital of $250,000, proposes to establish a central plant at some point in the southern part of Hamilton and to heat a large number of buildings in the business district. No doubt if the enterprise proves successful the company will extend its operations and take in the residential districts also.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, November 24, 1905.

CONDITIONS, locally, are almost identical with those of last week, though, if anytihng, the market has stiffened somewhat.

The week has been remarkable for a continuance of the shortage in iron pipe. The situation is true generally, but the manufacturers state that the sizes in which the shortage is most noticeable differ from day to day.

Iron pipe fittings are also very scarce. It is almost impossible to get deliveries from the foundries in this part of the country. This shortage is more keenly felt this week than at any other time during the season.

In spite of the continued strength of tin, and repeated advances in pig lead, prices on solder have not changed locally. A strengthening in tone has been the net result.

Range Boilers—Business is brisk at unchanged prices. We quote as follows: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe— As pig lead continues to rise in price, the present figures on lead pipe are becoming firmer than ever. It would not be surprising to see new discounts given before long. We give the following discounts: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—The scarcity previously reported is growing more acute than ever. It is extremely difficult to get deliveries. We quote: Discounts on all sizes of nipples up to 6-inch, 67 1-2 to 70 per cent.

Iron Pipe—The shortage which has confronted the trade for some weeks past is still very pronounced. Many sizes are scarce at present. Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings— Goods are moving very freely at the same prices as for some weeks past. We give the fo'lowing discounts: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—Though both tin and lead have been advanced this week, we have not yet changed our prices in solder. Our quotations remain as follows: Bar solder, half-and-half, guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, November 24, 1905.

WITH the exception of a slight falling off in trade on account of the law cases before the courts in Toronto, business is said to continue very lively. The disturbance in the city trade is allowing the supply houses to catch up with their orders and shipments are large, particularly of enamelled goods.

New lists of prices issued by the Standard Ideal Sanitary Co. are reported this week, the changes showing an advance on account of the increasing cost of raw material. It is expected that the present figures quoted on sinks will not hold, however, and a slight drop is likely.

Lead is very firm and a further advance is being talked of. Iron pipe is also unsettled, each dealer having a different schedule of quotations. The prices quoted this week are about the average, however. Some dealers are lower, but the talk of a second advance is strengthening the market.

Lead Pipe—The market is very firm and there is some talk of another advance. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 per cent.

Soil Pipe and Fittings—Buying is very active owing to the rush of opening the ground before it is frozen up. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—All kinds of quotations are given by the various supply houses, but those given below are about right. We quote as follows— Black, 1-4 inch, $2.09; 3-8 inch, $2.09; 1-2 inch, $2.39; 3-4 inch, $2.98; 1 inch, $4.27; 1 1-4 inch, $5.84; 1 1-2 inch, $7.01; 2 inch, $9.35; 2 1-2 inch, $15.00; 3 inch, $19.35; galvanized, 1-4 inch, $2.91; 3-8 inch, $2.91; 1-2 inch, $3.22; 3-4 inch, $4.13; 1 inch, $5.93; 1 1-4 inch, $8.09; 1 1-2 inch $9.71; 2 inch, $12.95; 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Demand for boilers is very brisk as many contracts are being completed. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—There is no falling off in the prices of metals and solder keeps firm at the prices quoted: Bar solder, half-and-half, guaranteed, 20 1-2c.; and wiping at 19c.

Enameled Ware—Revised quotations are given below, the advances on baths being $15. Lavatories are also quoted at smaller discounts, while sinks are quoted considerably higher. Our new quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

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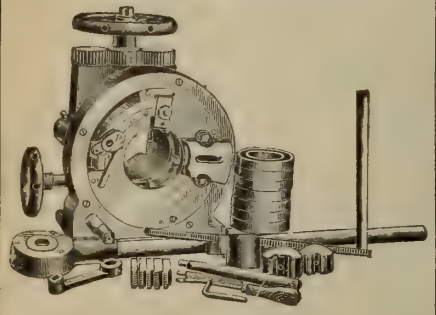
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naces and the arrangements are now being made to use natural gas for melting the raw material. All floors are made of cement and the roof is ventilated the whole length of the building in order to carry off the fumes from the brass.

Messrs. Chadwick Bros. will continue their show room on King street. The firm is composed of four brothers, all being practical men. Ten years ago when the firm started business they did not employ any extra hands, but one hundred and five employes are now on the pay roll. New branches of work are now being taken up and if the business continues developing it will soon be one of Hamilton's most important industries.

A ROPE PIPE WRENCH.

Pipe wrenches made of rope are illustrated in the accompanying cuts, Figure 1 showing a "one man" wrench in which the ends of the rope are held in one hand while the toggle is pulled with the

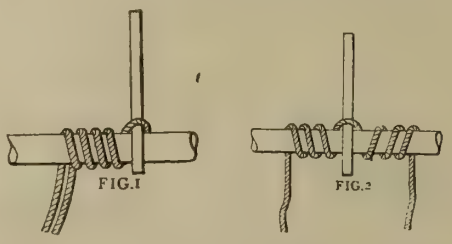


FIG. 1

FIG. 2

other. The wrench arrangement shown in Figure 2 is for heavier work and requires two men, one to hold the rope ends and the other to handle the toggle.

A ZINC ALLOY.

A ZINC alloy which is easily worked and stands rough usage better than white metals made with lead as a base, may be made by using 88 lbs. of zinc, 10 lbs. of copper, and 2 lbs. of aluminum. By using 12 pounds of copper and no aluminum the alloy will be made harder. The process of melting is as follows: The copper is first melted and enough cold zinc is added to kill it and to prevent it spitting when added to the bulk of the zinc. The zinc is melted separately and the copper poured into it, and the mixture is stirred. The aluminum is added after the copper and zinc have become perfectly fluid, and the mixture is thoroughly stirred. It is then cast into one inch plates, which are cooled, broken up and remelted under small charcoal. The alloy should be poured into horizontal sand-covered molds. The surface of this alloy resembles oxidized silver, and may be filed and polished. It cuts to a file similar to grey iron.

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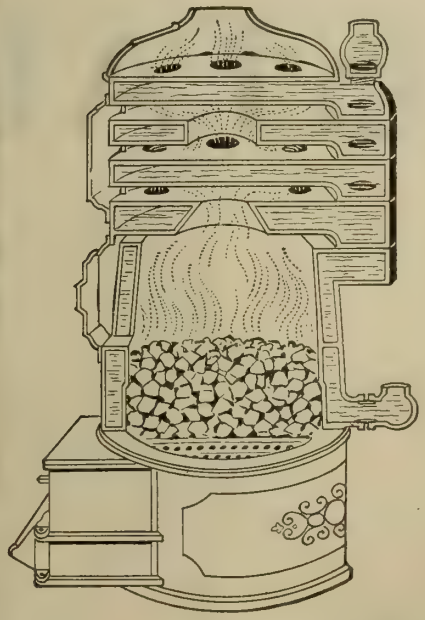
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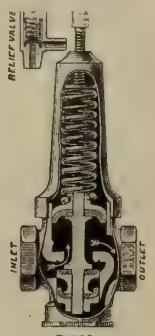
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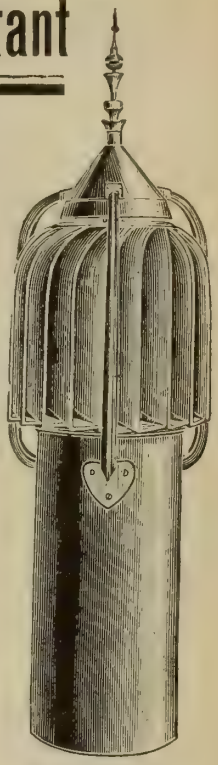
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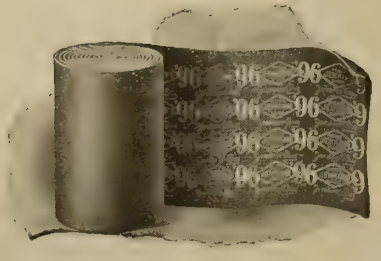


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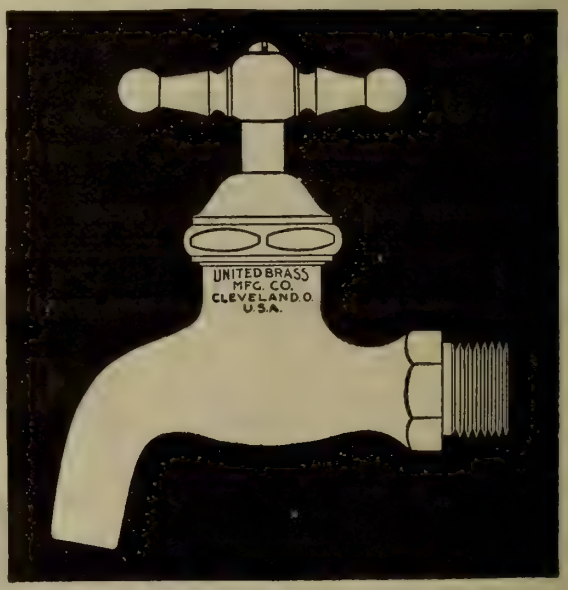
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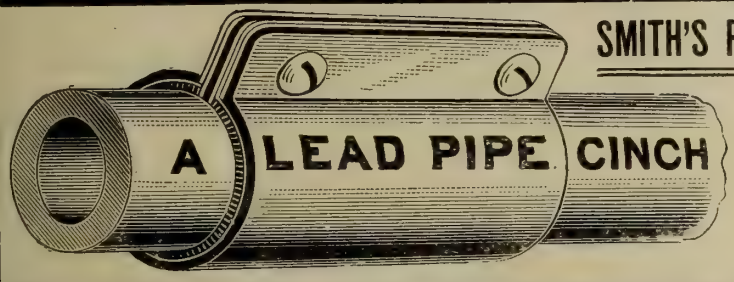
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CURRENT MARKET QUOTATIONS.

Nov. 24, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. / " 14x60, " / " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 97½	2 00
Forged iron "	2 22½	....
Refined "	2 37½	....
Horseshoe iron "	2 37½	....
Hoop steel, 1½ to 3 in. base	....	2 75
Sleigh shoe steel "	2 07½	....
Tire steel	2 22½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 56
"J" quality, best warranted	....	0 18
"I" " warranted	....	0 14
"B O" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 16
" Silver steel	....	0 12
" Black Diamond	0 10	0 09
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
16 gauge	2 35	2 30
18 "	2 25	2 40
20 to 24 gauge	2 20	2 50
26 "	2 25	2 65
28 "	2 30	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 75
All bright	3 75
Galvanized Canada Plates, 52 sheets	4 00

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 75
26 "	3 60	4 00
28 "	3 85	4 25

Apollo.

10¾ oz	4 25
28 gauge (American gauge)	4 00
26 "	3 75
24 "	3 65

	Comet Bell.	Queen's Head.
16 to 20 gauge	3 10	....
22 to 24 gauge	3 35	3 60
26 "	3 60	3 85
28 "	3 85	4 10

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "	....	5 60
"	5-16 "	....	4 45
"	⅜ "	....	3 85
"	7-16 "	....	3 70
"	½ "	....	3 55
"	9-16 "	....	3 45
"	⅝ "	....	3 35
"	¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	
Jack chain, brass, single and double, discount 40 p.c.	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	17 75	18 00

Bars.

Cut lengths, round, ½ to ¾ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	23 00
Plain, 14 oz	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 50	7 25
Part casks	7 75	7 50

LEAD.

Imported Pig, per 100 lb	4 25
Bar, "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 05½
Sheets, 3 to 6 lb. "	0 05½

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 10 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

	Plate E I, Fittings extra	1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$19 15	17 15
5 feet	"	20 15	18 15
5½ "	"	21 65	19 65
6 "	"	24 40	22 40
Plate E II			
5 feet	2½ in. "	18 65	16 65
5½ "	2½ " "	20 15	18 15

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c.	30 & 10 p.c.
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality		2 55
" " " " B "		2½40

IRON PIPE.

Black pipe—	Per 100 feet.
¼ inch	2 75
⅜ "	2 09
½ "	2 09
¾ "	2 37
1 "	2 98

Black pipe—	Per 100 feet
1 inch	4 27
1¼ "	5 84
1½ "	7 01
2 "	9 35
Galvanized pipe—	
¼ inch	2 91
⅜ "	2 91
½ "	3 22
¾ "	4 13
1 "	5 93
1¼ "	8 09
1½ "	9 71
2 "	12 95

Lead Pipe discount 25 per cent.

Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c

Cushion work, discount 50 and 10 p.c.

Fuller work, discount 70 p.c.

12 dozen lots and over of the above, extra discount 10 per cent.

Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.

J.M.T. Globe, Angle and Check Valves, discount 55 per cent.

Standard Globe, Angle and Check Valves, discount 65 per cent.

Kerr's special standard globes and angles, discount 65 per cent.

Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.

Kerr's standard brass checks, discount 55 p.c.

Kerr's standard brass disc steam radiator valves, discount 65 per cent.

Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.

Kerr's quick-opening hot-water radiator valves, discount 65 per cent.

Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.

Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.

J. M. T. Radiator Valves discount 55 per cent.

Standard Radiator Valves, discount 65 per cent.

Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock net	1 90
No. 4 " "	1 75
No .7 Fuller's "	2 10
No. 4½, " "	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.

Patent Compression Cushion, bath cock, No. 2208 2 25

Square head brass cocks, discount 65 per cent

" " iron " " 60 "

Thompson Smoke-test Machine $25.00

RANGE BOILERS.

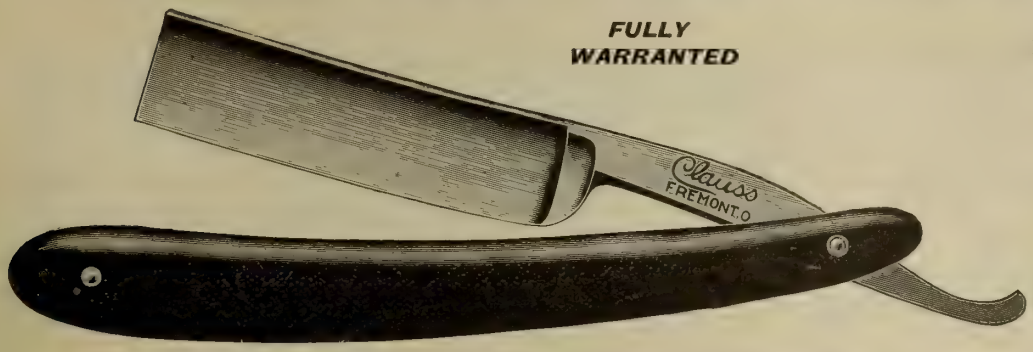
Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20,00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND EBONY HANDLED RAZORS



FULLY WARRANTED

Manufactured from finest Clauss hammered steel.

Hardened by our secret process,

Honed and set ready for use.

Crocus-finished back, tang and shoulder.

High blue-polished blades.

CLAUSS SHEAR CO.

WRITE FOR TRADE DISCOUNT TORONTO, - ONTARIO

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.	Per lb.
Bar, half-and-half, guaranteed	0 20½
Wiping	0 19

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.	Per 100 lb.
Pure	5 50 5 80
No. 1	5 10 5 25
No. 2	.. 5 05
No. 3	.... 4 12½
No. 4	.... 4 05
Munro's Select Flake White	.... 5 65
Elephant and Decorators' Pure	.... 5 50
Tiger brand, pure	.... 5 75
Decorators' Special for exterior use	.... 5 00
Monarch	.... 5 75
Decorator's Pure	.... 5 50
Essex Genuine	.... 5 00
Sterling Pure	.... 5 75
Island City Pure	.... 5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	.... $5 25
Genuine, 100 lb. kegs, "	.... 5 50
No. 1, 560 lb. casks, per cwt	.... 5 00
No. 1, 100 lb. kegs, per cwt	.... 5 50

WHITE ZINC.

Extra Red Seal	0 06 0 08
French V. M.	0 06½ 0 07
Lehigh	0 06 0 06½
Pure	0 07½
No. 1	0 06½
No. 2	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	.... 1 20
Second qualities, per gallon	.... 1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	.... 1 35
Canada Paint Co.'s pure	.... 1 25
Toronto Lead & Color Co's pure	.... 1 25
Sanderson Pearcy's pure	.... 1 20
Standard Co.'s "New Era."	.... 1 30
Francis-Frost Co.'s "Ark" B'd	.... 1 25
" British Navy deck	.... 1 50
Henderson & Potts's "Anchor"	.... 1 35
Ramsay's paints, Pure, per gal.	.... 1 20
" Thistle, "	.... 1 00
" Outside, bbls	0 55 0 65
Island City House Paint	.... 1 25
" Floor "	.... 1 25
Sterling House Paint	.... 1 20
" Floor "	.... 1 10
National	.... 1 05

PUTTY.

Bulk in bbls	1 50
Bulk in less quantity	1 80
Bladders in bbls	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal.		$2.50.
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08 0 08½
French medal	0 10 0 14
White, extra	0 18 0 22
Gelatine	....
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	....
Ground	0 12 0 16
Cologne, genuine	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz.	6 00 9 00
American	"	12 00 18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt	per ton	45 00
Heavy Straw Sheathing	per ton	35 00
Dry Sheathing	per roll, 400 sq. ft.	0 40
Tar "	" 400 "	0 50
Dry Fibre	" 400 "	0 55
Tarred Fibre	" 400 "	0 65
O. K. & I. X. L.	" 400 "	0 70
Resin-sized	" 400 "	0 45
Oiled Sheathing	" 600 "	1 00
Oiled "	" 400 "	0 70
Roof Coating, in barrels	per gal.	0 17
Roof " small packages	"	0 25
Refined Tar	per barrel	5 00
Coal Tar	"	4 00
Coal Tar, less than barrels	per gal.	0 15
Roofing Pitch	per 100 lb.	0 80 0 90
Slater's felt	per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz.	1 00 1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross	50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt.	0 60 0 65
Red		0 05 0 06
Crayon	per gross	0 14 0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English	per doz.	2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz.	5 00 9 00
man	"	0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz.	0 55 1 00
Axle	"	0 22 0 33
Screw	"	0 22 1 00
Awning	"	0 35 2 50

PUMPS.

Canadian cistern	1 80
Canadian pitcher spout	1 40

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'O' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 5 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz.		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes		2 50
Woodyatt, ball bearing, 12 to 20-in	5 60 to	7 45

Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen

Gem	each	1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

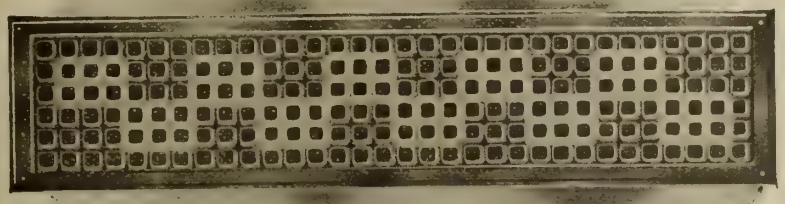
Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
" "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros.' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz.	0 65	1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3.25—No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80 No. 19, $2.50. All prices per 1000 ft. measure F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 75
Galvanized, plain twist	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

COILED SPRING WIRE.

High Carbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

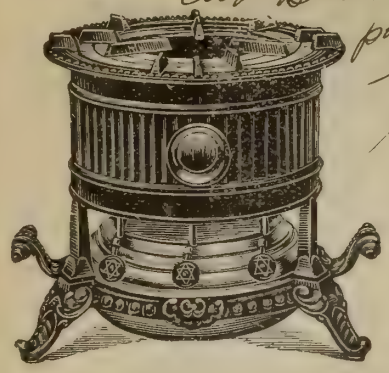
Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

RETURNED
NOV 25 1905
To Montreal
Cut Book #3
page 86



OIL STOVES

Now is the time to place your orders for Spring importation.

These Stoves have attractive Japanned or Granite bodies, with cast iron rims and bases and neatly bronzed cast iron stands.

We are also showing a big variety of other patterns.

WRITE US FOR PRICES AND DETAILS

F. W. LAMPLOUGH & CO., - Montreal



WALKER CORK SCREWS

are good holiday souvenirs and live sellers the whole year. Are made well and are made out of good material. That is why we guarantee every one that we put out. When ordering Cork Screws try **Walkers.**

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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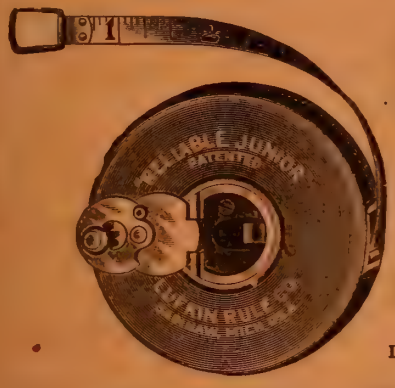
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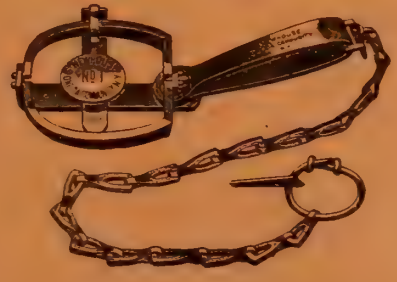
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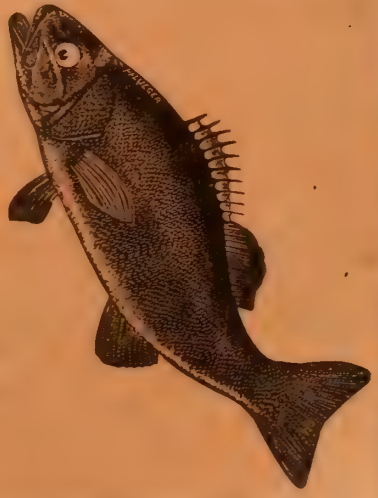


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Est. 1868. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve Medals



Awarded
By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

"Redstone"

High Pressure
Sheet Packing

A packing that will hold. For use in highest pressures for steam, hot or cold water and air. Packs equally well for all.

From actual tests, we believe that this packing is the most durable and satisfactory of any on the market. Try a sample lot and see for yourself.

Manufactured Solely by

THE GUTTA PERCHA & RUBBER MFG. CO.
of TORONTO, LIMITED

HEAD OFFICES,
47 Yonge Street, Toronto.
Branches: Montreal, Winnipeg, Vancouver.

We can quote favorable prices on the following goods for shipment from the United States:—

"Apollo" Galvanized Sheets,
Black Sheets, Bessemer and Open Hearth,
Range Steel, Pickled Sheets., etc., and different qualities suitable for all purposes.
Polished Sheets of different grades,
Coke and Charcoal Tin Plates,
Black Plates,
Taggers,
Terne Plates,
Large Tinned Sheets,
Galvanized Canada Plates,
Black Canada Plates.

Send us your enquiries.

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

Dominion of Canada Sales Agents
UNITED STATES STEEL PRODUCTS EXPORT COMPANY
Sheet Steel and Tinplate Department, - - New York

SADLER & HAWORTH

"Extra" *"Standard"*

HIGH - CLASS

OUR BELTS
save your Machinery.
Think it over.

LEATHER - BELTING

"Diamond" *"Agricultural"*

WAREHOUSES & FACTORIES
AT
MONTREAL *and* **TORONTO.**

CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL, TORONTO, WINNIPEG, DECEMBER 2, 1905 NO. 48

BUTCHERS' KNIVES
JOHN WILSONS
CELEBRATED
"PEPPERCORN AND DIAMOND"
BRAND CUTLERY.
TRADE MARK
BUTCHERS' STEELS
Canadian Agents: DORKEN BROS. & CO., MONTREAL.

CANADA
MORE POPULAR
THAN EVER
after forty years' trial.
WHY?
JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Canada's Most Expert Radiator Manufacturers



EXCELLENT WORKMANSHIP

and Newest Design characterize SOVEREIGN RADIATORS. All improvements discovered to date—Increased Surface, Larger Connections, Reduced Friction, Screwed Nipples, etc.—these will be found in

SOVEREIGN RADIATORS

You, of course, want to handle the radiators that sell, so SOVEREIGN RADIATORS will appeal to you.

We have a stock at our KING ST. WEST BRANCH, TORONTO, and can ship on short notice.

Taylor-Forbes Company, Limited

TORONTO
21 Richmond St. W.

Head Office and Works:
GUELPH

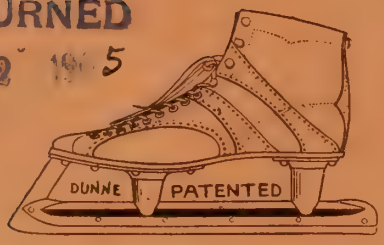
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9 De Bresoles St.

See Classified List of Advertisements on Page 79.

SKATES HOCKEY SUPPLIES AND SNOWSHOES

MOCCASINS

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DUNNE TUBE SKATES
all sizes.



SNOWSHOES—All Sizes.
Ladies' or Gentlemen's.



FISHER TUBE SKATES.
All Sizes.



SHIN PADS.



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MEN'S or BOYS' HOCKEY BOOTS.
All Sizes.



GOAL KEEPERS'
SHIN PADS.



LADIES' HOCKEY BOOT.
All Sizes.

Write for Prices.

RICE LEWIS & SON

LIMITED

TORONTO.

This is a specimen of one of our advertisements which regularly appear in all leading publications. All results therefrom are referred to the dealer in the town from whence they come. SEND FOR BOOKLET WITH TRADE PRICES.

PRICES:
Hollow Ground
$2.50
Double Concave for Extra Heavy Beards
$3 00
Pair in Leather Case
$5.50
Carbo-Magnetic Strop $1.00



No Honing! No Grinding!

NO NEW BLADES—NO ANNUAL TAX—THE FIRST PURCHASE PRICE THE ONLY EXPENSE

If you will send us your dealer's name and let us know whether he handles the Carbo-Magnetic razor, we will send you our **booklet, "Hints on Shaving," Free,** and also make you a proposition whereby we will arrange with your dealer that you can test and use one of these razors **without any risk** or obligation on your part The booklet illustrates the correct razor position for every part of the face, and gives much needed information to all self-shavers. The Carbo-Magnetic razor is for sale by most good dealers who guarantee it to give **3,650 perfect shaves**—we back that guarantee. Send for book to-day.

Firm of A. L. SILBERSTEIN, 459 Broadway, New York

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

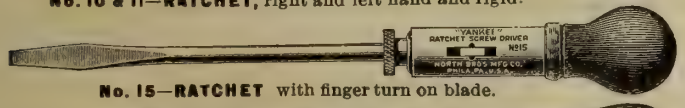
THOS. BIRKETT & SON CO.,
LIMITED
IMPORTERS AND JOBBERS OF HARDWARE
OTTAWA, ONT.

Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET right and left hand and rigid.
No. 31— " " (heavy pattern)
No. 20 - " " right hand only.



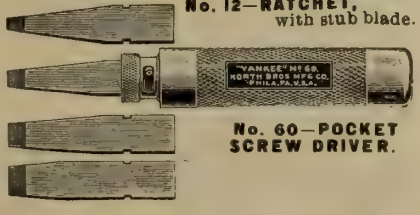
Chuck and 8 Drill Points, for spiral ratchet screw driver.



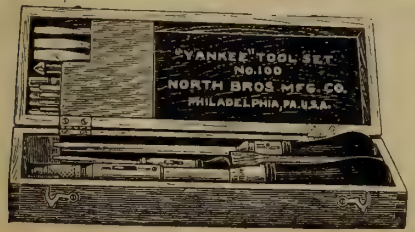
No. 12—RATCHET, with stub blade.



Countersink, for spiral ratchet screw driver.



No. 60—POCKET SCREW DRIVER.



DRILLS



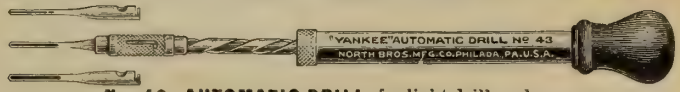
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

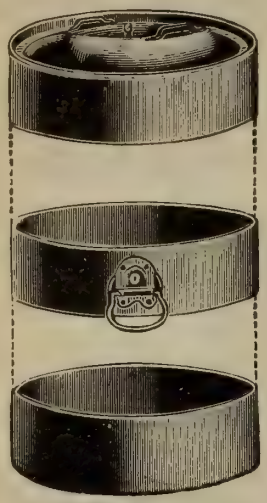
SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

Davidson's Milk Can Trimmings



IN COMPLETE SETS

"BROAD HOOP" Pattern—Composed of the following: 1 Broad Hoop Bottom, 1 Cover, 1 Centre Hoop 6 inches wide, 20 gauge, 1 Broad Top Hoop, 1 pair Cover Handles, 1 pair Side Handles.

and Milk Cans with Broad Hoop Patent Roll Rim Bottoms

are in great demand and their general popularity is increasing yearly.

They give satisfaction to users and dealers alike.

IMPORTANT

The best mechanical skill obtainable is utilized to make Davidson's Milk Can Trimmings perfect in even the smallest details

Write for Price List.



Heavy Rolled Edges make our PATENT BOTTOMS doubly durable and waggon and factory floor protectors.

Some customers do not like to send us small orders. That's a mistake. We take them, large or small. We are waiting for your order now.

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

M. & L. Samuel, Benjamin & Co.

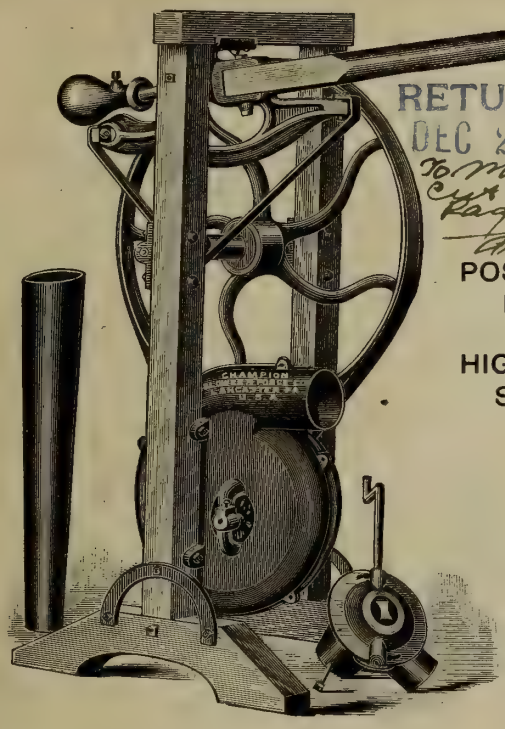
have removed their offices and warehouse to 54-56-58 Front West.

M. & L. Samuel, Benjamin & Co.

TORONTO

English House—16 Philpot Lane, LONDON, ENGLAND

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Page 12
Office



POSITIVE DRIVE—

HIGH SPEED—

BLOWER No. 400 (Champion).

Ball-bearing, runs like a watch, 12-inch fan, with tuyere iron and piping complete, weight 100 lbs.

LIVE AND LET LIVE

(OUR MOTTO)

We believe that our relations with our customers should be clean and above board, and have always tried to carry out our part faithfully. The daily increase of our business has proved to us that we have not tried in vain. We try to sell our customers goods which will allow them a good profit, and have not lost sight of this important item in illustrating a few lines from our large assortment of Blacksmiths' and Machinists' Tools.

Give these illustrations your attention for a few moments—it may prove mutually beneficial.

For further information see our 1,000-page Catalogue No. 31.

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REECE'S NEW SCREW PLATES. No. G.

One 22-inch Stock cuts ¼, 5/16, ⅜, 7/16, ½, ⅝ and ¾ in.; and One 40-inch Stock cuts ⅞, 1, 1⅛ and 1¼ in.

PIPE STOCKS AND DIES

TWIST DRILLS

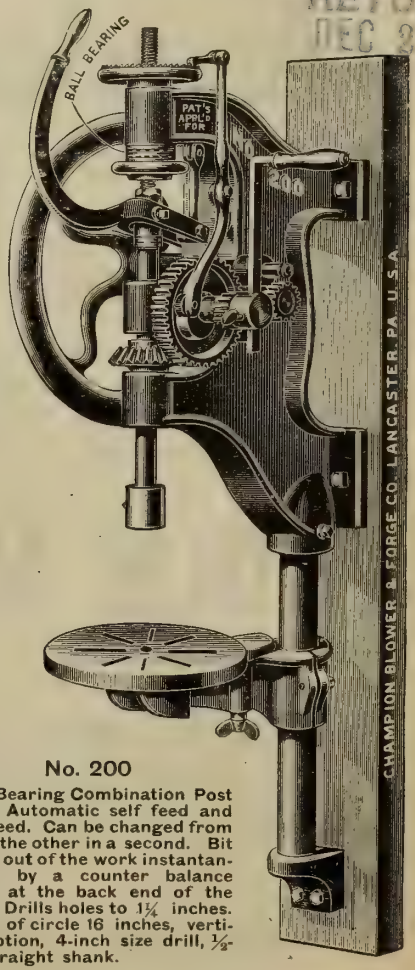
PIPE WRENCHES

PIPE TONGS

PIPE VISES

BLACKSMITHS' AND MACHINISTS' TOOLS

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WEIGHT 160 LBS.

No. 200

Ball Bearing Combination Post Drill. Automatic self feed and lever feed. Can be changed from one to the other in a second. Bit raised out of the work instantaneously by a counter balance weight at the back end of the lever. Drills holes to 1¼ inches. Centre of circle 16 inches, vertical motion, 4-inch size drill, ½-inch straight shank.

RATCHETS

BENCH VISES AND ALL TOOLS USED IN BLACKSMITHS AND MACHINISTS' SHOPS

OUR PRICES WILL PLEASE YOU. ADDRESS MONTREAL OFFICE.

LEWIS BROS. LTD.

OTTAWA
TORONTO
VANCOUVER
CALGARY WINNIPEG

THEY CUT TO THE POINT

REGISTERED TRADE MARK TRUE

"TRUE" BRAND SCISSORS

AND EVERY PAIR IS FULLY GUARANTEED

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

WIRE ROPE

GREENING

"ACME" BRAND

Highest grade of hoisting rope made.
Extra tensile strength for heavy work;
One strand painted green. Look for it.

Use Greening's Rope Grease for Lubrication.

THE B. GREENING WIRE CO.
LIMITED
HAMILTON, ONT. MONTREAL, QUE.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS
CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork.



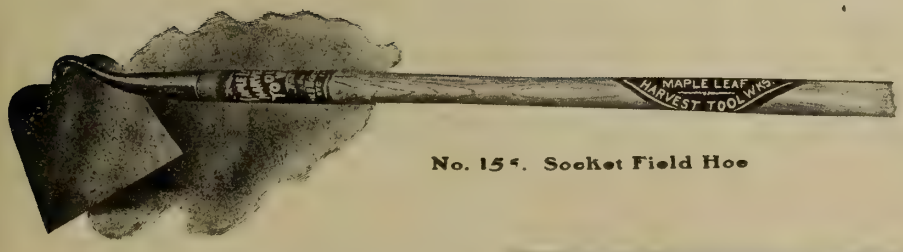
No. 138. Spading Fork.



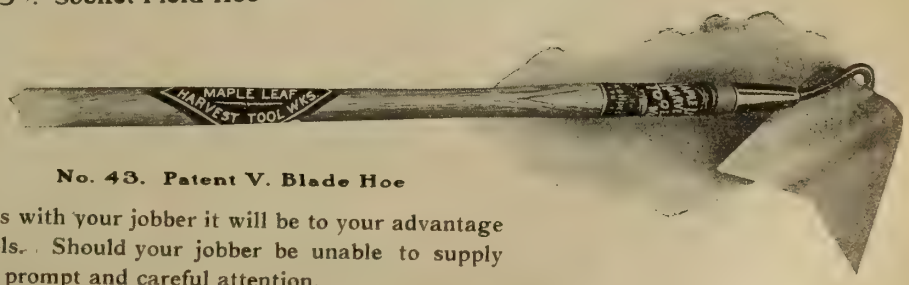
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 15[illegible]. Socket Field Hoe



No. 43. Patent V. Blade Hoe

TO THE HARDWARE TRADE:—

When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Pink's Lumbering Tools

MADE IN CANADA

THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

Pink's Duck Bill Winter Cant Hooks, Handled in Split Maple.

Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

Boom Chains, Pike Poles, Skidding Tongs, Boat Winches, etc.

Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

I Can Furnish You with the

Brazil Patent Snow Plough and Road Maker;
also **The DesJardin Patent Log Sleighs**

Send for Catalogue and Price List

THOMAS PINK & CO., Pembroke, Ont., Canada

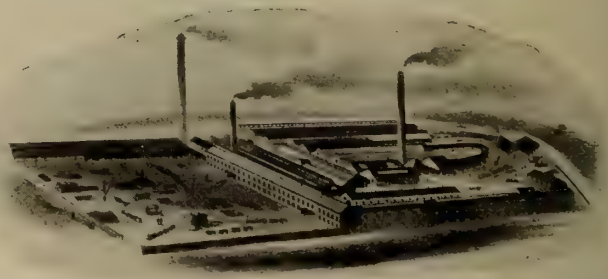
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John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal



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EDGE'S CHAIN
BEST BY TEST

For **Cranes, Dredges, Chain Hoists, Anchors, Lumbering purposes,** and for all severe uses where a reliable chain is required.

We have it in stock ¼ to 1¼ inch.

WE MAKE OUR OWN PRICES AND THEY ARE FAIR

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants

FOUNDED 1809 MONTREAL, CANADA

F. & W.

JOHN ROUND & SON, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
JR & S ALL THE ROUND JR & S
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON

Manufacturers of all Kinds of

GOLD, SILVER, ELECTRO PLATE ON NICKEL and BRITANNIA METAL GOODS, SILVER and PLATED CUTLERY, STEEL CUTLERY, OAK and INLAID GOODS

WITH SILVER AND PLATED MOUNTS

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

We want to mail our Catalogues to all Canadian Dealers, will YOU send us YOUR name?

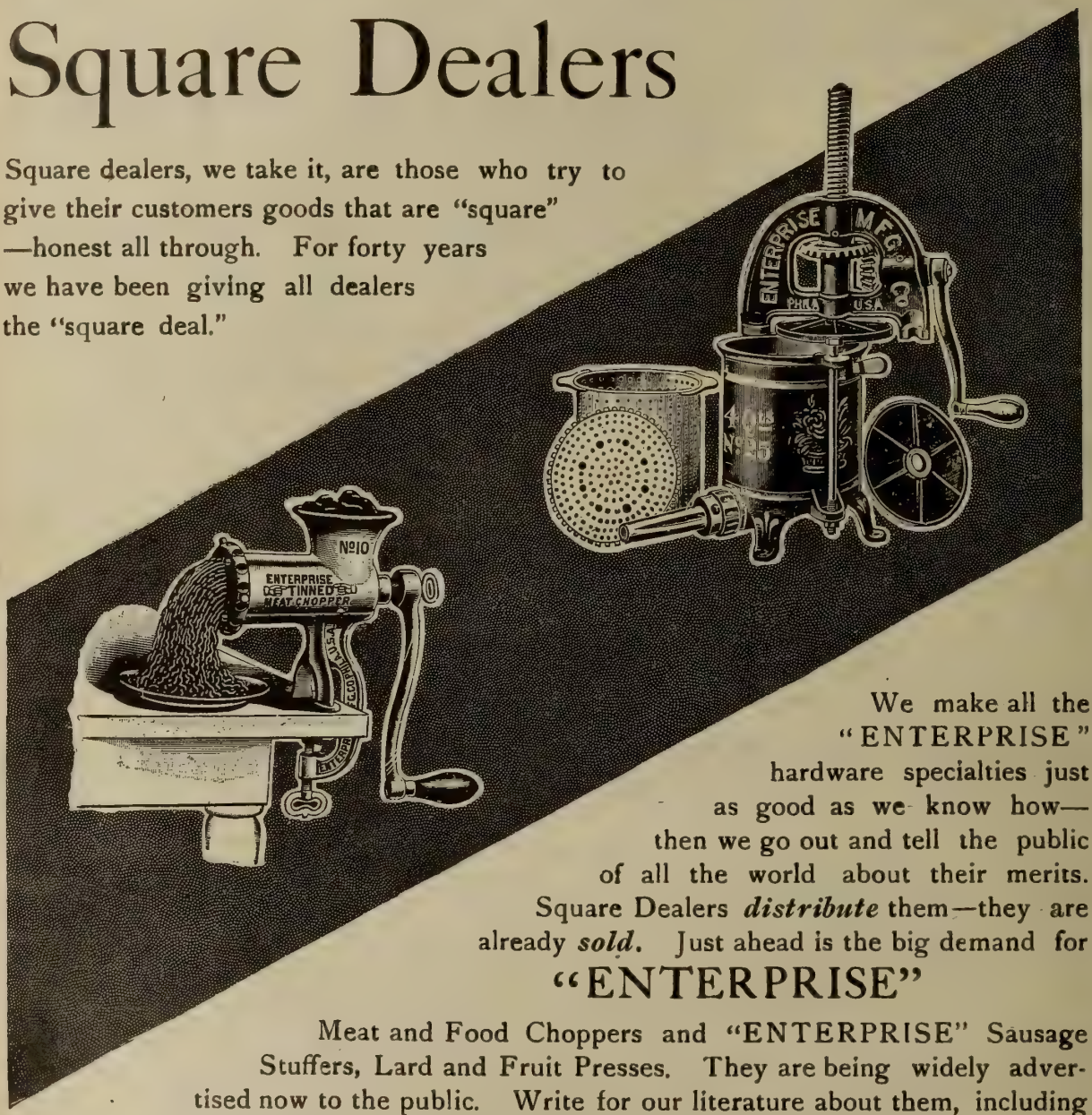
HOTEL and SHIP'S OUTFITS, special goods for hard wear. Special designs for all purposes supplied free.

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

Showrooms and Warehouses: - Coristine Building, MONTREAL

A SQUARE DEAL
FOR
Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square" —honest all through. For forty years we have been giving all dealers the "square deal."



We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public of all the world about their merits. Square Dealers ***distribute*** them—they are already ***sold.*** Just ahead is the big demand for

"ENTERPRISE"

Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new Booklet: "The Cook, Her Critic and—." We will send you a supply of these on request.

The Enterprise Manufacturing Co. of Pa.

New York Office, 10 Warren St.

Philadelphia, U.S.A.

San Francisco Office 105 Front St.

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S. Montreal
Ast Book 44
page 14

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Secure the

Christmas Trade

by selling

COMMUNITY SILVER

The design has a dignity and lasting beauty in marked contrast to the over-ornamentation of other plated ware.

The ware has all the style and appearance of the best Sterling. It is more than triple plated and is guaranteed for 25 years.

It is made in one quality only and has nearly **300 PER CENT. MORE SILVER** than standard plate.

Write for handsome booklet and prices to

Caverhill Learmont & Co

MONTREAL and WINNIPEG

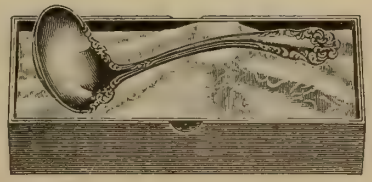
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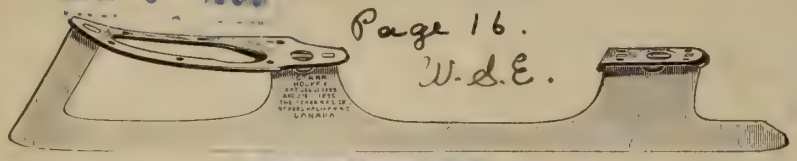
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THE STARR HOCKEY

RETURNED MAY 9 1906

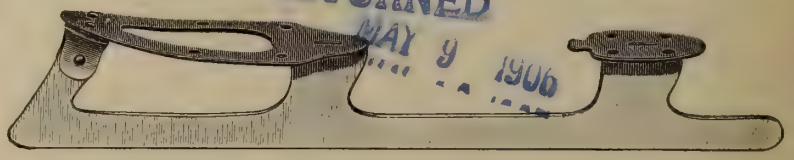
FEATHER WEIGHT



MIC-MAC SKATE

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THE RELIABLE BOYS' HOCKEY



Here are three skates which in their respective classes cannot be excelled. The ***Starr Hockey*** is noted for its rigidity, strength and lightness. The ***Featherweight Mic-Mac*** also for its light weight, but especially for its design and general efficiency, for the length of bearing surface on the ice ensures great speed. The ***Boys' Hockey*** is pre-eminently the leader among low-priced skates, being built to stand the rough usage given it by boys.

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THE "MIC-MAC" HOCKEY STICK

This stick has the correct shape, weight and balance, and as the grain of the wood runs to the curve of the stick, it is practically unbreakable and therefore very satisfactory to hockeyists. Beware of imitations, for the name "***Mic-Mac***" on the blade is registered, and anyone selling such, which are infringements, render themselves liable to prosecution.

THE STARR MANUFACTURING CO., LIMITED

DARTMOUTH, N.S.

TORONTO BRANCH, - 61 YORK STREET

DOMINION WIRE MANUFACTURING CO.

MONTREAL AND TORONTO LIMITED

ANNEALED WIRES

FOR BALING

HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

FLAT HEAD
ROUND and OVAL HEAD
SCREWS
BRIGHT—BRASS
BRIGHT and BRASS

TINNED WIRE for Mattress, Broom, Bolting and Binding

STEEL WIRE HOOP

COPPER WIRE—ALL—BRASS WIRE

MADE IN CANADA



Style "F"

The Very Newest

Combination, Bow Lever and Side Pedal drive; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



THE "SNOWBALL"

THESE ARE TRADE BRINGERS

W. L. HALDIMAND & SON,
MONTREAL,
Eastern Agents

Made solely by
THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, - ONTARIO

We manufacture Cordage and Binder Twine of every variety.
We solicit your 1906 business for the following brands:

Blue Ribbon,	650	ft.	per lb.
Red Cap,	600	"	"
Tiger,	550	"	"
Standard,	500	"	"
Golden Crown,	500	"	"

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX

BRANCHES:

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MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

CATALOGUES TO TRADE ON APPLICATION

CANADIAN ALUMINUM WORKS, LIMITED

CHAMBLY CANTON, QUE.

H. G. EADIE, Montreal Sales Office, 22 St. John St., MONTREAL

Give that man a **UNION PLANE** when he asks you for a

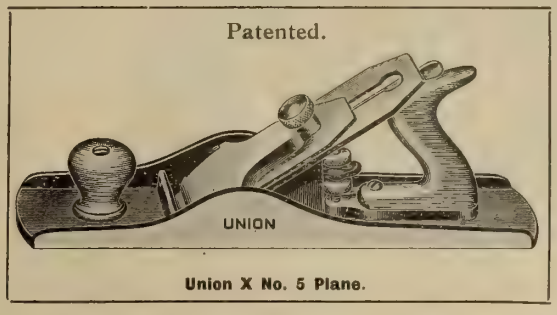
GOOD PLANE

They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever adjustment and Solid Frog.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

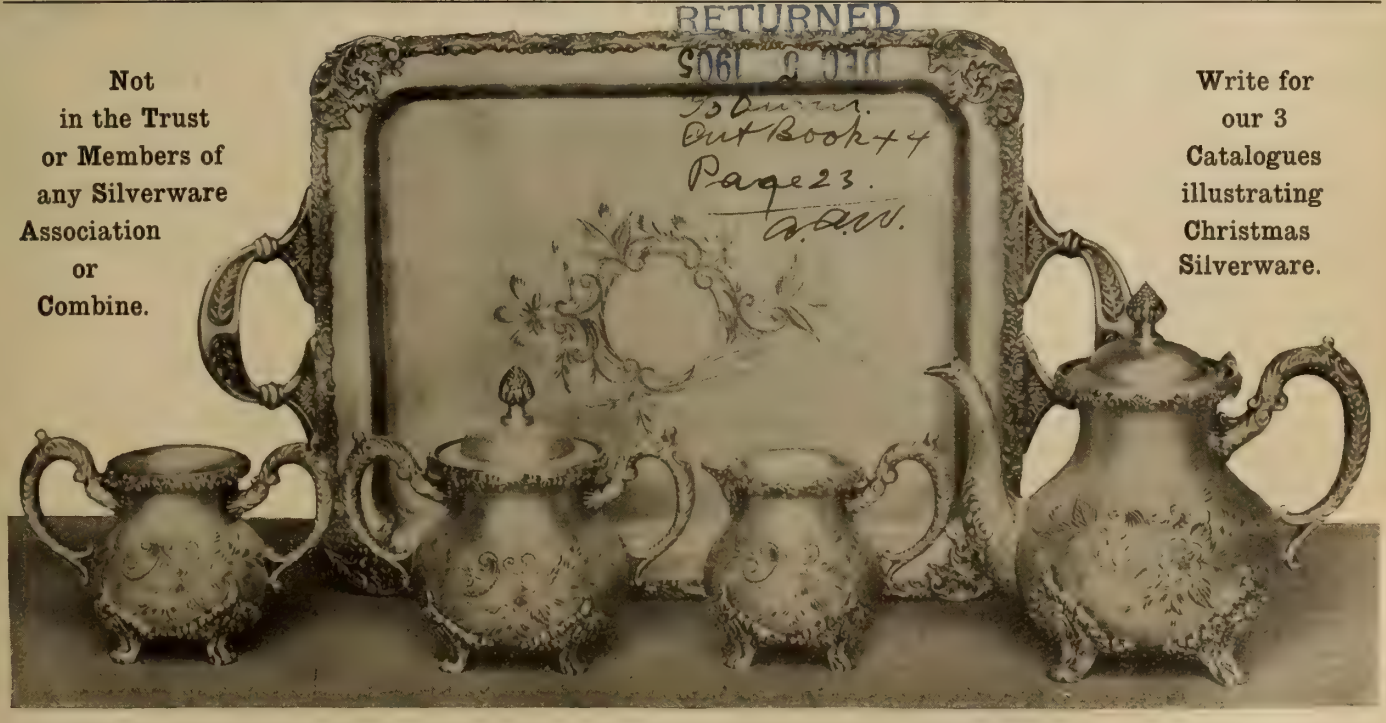
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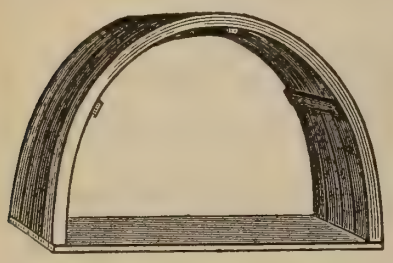
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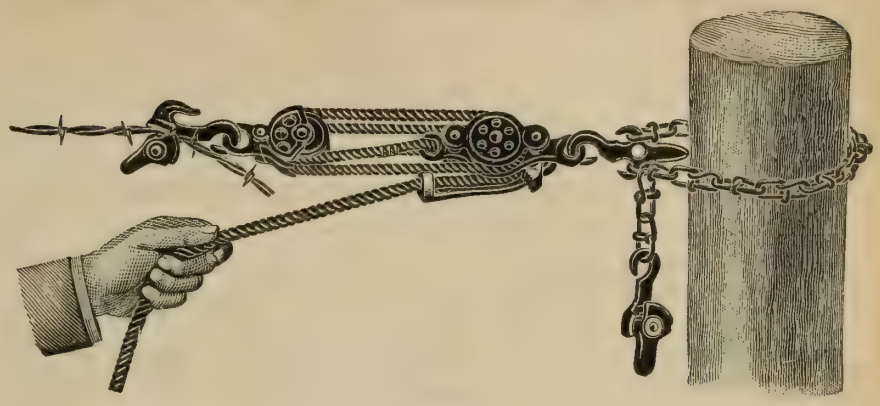
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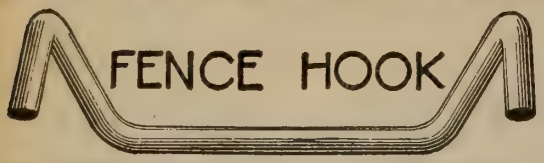
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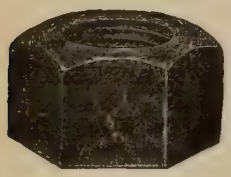
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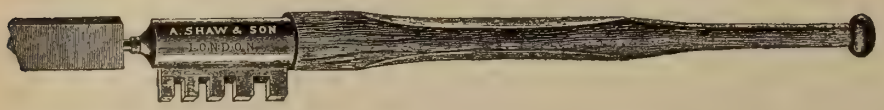
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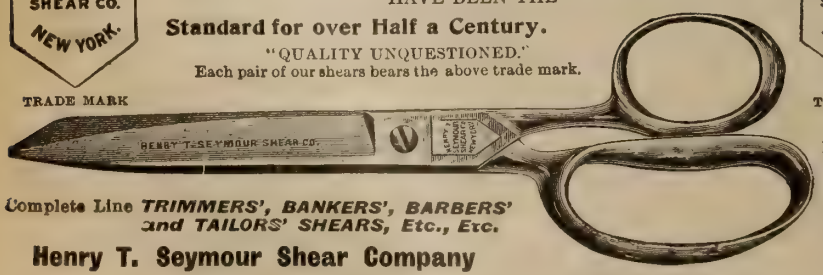
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If you have not yet subscribed do so at once, while our special offer lasts.

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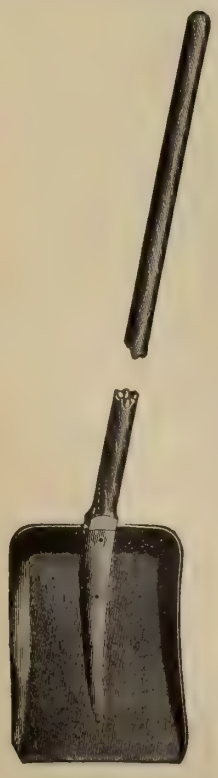
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are securely fastened to the handles by bolts, which pass through iron straps encircling the handles.

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HARDWARE ASSOCIATION ORGANIZED

IN very many respects the virile progressive west has set the pace for the rest of Canada, and in none more conspicuously than in the proper, effective organization of the retail hardware trade. As there is at present a movement on foot for the organization of the retail hardwaremen of Ontario along the same lines as the Western Retail Hardware and Stove Dealers' Association a short sketch of the development of the movement in the west may prove of interest. To the western readers of Hardware and Metal it is an oft-told tale, but readers in the east are probably not as familiar as they might be with the movement.

Winnipeg Association.

The present flourishing western association is the result of the development of the local Winnipeg organization. In 1901 the Winnipeg hardwaremen came to the sane and sensible conclusion that they had been cutting each other's throats long enough, that it was time to put an end to destructive competition, and that there were many common objects to be gained which could be achieved only by the united efforts of the whole retail hardware trade of Winnipeg. Consequently in the summer of 1901 an association of the hardwaremen of Winnipeg was formed and that association had some two or three definite objects in view.

The first object was to protect the retailers from themselves. Perhaps there had been more mutual jealousies, more suspicion and distrust, more price cutting among the retailers of Winnipeg than in any other town in Canada. The first thing necessary was to bring the dealers of the city together in order that they might become acquainted with each other and adjust differences. Having met in the association meetings and frankly discussed grievances and common objects it was comparatively easy to eliminate price cutting and to protect the whole trade from the unfair competition of a few dealers. The Winnipeg hardwaremen learned to trust each other. Before the association was formed any customer could bluff any dealer into giving him a cut price on nails, glass, building paper or some such staple merely by telling the dealer that he had been quoted such a price by so-and-so down street. These tactics don't work now.

Grievances Against Wholesalers.

But the Winnipeg dealers had other grievances. They had a grievance against the jobbing houses. The year 1901 saw a great impetus in the building operations of the city and a large proportion of the hardware trade of the city consisted of building supplies. Much of this trade in building supplies belonged legitimately to the retail hardware stores but they were getting very little of it. Small contractors were buying their supplies direct from the wholesale trade and the indications were that in a short time, unless decided action were taken, the wholesale houses would practically be doing a retail business in builders' supplies. That at least was the view taken by the alarmists among the retailers. Individual dealers could do nothing to stop this but the protest of the Winnipeg association proved effective. There were many large contractors whose business was so big that the retail trade did not want it ; they were quite willing that these men should buy from the jobbers. Accordingly a preferred list of contractors was prepared and it was agreed that to no other contractors should the jobbing trade sell builders' supplies. All others must buy through the retail dealers.

For three years the Winnipeg dealers enjoyed the benefits of their association and the experience of those years was sufficient to convince them that their organization could not well be dispensed with. There was, however, a strong sentiment that, to be really effective in presenting to the jobbers the views of the retail trade, it was necessary that the association should include not only the Winnipeg dealers but the entire hardware trade of the west. The Dominion Exhibition in Winnipeg in the Summer of 1904 seemed to afford an auspicious and convenient occasion for the holding of a convention of hardwaremen from the whole of the west. Accordingly the trade were invited by circular letter and through the columns of the trade press to attend a convention to be held in Winnipeg during the Exhibition.

Winnipeg Convention.

The response was encouraging as the register showed names of hardwaremen from all parts of the west. The Winnipeg dealers described their own local organization and told of the solid, substantial benefits derived from their organization. Their enthusiasm was contagious and it was decided to proceed with the organization of a western association. A constitution and a series of by-laws were drafted by a committee and adopted after a thorough discussion. Officers were elected and the convention was dismissed.

Steady Progress.

It rested then in great measure with the executive whether the association should make progress or whether it should be forgotten as soon as the convention had passed into history. Fortunately the officers were aggressive, pushing hardwaremen, full of confidence in and enthusiasm for the association idea. The president and secretary were J. A. Lindsay and W. W. Lindsay, both of the Ashdown retail store. Of course the fire that destroyed the Ashdown store a few weeks after the convention dispersed interfered somewhat with their plans, but the secretary in some way made time to keep in touch with the movement and the spontaneous response to the call for members was very encouraging. There was a large attendance at the February meeting and it was then decided to raise the fee to ten dollars per year and engage a permanent secretary to devote his whole time to the organization of the trade and the affairs of the association. A few weeks later the executive selected for the position a popular traveler, J. E. McRobie, and he has made a big success of the movement. The organization is extending and in a short time it will undoubtedly include the entire retail hardware and stove trade of the west.

Plan of Procedure.

Mr. McRobie is hard at work visiting the trade in all the western towns and organizing them in local sections. Each section arranges its own scale of prices on a few staples on which prices are usually cut and it is almost always possible to arrange these matters amicably. The Winnipeg prices are usually taken as a basis.

The organization is rapidly extending and it now commands the respect of all branches of the trade.

A TRADE NEWSPAPER PUBLISHER

LONDON'S new Lord Mayor is a trade newspaper publisher. Coming of a family of bankers, he began to follow in the footsteps of his ancestors, but was one of the first to see the tendency of modern time was to specialization.

He saw that there were many classes and communities which needed a more complete news service than the daily and weekly newspapers could afford to collect or publish. With his brothers he established the Grocer. This was followed by the Ironmonger and Chemist and Druggist. The first passed into the hands of his brother-in-law many years ago. Later the brothers established a similar series of papers in Australia.

The two surviving brothers, the Lord Mayor and Mr. Septimus Morgan, do not now devote much time to their publishing business. They visit their offices for an hour every Friday when they are in London. The real work is now being done by their sons and nephews. The boys are very wealthy in their own right—one of them being a multi-millionaire, yet they work extremely hard.

Under their fathers the papers were the greatest of their class in the world, but the young men are making them better still. It is said the editorial expenses of the Ironmonger alone amount to over $1,500 a week. In this they have a monopoly. Some years ago Mr. Ingram, of the London Illustrated News, and C. Arthur Pearson, who was then associated with him, had been

looking with jealous eyes at the Morgan Brothers great property, and started a paper to compete. They lost about $275,000 before they abandoned it, and the Ironmonger was stronger than ever.

The Lord Mayor as well as his brother have large investments in Canada. The former is a director of the Hudson Bay Co. The latter had more faith in Canada than Canadians themselves, for he bought heavily of Canadian Pacific around 40 and sold at about 150.

The position of Lord Mayor is no sinecure. He receives a large salary, but the expenses of the position will require him to spend from fifty to one hundred thousand dollars during the year out of his own pocket. His duties are quite onerous. Here are his engagements for an average day: 9.45 a.m., small committee at Mansion House; 10.45, magisterial work for about an hour and a half; 12.15 to 1.15, signing papers; 1.30, luncheon of about twenty; 3 p.m., public meeting re education in South Africa at Mansion House; 7 p.m., chief guest at dinner given by the Plumbers Company, one of the ancient guilds of the city.



The New Lord Mayor of London.
Walter Vaughan Morgan, one of the founders of our English contemporaries—The Grocer and The Ironmonger.

A DOUBLE PRESENTATION.

THE town of Rockland, Ont., was the scene of a pleasant social gathering last week, when "the boys" of the town met in the Rockton Hotel to say good-bye to James Bennie, who has been buyer for the W. C. Edwards Co., but who is now about to launch into business on his own account at Beachburg, Ont.

The prime mover in the affair was Mr. Rowe, principal of the high school at Rockland, to whom the success of the evening was largely due. When the fun was at its height Mr. Jack Binks came forward and read an address to Mr. Bennie expressing the regret of the boys at his departure, and Mr. Rowe then made the presentation of a beautiful engraved locket, to accompany the address. A surprise was then sprung on at least one gentleman in the gathering, when another locket, identical with the first one, was presented to Mr. Rowe, who has been principal of the local high school for eight years. In this case the address was read by Dr. Jovet and the presentation made by Mr. Taylor.

A number of commercial travelers who happened to be in town helped to enliven the proceedings with their witty speeches. Among the boys of the grip who contributed to the program were D. McNair, John Murphy (who was accompanied by his Sweet Caporal girl), C. D. O'Brien (the Irish comedian) and N. McElroy.

The sumptuous repast provided by Mine Host Tague was done ample justice to, and the boys parted in high good humor.

AUSTRALIAN TRADE OPPORTUNITIES.

D. H. ROSS, Canadian Commercial agent for Australia, in his report of Oct. 2, states that in Australia, where the thermometer rarely falls to freezing point, ice skating is an attractive novelty. A rink has been established at Adelaide and others are to be erected at Melbourne and Sydney. The necessary refrigerating machinery has been ordered and when the Australian Winter opens next June the sport will be enthusiastically taken up by our fellow colonists. The skates used at the Adelaide rink are mostly of an inferior character, and as there will be a large demand for skates of a superior article, Canadian manufacturers are urged to send sets of catalogues, illustrations and price lists, immediately, to the Canadian Commercial Agency, box 140, Melbourne. Fuller particulars can be secured from the Department of Trade and Commerce at Ottawa.

A new railway station, to cost $550,000, is to be erected at Melbourne, and metal ceilings and art steel goods to the value of about $60,000 will be required for the structure. Canadian manufacturers who desire to submit estimates should write the Ottawa officials for information at once.

Another contract to be given by the Australian Government shortly, for which tenders will be invited, is for a supply of 500 tons of copper wire, 600 lbs. to the mile, for the construction of a telephone line between Melbourne and Sydney.

REPORT ON COBALT ORES.

MANY facts of great interest regarding the development of the mining district in the neighborhood of Cobalt are contained in the second part of the Report of the Bureau of Mines which has just been issued. This volume contains a detailed account of the work done in the field by W. G. Miller, Provincial Geologist, in 1904, and the information is brought up to July, 1905. A complete account of the discovery of the area and its situation is given, while correspondence shows that although the Provincial Department had in its possession a collection of specimens and reports on the deposits yet the public did not realize the value of the discovery for fully 18 months after the strike was made.

Data is given regarding the rock formations of the district and the statement is made that while gold ores are profitable to work when they assay $3 to the ton, the Cobalt ores average $18 to the ton. A comparison with other districts shows that the area is unique in North America.

Those in Saxony and Bohemia resem-

ble the Ontario field. In the latter are all the groups of metals found in the Joachimstaal deposits of Bohemia, except pitchblende, the source of radium, and this may yet be found. The Old Silver Islet and other deposits near Port Arthur are more like those of Cobalt than any other in North America. The intermediate areas have been prospected only slightly, and may be productive of similar rich minerals.

The ores of the province, the report concludes, carry such big value in silver that they will be worked primarily for this metal, although those of Cobalt contain a much higher proportion of cobalt than those of New Caledonia. There are also by-products of value such as arsenic and nickel. The opinion is finally exprecsed that the ores of Ontario should control absolutely the market for cobalt.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

No. 1094. A Scotch company manufacturing engineers' tools, woodworking machinery, cast iron baths, rain, water and soil pipes, heating and cooking stoves and general castings, would like to be placed in touch with Canadian importers who could handle these manufactures.

No. 1095. A Bristol firm who are buyers of pick and shovel handles, hay and manure fork handles, and basswood broom handles, 50 inches x 1 1-8 inches, would like to hear from Canadian manufacturers who can fill orders promptly.

No. 1096. A Staffordshire manufacturer of tiles and similar building lines is open to arrange with suitable Canadian importing houses to handle such goods.

No. 1098. Inquiry has been made by a London firm for the names of the leading nail makers in Canada.

No. 1106. A firm of mineral importers in Manchester, and a Lancashire manufacturing firm prepared to buy and smelt crude Cobalt under conditions, will welcome correspondence from Canadian producers and shippers of same.

No. 1109. A Manchester firm of machinery importers desires to correspond with Canadian manufacturers of machine tools, valves, pipe fittings and paper mill machinery.

No. 1110. A Lancashire firm of oil importers, now obtaining their supplies from the United States, would welcome quotations for naptha and creosote from Canadian producers.

No. 1119. A Lancashire firm handling large quantities of spade, pick and wooden handles, would like to hear from Canadian manufacturers who can fill orders.

No. 1121. An English manufacturer of every kind of door lock is desirous of being brought into touch with actual buyers of such goods in Canada.

No. 1122. Inquiry has been made for Canadian makers of towel rollers, rolling pins, pastry boards, chopping boards and domestic hardware.



WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

"A 'C' BRAND FAMILY."

Editor Hardware and Metal.—Your good people up in Ontario have been lately treated to some homilies upon "race suicide," and you deserve it all, according to the census returns.

We do things differently down in this benighted Province of Quebec. As an example in point, one of our old employes, Mr. Antoine Labelle, a French Canadian, of course, as his name implies, told me on Saturday that he was the father of thirty children. 'Go, thou, and do likewise!" We claim the championship on behalf of this company.

CANADA HORSE NAIL CO.,
Wm. Smaill, Sec.-Treas.

NEW DRAIN PIPE.

The Dominion Sewer Pipe Co. has purchased from Mr. M. H. Rylatt, Boston, England, the inventor, the right for Ontario, Manitoba, and the Territories, to manufacture what is known as self-centering drain pipe. The essential feature of the new pipe is the presence in the socket of three tapered bars, running from the mouth of the socket almost, but not quite, to the end of the interior tube of the pipe. As the spigot of the second pipe is laid in the socket of the first, it rests on these three bars, which as it is pushed in guide it up to its exact position in the centre of the socket, giving what engineers call a "true invert"—in other words, a smooth interior join between every two pipes. The groove between the tapered bars and the base of the socket is simply to

provide a solid ring of cement all round the joint. The cost of adding these three bars is so insignificant that the new pipe can be made for almost the same cost as the plain pipe.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

A Bookkeeper's Ruler.

JAS.SMART MFG. Co., Brockville, Ont., manufacturers of hardware, woodenware, stoves, etc., and agents for Kelsey warm air generator, are sending to the trade a very neat bookkeeper's ruler. Readers of Hardware and Metal who have not received one can secure one on request by mentioning this paper.

Attractive 1906 Calendar.

The cut herewith presented illustrates the new calendar for 1907, just issued



by the Harrington & Richardson Arms Co., Worcester, Mass. The calendar is beautifully lithographed, in colors, and will make a good ornament in any hardware store. Any reader of Hardware and Metal, who mentions this paper in asking, will receive the calendar promptly.

Railroad Motor Cars.

Fairbanks, Morse & Co., Toronto and Montreal, have issued catalogue number 101A, dealing with motor cars for railroad work. The designs shown are very unique, while full descriptions are given the magnetism of the various styles of cars shown. Readers of Hardware and Metal can secure copy of the catalogue by mentioning having seen the offer in this paper.



Business Devices.

Brass bound price card, hardware merchant card index records, etc., are described in leaflets issued by the David Williams Co., publishers of the Iron Age. The agents for these goods are The MacLean Publishing Co., Toronto. The illustrations showing samples of price cards, and the description of these time-saving business devices, are worthy of a great deal of study, and any merchant who desires to place the business end of his business on a more modern basis cannot do better than look into the systems adopted, particularly for hardware stores, by the publishers named above. Full information and descriptive matter will be sent on request.

Gasoline Soldering Iron.

An illustrated booklet from Emmelmann Brothers Mfg. Co., Indianapolis, Ind., shows the many good points of their gasoline soldering iron and blow torch. This apparatus is not an experiment, but an assured success. Ask the makers for a copy of this late booklet and mention Hardware and Metal.

Bolts and Screws.

The Standard Bolt & Screw Co., Limited, Toronto, recently incorporated, and who are rapidly getting their special automatic screw and nut-making machinery installed in their handsome new factory adjoining the Dundas street bridge, Toronto, have issued a catalogue and price list of the lines they will manufacture, including bolts and nuts of all descriptions, set crews, cap screws, studs, boiler patch bolts, stay bolts, machine screws, coach screws and steel taper pins. The catalogue illustrates in their various sizes and modifications the standard lines, but the company are prepared to make all classes of small parts and machine shop supplies in iron, brass, steel, German silver, silver and gold. Frank Jackson, formerly identified with the Diamond Machine & Screw Co., Limited, Toronto, is factory superintendent in charge. Mention Hardware and Metal when writing for a catalogue.

U. S. TARIFF ON STEEL.

The board of United States general appraisers recently sustained a protest filed by John J. Beck of Buffalo, and held that merchandise exported from the United States to Canada in the form of hoop or band steel and returned to that country as scrap steel is entitled to free entry, as articles of the growth, produce or manufacture of the United States.

The board further rules that free entry may be had without the production of a clearance certificate from that country on satisfactory proof of the identity of the articles, it being impracticable or impossible to produce such certificate, owing to the nature of the importation. Another point in the board's decision is that where the importer has made application for allowance of drawback on any portion of an importation, no refund of any duties will be allowed under paragraph 483 of the free list of the Dingley tariff law.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

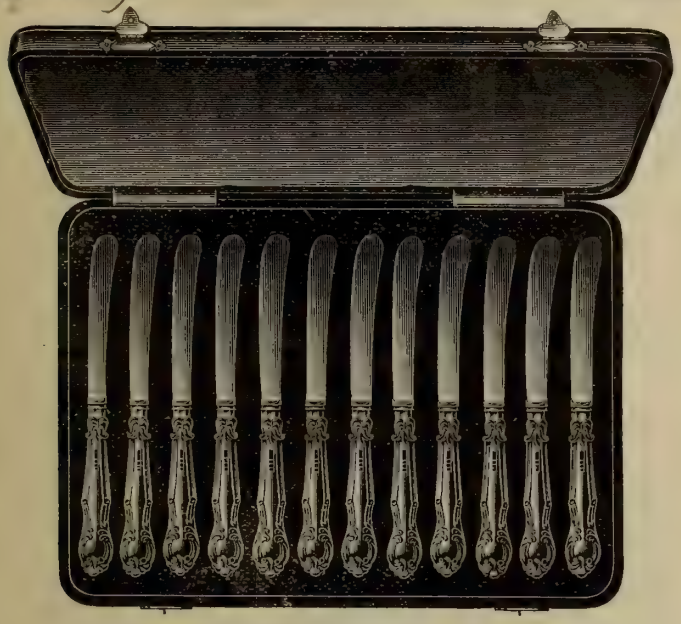
138-140 WEST FRONT STREET, TORONTO

Wholesale Only

FRUIT KNIVES and FORKS

IN LEATHERETTE CASES

RETURNED DEC 5



FRUIT KNIVES ONLY (Plated Steel Blades)
No. 50—6 Pieces Sterling Silver Hollow Handle
12 " " " " "



No. 8—12 Pieces Pearl Handle, Plated German Silver Ferrule, Blades and Forks Silver Plated on Steel.



No. 0461—Dessert Knives and Forks, Plated on Steel
" —Table " " " " "
Pearl Handles

SETS IN WALNUT PLUSH LINE CASES



Fish Knives and Forks
No. 764—Pearl Handles, Plated G. S. Ferrules, Blades and Forks Silver Plated on Nickel Silver.

RETURNED DEC 2
To Own Cut Book Page 14

OTHER LINES—SEE OUR CATALOGUE

H. S. HOWLAND, SONS & CO., LIMITED Toronto

We ship promptly

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

Our prices are right

——Here is the——

"GOOD CHEER" RANGE

You Will Want

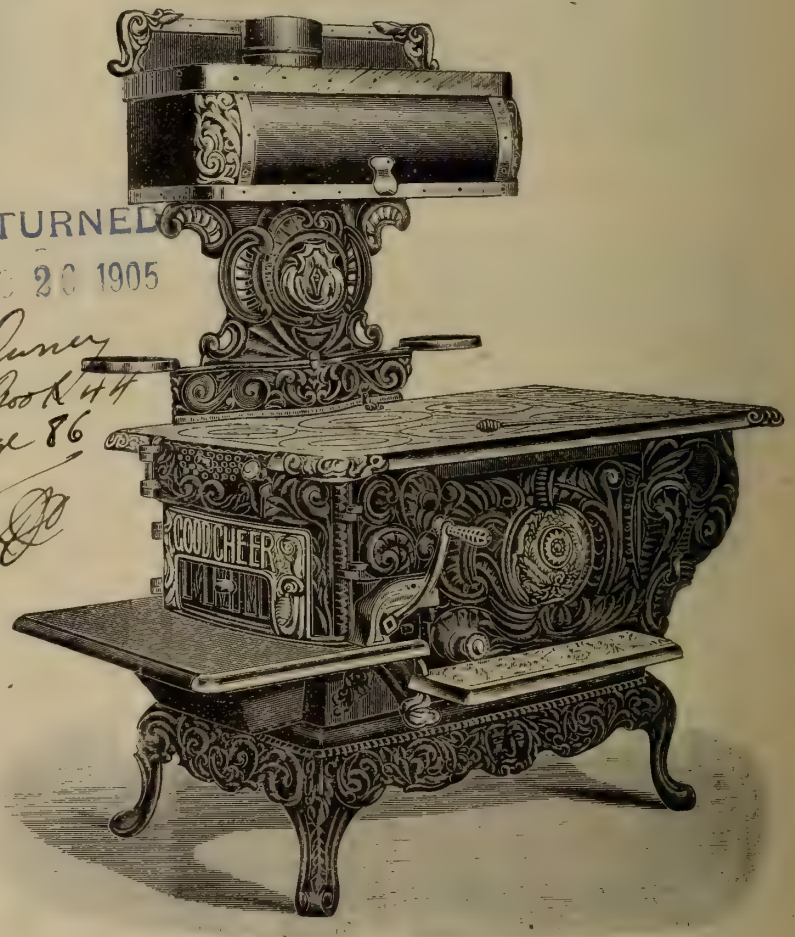
A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price

It Has a Full Sized

20-INCH OVEN

Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.



RETURNED
DEC 26 1905
To Owner
on Book 44
page 86

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted

The "GOOD CHEER" KITCHEN QUEEN

THE JAMES STEWART M'F'G CO.

Limited

Winnipeg, Man. ***Woodstock, Ont.***

STOVES AND TINWARE

TIN PLATE OR GOLD BRICK.

UNDER the above heading Hardware and Metal last week referred to the failure of the Eastern Trust Company, an enterprise promoted in the United States by Messrs. Allison and Meldrum, two of the chief promoters of the Canadian Tin Plate & Stamped Steel Company, which proposes to establish a tin plate mill at Morrisburg.

In view of the connection of these promoters with the defunct Cramp Steel Company, of Collingwood, and the publicity we have given to the Morrisburg proposition in recent issues of Hardware and Metal we reproduce this week two articles from the United States Investor, of Boston, New York and Philadelphia. The first is from the issue of January 16, 1904, and reads as follows :

STOCKHOLDERS INSIST ON LIQUIDATION.

Among the trust companies which started in New York during the heydays of flotations was the Eastern Trust Company, the promoters of which were Messrs. Allison and Meldrum ; and the attorneys for the promoters were Messrs. Brown and Wells, who have been identified with numerous enterprises, a number of which have resulted disastrously.

Upon the first examination of the company by the banking department, the latter discovered that $50,000 commissions were charged by the above named gentlemen for this promotion, and the department insisted upon this amount being taken out of the surplus and written off.

Some time in April of last year Mr. Allison and other directors of the company tried to arrange for an exchange of the stock of this company for the stock of the Van Norden Trust Company. The exchange of stocks, it is claimed, would have netted the stockholders about $150, but the engineers of the undertaking took good care that they and their associates were to get above book value, which was, at the time, about $192 or $193. A well known brokerage firm in the street, which had put a great many of its clients into this stock, issued a circular at the time advising their clients not to accept the proposition of merging, taking the position that if the company was to be liquidated, its own stockholders could attend to it as well as any outsider.

A Laggard.

Ever since this movement the company has been a laggard. Its deposits, which had at one time run up to over $2,000,000, shrank gradually until late in the Fall of 1903 they had fallen below the million dollar mark. The statement of January 1, 1903, showed a profit of some $21,000. The statement of January 1, 1904, shows a profit of some $22 000. According to the company's own figures, therefore, the officers in charge of $2,000,000 of capital and surplus have been able to earn, in the course of 12 months, barely $1,000. In the statement of January 1, 1904, the officers, however, show that they are carrying their bonds at book value and not at market value. Deducting the difference between the actual market price and the cost price of the securities, the company in the 18 months of its existence has been able to show the remarkable results of an actual loss in the book value of its stock and the building up of a deposit line of barely $1,000,000.

Just Criticism.

Considerable criticism has been indulged in by those who have been in a position to know about the large amount of loans made to any one party, and the criticism has been justly made that a concern with barely $1,000,000 deposits is scarcely in a position to make several time loans of $300,000 to $400,000 in each loan. The published statement of the company is woefully lacking in information as to the amount of time loans, demand loans and call loans.

It is no wonder that there should be dissension in the board of managers of this concern, and that a number of the leading stockholders and directors are so thoroughly dissatisfied and disgusted with the past, present and future, and with the possibilities for getting business, that they have joined in a movement to force a liquidation of this institution.

Stockholders' Meeting.

Such well known men as Mr. Wm. G. Park, one of the directors of the Lincoln Trust Co. ; Mr. J. B. Bloomingdale, director in several financial institutions ; Mr. Charles Kimberly, a well known banker of New Haven, Conn. ; Mr. Ernest Werner, of the Stock Exchange firm of Werner & Broun, and Mr. A. A. Lisman, issued a call for a private stockholders' meeting, in anticipation of the annual meeting, to discuss the question of liquidation. This meeting, which was held in a Wall street law office last week, was, it is said, "packed" by the friends of the present management, who indulged in a good deal of speech-making, but who, when it came to a show-down, were able to master exactly 545 votes, whereas the gentlemen who issued the call own alone over double the amount of stock that the management represented, and had, in addition, proxies for several thousand shares.

Efforts have been made to rehabilitate this unsuccessful institution by asking for the resignation of all directors, so that their places could be filled by others. Several directors, however, have declined to resign under fire, but have decided to remain on the board, so as to be in a position to vote for liquidation of the company, whenever the opportunity shall present itself.

The annual meeting of the company will be held on the 20th instant, and it is likely that the management may hear some unpalatable truths by stockholders who have, for a year and a half, been patiently waiting to see some results in the increase of the book value of their stock, or in the establishing of a profitable line of deposits, and who have been disappointed in both these reasonable expectations.

Condition of Company.

Following is the statement showing the condition of the company as of December 31, 1903 :

RESOURCES.

Bonds of city of New York, book value		$1,003,131.25
Union Pacific conv. 4 p. c. bonds, book value		52,937.50
Furniture and fixtures		6,590.25
Loans		1,823,666.37
Accrued interest		24,182.50
Due from trusts—		
Advances	$ 254.05	
Commissions	2,920.10	
		3,174.15
Cash—		
In banks	$338,444.57	
On hand	22,609.55	
		361,054.12
		$3,274,736.14

LIABILITIES.

Capital stock	$1,000,000.00
Surplus	950,000.00
Undivided profits	22,282.58
Reserved for taxes	9,750.00
Interest accrued on deposits	9,039.16
Deposits	1,270,637.26
Certified checks	13,027.14
	$3,274,736.14

The second article announces the death of the company as foreshadowed in the above article, it being published in the Investor on July 9, 1904. It follows :

TRUST COMPANY TO LIQUIDATE.

The usual aftermath of any boom is liquidation. It is not surprising, therefore, that the trend of the times in trust company circles is toward reduction in capitalization or the winding up of business. Following closely upon the announcement of the reduction in the capital stock of the Trust Co. of America from $2,500,000 to $1,000,000 comes the official statement to the effect that the Eastern Trust Co. will retire from business. The counsel of the company is quoted as follows : "This action is taken to avoid the customary receivership in liquidation. The plan avoids the necessity of receivership expenses and renders possible a disbursement of a larger proportion of the assets among the stockholders."

Stockholders' Loss Small.

Although the stock is quoted around 175, inasmuch as the capital of the company is $1,000,000 and the surplus $950,000, approximately 190 should accrue to the stockholders. The liquidation of the assets should afford no difficulty, these consisting as per report of December 31, 1903, of $52,937 Union Pacific convertibles, and $1,331,000 New York city

bonds. The winding up of the Eastern Trust Co. will not come as a surprise, an effort having been made in this direction last January. The company was never very successful, as will be perceived by the fact that during the two years of its existence profits amounted to only $22,000, $21,000 of which was earned during the year ending December 31, 1902. In other words, during 1903 the company, with a capital and surplus of $2,000,000, has been able to earn only $1,000.

A PHILADELPHIA FAILURE.

The New York Herald of September 23, 1905, gives another account of the shipwreck of one of Messrs. Allison and Meldrum's enterprises, this time the enterprise being the Philadelphia Steel & Iron Company. The article follows :

"Developments in the bankruptcy proceedings against the Philadelphia Steel & Iron Company have brought to light an underwriting syndicate that may find its operations unprofitable, filled the air with rumors of suits and disclosed another promotion of the firm of Allison & Meldrum which did not meet with success.

"The syndicate consisted of a number of brokerage firms including Allison & Meldrum, of New York, Chicago and Canada. This syndicate, it is asserted, underwrote more than $150,000 worth of what purported to be the first mortgage bonds of the company, and now creditors allege that the amount named did not constitute a first lien and that there was a prior one of $25,000.

"The creditors mentioned in the bankruptcy proceedings are the Lancaster Trust Company, of Lancaster, Pa. ; Isaac J. Greenwood, of New York ; Charles F. Hickey, of Brooklyn, and F. L. Crocker, of New York. In addition to the sale of the assets of the company it is announced that there will be suits against each of the underwriters individually for the amount of their subscriptions.

Organized New Concern.

"The Philadelphia Iron & Steel Company is the successor to the Farrell Carbon Casting Company, of Philadelphia, which had a process for making Atlas steel. Through Alfred C. Rex and Chas. F. Walter, of Philadelphia, it is declared that Allison & Meldrum obtained possession of the plant and the patents of the company, organized a new concern, with a capital stock of $1,000,000, and issued $300,000 in bonds to meet the costs of incorporation and patents. Allison became president, with Meldrum second in command.

"Allison & Meldrum, being unable to float the bonds, went to Flint, Jones & Co., in Wall street, offering them $4 a thousand to underwrite M. Flint, Jones & Co., now Flint, Bacon & Co., organized the syndicate, and with that list of names the promoters went to the Lancaster Trust Company and borrowed $35,000. There were several outside purchasers, among them Greenwood & Hickey. About $50,000 in bonds were actually sold and how much in stock is not stated.

"The bond purchasers, discovering that they in reality held them subject to a prior lien of $25,000, began suit against Allison & Meldrum, in the United States Court, but this action was dropped when the standing and liability of the underwriters was ascertained. The taking of testimony from the members of the syndicate, it is said now, is for the purpose of discovering the assets of the company. Some of the New York members have already been examined by F. L. Crocker, who is attorney for the bank and other creditors. General Greene, who lives in Buffalo, will be examined when he comes to testify in the asphalt case. So soon as Messrs. Allison & Meldrum return from their trip to Canada they will go on the stand.

Mr. Allison's Record.

"The office of Allison & Meldrum is at present at No. 51 East Forty-fourth street in the same building in which Dr. W. Seward Webb has a suite. The career of the three men has been somewhat intertwined for several years, Mr. Allison being at one time connected with the Wagner Palace Car Company, of which Dr. Webb was the head. They were also identified with the Automatic Telephone and Electric Company and Mutual Automatic Telephone.

"J. Wesley Allison and Garnett H. Meldrum are Canadians, Mr. Allison coming to New York city in 1891 as the United States agent of the Canadian Government Railway system. He is known in the business world as a promoter and has appeared in the directorate of many companies. One of his early companies was the George Washington Lighting Company. Others were the Woods Motor Vehicle Company, until its reorganization in 1902 ; the Storage Power Company, Columbia Electric Car Lighting and Brake Company, the Guaranty Development Company and the Artificial Lumber Company of America. In 1902 he appeared as a director of the American Cold Storage Shipping Company, the Depew Syndicate and the Cramp Steel Company, Limited, of Collingwood, Ont. ; the Eastern Trust Company, the Middletown Greenfield Railway Company, the National Leather Mat and Belt Company, the Pacific Coast Iron and Steel Company, the Para Rubber Plantation Company and the Picacho Blanco Mining Company of Arizona. He was also a director in 1902 of the Montreal and Boston Copper Company."

A NEW LANTERN.

E. T. WRIGHT & CO., Hamilton, Canada, beg to draw the attention of the trade to their latest improved patent of the Cold Blast Lantern, which they claim makes it the strongest and best Cold Blast Lantern now on any market. The improvements are as follows : First, the globe holder has not the perforations in its side. Second, constructing a ring around the base of the hood with perforation thereon. Third, placing a series of perforations on the upper part of the globe holder, for the purpose of feeding double the volume of air to the tubes, making it so more air and less oil is burned, which is an immense saving. Fourth, forming a solid hood to the lantern, with side openings. These four valued improvements make it impossible to extinguish by swinging, shaking, or by any other ordinary means of usage.

TIMELY SUGGESTIONS.

One reason why some stove merchants do not sell more stoves is that they do not know enough about the goods. They pay little attention to detail. The traveler comes along and tells them what a good line of stoves he sells. They believe it—without paying much attention to the good points that he emphasizes—and put in the line. When a possible customer wants to buy a stove the merchant is ignorant of the advantages of the line. He does not know that the oven is bigger than in other stoves of the same number, nor that the lining is extra heavy, nor that the grate is an interchangeable one. He knows none of the good points of the stove and therefore cannot do any more than talk in a general way about it. Maybe you think this does not apply to you. Try it on and see. See if you know every feature of the stoves you sell. What kind of fuel will that one burn best ? Can it be changed from coal to wood easily ? Can an oven door thermometer be fitted on? At how much additional cost? Is the oven large ? Is the clean-out easy ? Is the ash pan large ? Is the fire box well lined ? What is the lining of the reservoir ? These are some of the questions that are likely to come up in selling a cook or range. Then with the heater there are others. What is the best fuel? Will the stove gold fire well? Why will it warm the floor ? What is the hot blast feature ? Why is it economical in fuel ? Are the ashes easily emptied ? The man who starts out to sell stoves should be able to answer these and a hundred other questions in regard to the goods. Put in your spare time looking up the answers.—The Hardware Trade.

GOLD VARNISH FOR TINPLATE.

Leave 2 pounds of finely powdered crystals of acetate of copper for a long time in a warm place, says an exchange. Rub the powder as soon as it has changed to a pale brown with oil of turpentine, and mix it with 6 pounds copal varnish at 70 deg. C. Solutions will be complete in about a quarter of an hour, and after standing a few days the varnish will be ready for use. Dry in artificial heat after application, for the exact color depends on the drying temperature. If good copal varnish is used the gold is very permanent, and adheres with great force.

STOVE TRADE HURT BY GAS.

"The natural gas flow is certainly killing the stove business in certain districts," said a representative of a stove manufacturing company in Kansas City recently. "We have been feeling the effect of the installation of gas for some time, but never so much as now. In the southeastern part of Kansas the trade is almost at a standstill. In some cases the old stoves have been made to burn the gas simply by inserting a pipe after cutting a hole in the bottom of the stove and installing a regular gas burner. The people through the district haven't been able to figure out why this city is not being supplied with the gas. We in our business can only hope that the supply is limited."



We are now arranging agencies for

The Joy Malleable and Steel Range

The only malleable range made in Canada and sold exclusively through the **Retail Hardware Trade.**

Write us for descriptive matter; secure the agency for your town; and order samples before your competitor gets ahead of you.

The Joy Manufacturing Co.

Future ads will describe construction in detail.

Office, Factory and Salesroom
32 William Ave., Toronto



VORTEX HOT BLAST COAL STOVE

for Soft Coal, Lignite, Hard Coal, Wood, and lighter fuel.

For Sale by

E. T. Wright, & Co., Hamilton, Canada.

SELL THE LAMPS

That produce the **most Light** at the **least cost.**



SHELBY USEFUL LIGHT LAMPS

DOWNWARD LIGHT TIPLESS LAMPS

We quote special prices to the hardware trade.

ONTARIO LANTERN & LAMP COMPANY,
LIMITED
Hamilton, - Ontario

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

BE POLITE TO CUSTOMERS.

A REPUTATION for intelligence and truthfulness is indispensable to a permanent and satisfying success in the grocery business, and politeness is also among the few weapons that the small dealer has at his command to meet the competition of larger dealers who buy their goods more cheaply. But the larger the business the greater the number of hands required, and consequently the less chance of the customers being treated with difference. That these advantages are not fully realized and utilized by the average retailer is well known to all who come in contact with them. One important point in particular to be impressed upon your assistants is the necessity of careful and polite attention to the smallest customers. There is an old and trite adage which says, "When you buy keep one eye on the goods and the other on the seller, but when you sell keep both eyes on the buyer." Customers are drawn to the dealer who greets them cordially, treats them with civility, shows them little courtesies, manifests an interest in their wants and seeks to gain their confidence. Do not imagine that customers consider cheap goods and "cut prices" are the equivalent for such treatment, for if you do you will soon have to discontinue business for lack of brains or to be sold out altogether, although you may charge your misfortune to other causes.

HOLD YOUR TRADE.

While going out after new business, don't overlook the importance of holding your old customers. If old friends cease trading with you, try to find out what is wrong, and make it right. Try not to have any cause of dissatisfaction. If a customer makes a complaint, arrange the matter satisfactorily, even though it costs you something to do so.

Very few towns in Canada will equal Walkerville's record for building this year. The most costly single structure is E. C. Walker's new residence, costing $125,000. The new King Edward school, costing $50,000; Walker's rack house and new cooper shop, $40,000 each; the Globe Furniture Works, $40,000, and new residences bring the total for this year up to nearly $400,000.



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.

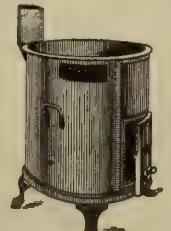
H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
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MONTREAL.

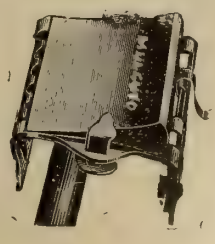
If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada



SAFETY RAZOR, 3/6
Luxurious Shave in 2 minutes

Bachelors' and Colonists' Buttons, attached instantly by merely pressing. Pocket Warmers, Patent Tobacco Pipes, Automatic Clocks, Novelties, etc., etc.

Send for lists and liberal discount terms.

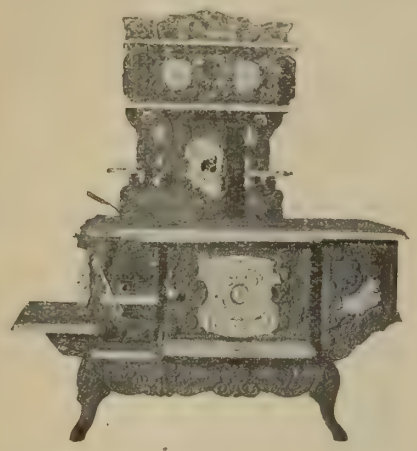
G. BISHOP, Mary Ann Street Birmingham, Eng.

REMEMBER THIS POINT

Our interest in you does not peter out at the selling point. The Gurney method is different. We have created a big demand for the Oxford lines by wide, strong and systematic advertising—and—stamping quality through and through every article we market.

But, we do not stop there. We keep eternally at it all over the country and you'll notice we don't forget YOUR territory.

We expected great results when we placed the



Our guarantee bond goes with each Range.

Imperial Oxford Range

on the market, but its prompt and big success topped the highest hopes of its designers. Year by year its sales have grown enormously until to-day its nearest competitor is far behind in the race for supremacy.

Why?

All practical men know just why. The exclusive features of the Imperial Oxford were bound to make it a winner and—what is more to the point—an easy, quick seller.

The Draw-Out Duplex Grate and frame prolongs the life of the fire-box because repairs can be easily effected without disturbing the linings.

The Diffusive Oven Flue delivers a column of superheated air into the oven and maintains an even temperature very pleasing to the most fastidious cook.

The oven is full-sized and square.

The fire-box is accurately proportioned, deep and straight.

The weight is there and every modern improvement in Range making is to be found in the Imperial Oxford. It is easily the handsomest range of them all and the easiest to sell.

It will pay you well to place the Imperial Oxford Range in a prominent place on your floor.

Send for Catalogue 61.

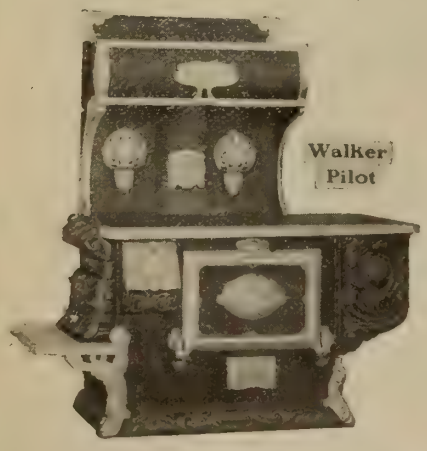
WE also manufacture Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER** 77

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

The Walker Pilot Steel Range



MADE IN 2 SIZES AND 6 STYLES.

Ovens 18 x 20 x 14
and
" 20 x 20 x 14

Steel High Shelves and High Closets.

6, 8, or 9 inch covers.

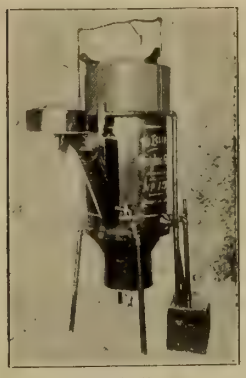
This Range complete with Oven Thermometer, Base, and Duplex Grates (removable without disturbing linings).

Retails at from $32 to $50

LET US SEND YOU FURTHER PARTICULARS.

The Walker Steel Range Company, Limited

Grimsby, Ont.



The Eclipse

The Light That Lights!

ACETYLENE

It you want the best light for the least trouble and expense, us acetylene. Unequalled for store, factory or house.

The Continental Heat and Light Co.

Montreal



A GUARANTEE
THAT MEANS SOMETHING

If any stove dealer receives

STERNE'S
ASBESTOS STOVE AND
FURNACE CEMENT

and is not satisfied with it, or if he does not find it exactly as represented, or if he has any reason for returning it, or if he returns it without any reason, he may have his money back by return mail, without "any talk."

G. F. STERNE & SON, MANUFACTURERS,
BRANTFORD, ONT.

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



200 CANDLE POWER OF CLEAR, STEADY LIGHT

The best and cheapest light for STORES, CHURCHES and HOMES.

Gives more light than a dozen oil lamps for half the cost. Makes its own gas without smell, smoke, wicks or grease.

Satisfaction Guaranteed. Send for Catalog.

AUER LIGHT CO.——————MONTREAL

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.

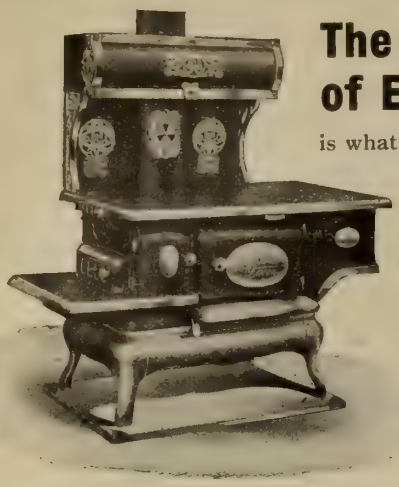


Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.



The Maximum of Efficiency

is what the user finds in

THE EMPIRE QUEEN RANGE

Efficiency makes sales. Sales are what you want. **The Empire Queen Range** is the best baker on the market. Its **construction** accounts for that. No waste heat, but concentrated heat, is the watchword in making **The Empire Queen Range.**

This range is just as easy to sell as it is to cook with.

Have you our Booklet?

The Canadian Heating & Ventilating Co.
OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

ARK-EL-ITE
TRADE MARK

More Serviceable

ARK-EL-ITE ASBESTOS STOVE LINING is in greater demand than fire-brick because it is **more serviceable** and better wearing.

ARK-EL-ITE ASBESTOS STOVE LINING forms a durable and economical lining for Cooking and Heating Stoves, Hot Air Furnaces, etc. It is especially adapted for Grates, Ranges, etc., where natural gas is used.

Can be applied by any person to any kind of stove.

Packed in heavy cardboard cases.
10-six-lb. pkges. in case, price $1.50

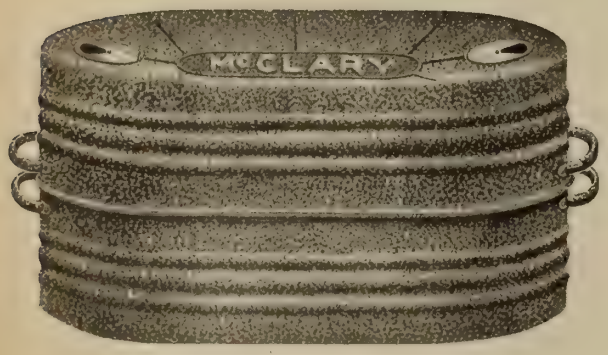
Have You a Supply?

MANUFACTURED BY

THE FRANCIS-FROST CO. LIMITED
TORONTO

Makers of the Celebrated "Ark" Brand Paints.

McClary Self-Basting Roast Pan



No Basting, No Waste, and Nothing to Watch But the Clock.



Do you realize what this means to you ?

It means that no matter what you roast—meat or fowl—all you need do is to put in the roast, with a little water in the bottom of the pan, and take it out when done—crisp, juicy, and roasted to a turn.

The reason why this Roaster roasts so much better, and bastes itself, is that all the steam which arises and bastes the bottom of the roast is made to drop down again on the top of the roast, because of the special construction of the top. (See picture.)

But that is not all.

The ordinary Roasting Pan not only requires a lot of basting and watching, but it also wastes a lot of the roast itself, as most women know from experience. Actual test shows that a 10 pound piece of roast beef will only weigh 8 pounds, or less, when roasted in the ordinary pan—a clear loss of 2 pounds, or one-fifth of the weight ; at this rate you do not need to have "roasts" very often before this waste amounts to $3 or $4 a month !

This big item of waste, as well as the necessity of basting and watching, are all entirely eliminated in the **McCLARY SELF-BASTING ROAST PAN.**

It takes up no more room, and it can be used on the top of the stove as well as in the oven.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Kitchen."

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

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NEW ADVERTISEMENTS.

Joy Manufacturing Co., Toronto.
United Factories, Toronto.

ANOTHER COAL STRIKE.

IT is asserted that the "Coal Trust" has stored 400,000,000 tons of coal in anticipation of a strike of the unions when the present agreement expires next Spring and that the miners have accumulated a fund of $2,000,000 for the same purpose. As 400,000,000 tons of coal is to $2,000,000, so is the strength of the mine owners compared to that of the miners. This is, however, still further aggravated by the fact that the former are few in numbers while there are many thousands of the latter. It ought not to be difficult to figure out beforehand which side will come out victor should the expected contest occur.

But if the strike occurs next April, as freely predicted, the ill effects of the controversy will not only be felt by the participants but also by manufacturers and merchants and the general public, who have no part in the contest. It is not too early, therefore, to discuss the situation and adopt ways and means of lessening the evils of the strike. The Iron Trade Review makes the novel suggestion that users of coal treat the commodity as insurance and purchase a policy before the strike really takes place. The Review says:

"The danger of a general strike of miners in both the anthracite and bituminous districts is now so great that we believe it will be wise for all manufacturers to purchase and store large supplies of coal, so that business will not be paralyzed by even a long cessation of mining. The expenditure involved in such purchases is really a payment for insurance. Men are usually willing to carry insurance on their lives and property when there is no immediate danger of fire or sickness. Far more reason is there for investing in insurance when it is almost certain that such protection will be needed."

The suggestion is a good one, so far as manufacturers are concerned, and it is one that can be acted upon to the advantage of many merchants. While it entails an initial expense, it must be remembered that the commodity is not a perishable one, and the cost of the investment is really only the interest on the amount invested and the chance of losing on such a plan is very small.

TWO STRONG CARDS.

MANY a retailer's stock needs more well kept want books and the more frequent use of the mail order.

Most merchants will confess that their stores have not want books enough and what they have are poorly kept. The stock runs short on some particular articles and the clerk or merchant fails to enter those items on the want list.

The day comes when calls for those articles are made and the stock contains them not. Then it is that the merchant is tempted to buy more than he should of those lines to make sure that the stock will not get short on them again.

In every scientifically handled store the want book and the mail order are coming to the front. Thus instead of buying it all in one lump to make sure the stock will not run short, the scientific merchant orders carefully and sorts up frequently. The want book is an important part of his system. The mail order is another.

These two features of good storekeeping save many a dollar from year to year when properly applied. Carrying expense is a big item and the want book and mail order help chip off a large piece of that expense. They assist the retailer to do business with less of his money tied up in merchandise. They teach him to leave as much of the stock as possible in the hands of the wholesaler and manufacturer until he needs it.

THE C. N. R. IN EDMONTON.

FRIDAY, November 24, saw the celebration of an event of national importance, for on that day the first C.N.R. train arrived in Edmonton from Winnipeg, having made the trip in 27 hours. On the afternoon of the same day, with ceremonies and speech-making befitting an occasion so important, the "last spike" was driven by Lieut.-Gov. Bulyea and the road was formally declared open for traffic.

The occasion was an epoch-making one in the history of Canada, for it marked an important stage in the building of a transcontinental road about which the majority of the Canadian people have heard very little. All Canada was in an uproar when the Canadian Pacific was built, and considering the importance of the undertaking and how little was then known of the possibilities of the country it was only natural that the project should command the attention of the entire country. The building of the G.T.P. has also been heralded by the beating of drums and the blowing of political trumpets, and the country has been in a ferment of discussion and political strife because of it. All Canada has known of the project and has appreciated its importance. The G.T.P. has often been referred to as the second of the Canadian transcontinentals, but this, of course, is a mistake. Since 1895 the Canadian Northern interests have been working steadily at the building of the second transcontinental and although their work has attracted very little attention and aroused very little interest in Eastern Canada they have nevertheless been accomplishing great things in a quiet and unostentatious way. A little more than a year ago the good people of Toronto sat up and rubbed their eyes in astonishment when they read in their papers one morning that the C.N.R. management had secured an option on the proposed new union station site about which the Canadian Pacific and Grand Trunk were disputing. It was a bold stroke that advertised effectively the fact that another transcontinental was being built.

It may surprise many people to know that the C.N.R. have now almost 2,500 miles of track west of Lake Superior. Nine years ago they had only 100 miles in the Dauphin district of Manitoba, but the work has been carried on steadily and systematically in the intervening years. So well has the work been planned that every section of the road has been made self-supporting as soon as it has been turned over to the operating department. The accomplishment of this object has been steadily kept in view by Mackenzie & Mann when deciding on new extensions.

The completion of the road to Edmonton marks an epoch in the history of Western Canada and means a great deal for that city. The distance from Winnipeg and the east has been shortened by several hundred miles and the future of Alberta's capital as a jobbing centre seems to be assured.

WORK, NOT CHARITY.

PAUPERISM in England is one of the most absorbing questions before the world to-day. There is an apparent reason for the revolutionary movement in Russia, but few Canadians can understand why "there are ten million people in Great Britain on the verge of starvation," as a leading British statesman put it a year ago, and how things can be so bad in London, the wealthiest city in the world, as to have a procession of 6,000 poorly dressed and half starved women, many of them carrying babies, march through the streets of the metropolis singing the "Marseillaise," and sending a deputation to Premier Balfour asking that public works be started to provide employment for their husbands, brothers and fathers.

But hard though it may be to realize that wealth and poverty are twin sisters, such is the fact, and the deplorable conditions existing in London have moved Queen Alexandra to donate $10,000 to start a charitable fund to relieve the distress, Premier Balfour having stated that "he had little to suggest in the way of alleviation except an expression of hope that public charity would come to the aid of the unemployed. He deprecated the Socialistic suggestion that industries should be started at the national expense for the benefit of the unemployed as calculated to destroy the springs of enterprise and energy of the nation." And a recent cable says the poor are flocking to the metropolis in droves, being attracted by the Queen's fund to assist the unemployed. This influx simply aggravates the situation, as the impoverished are invading London more rapidly than they can be provided for.

There seems to be no longer room to doubt that the condition of the poorer classes in England in continually growing worse. The reports of the medical examiners of recruits for the army showed such evidence of physical degeneracy as to cause general alarm, which was only partially allayed by the investigation of a Parliamentary commission, which found the conditions exaggerated, although serious enough to demand attention. The commission reported that one of the chief causes of physical deterioration is that many of the children do not get enough to eat. The latest statistics show that there is now more pauperism in England than at any time since 1873, and that it has increased rapidly in the last few years. The total now recorded is 768,390, or 22.8 per 1,000 of the population. The increase over last year is 30,756, and it is higher by 63,782 than it was ten years ago.

What is to be done to relieve this situation? Can the English race be allowed to starve and deteriorate in its home land and in the midst of plenty? Can the problem be left for solution by the leisure classes in England and for alleviation by Queen's funds and other charitable enterprises? As well may we do as an Irish domestic is said to have done—endeavor to mop up the water on the kitchen floor without turning the water tap off. A wealthy business man, one who had risen from the ranks, recently pointed out that it was the policy of the families in England having hereditary incomes or drawing large pensions to encourage pauperism, as it meant to them cheap labor and products of labor (food, clothing, etc.,) a plentiful supply of cheap servants, and a servile common people. Little, therefore, can be expected from this quarter. Whatever practical measures are adopted must be suggested and put into action by business men who recognize the waste to society in keeping in existence an idle poor as well as an idle rich class. The incapacity of the offspring of idle parents will appeal to all thinking men who desire to see the world's undeveloped resources exploited.

"Work, not charity," were the words emblazoned upon the banners of the orderly out-of-works who paraded the streets of London recently. Men and women denied the opportunity to earn bread for themselves and their children asked that the opportunity to labor be given them. But the English tax-payer dearly loves low tax "rates"—even though it means workhouses and charity. The Canadian business man sees things differently. He sees "millions of acres wanting hands" in Canada, and "millions of hands wanting acres" in old England, and he makes the connection. Farmers in Canada are crying out for assistance, and while it is no easy matter to make a Canadian farmer of a British city dweller, three or four years spent on the farm will give sufficient knowledge to enable the former pauper to take up land and farm his own ground. This is a subject in which the retail trade is vitally interested, as the more Englishmen put on Canadian farms the more customers will the merchants of Canada have to serve. The average farmer's family spends about $1,000 per year, and money spent in bringing and training a lot of families of this sort would soon pay for itself. The work should be directly supervised by Government agents, however, as employment agents in Great Britain are doing much to give Canada an unenviable reputation in the Mother Country. Much money is already being spent in encouraging emigration to add to our city population, but the need of the country districts is of much greater importance.

When we take into consideration the fact that the level land of Japan is less than 3,000 square miles and that this same level area supports over 45 millions of people, we can form some idea of what a mighty empire it is possible for Canada to become. All that is needed is willing workers who despise charity and use push, perseverance, and patience.

QUESTION OF QUANTITY BUYING.

"SHOULD not one combination be allowed to get a given quantity of goods as cheaply as another combination of men?"

These words uttered by Mr. Fielding, sitting on the Tariff Commission at Hamilton, are really pregnant with meaning and strike at the root of the whole question. It is always well to bear in mind there are two sides to every question.

As an illustration of the importance to a manufacturer of regulating the selling price and terms on goods of his manufacture, an instance is known of a manufacturer a short time ago having sold a block of goods to a departmental store, the argument advanced by the buyer of the departmental store being that in view of the quantity purchased they expected the very lowest price. The manufacturer sold at his lowest price and shortly after that the departmental store was advertising the line of goods in question at less than the manufacturer's wholesale price.

The result was, that when afterwards the manufacturer called upon the wholesale and retail trade with a view to securing business, he was met with the answer that it was no use him expecting to make sales to the wholesale and retail trade at the prices he was asking when the departmental store in question was offering the goods at less than the manufacturer's price. This line of goods was used as an advertising medium to attract buyers by the cheapness of a staple article upon which every householder knew the price, while, at the same time the departmental store could probably secure other business from an intending buyer that would net him a

very large profit, completely ruining the retailer's trade for the season.

There are many cases of this kind, and unless proper protection and regard were given by the manufacturers to the different classes of trade, the sale of goods to the consumers would soon be entirely in the hands of three or four departmental stores or their branches throughout the country. So many lines of groceries being staple, and the prices being well known to consumers, departmental stores frequently use such lines for advertising purposes, with the result that their action is calculated to ruin the trade of the retail grocer, unless he is properly protected by the manufacturer and wholesaler.

FIGHT FIRE WITH FIRE.

WHEN you find mail order advertising circulating in your territory which actually misrepresents, go after it.

You cannot do this by talking in the store. While you are discussing such misrepresentation with a few people many more are taking the bait and sending their money away.

There is an old saying that you must fight the devil with fire. You must fight retail mail order advertising with advertising just as positive and even more convincing.

An exchange tells of a North Dakota retailer who has found it necessary to begin a campaign of education against retail catalogue houses. He uses both prices and general argument. He analyzes the weakness of the offers made by retail mail order houses, compares their goods with his goods and their values with his values. One of his recent circulars, printed on a mimeograph, is an argument which no farmer can dodge. He must confess that the local merchant has proven his case.

Even with such work as this there are people who will persist in sending their money out of the country, but do not weep too long over them. Every community has them. Do the best you can. Hold as big a percentage of the trade at home as possible and bear in mind that the man does not live who can hold it all.

Time spent in trimming a window is never wasted—if the trim is any good at all. Therefore do not think that when the clerk is fixing up a display that his time is being poorly spent. If he has any ability he is earning money for you—more, maybe, than when he is behind the counter.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 8

UNDOUBTEDLY this series of "Successful Jobbers and Salesmen" would be sadly incomplete if western jobbers and salesmen were not represented. The west is now offering, in many lines, the largest opportunities for Canadian business houses, and it is to the west that Canadian manufacturing and jobbing houses must look for future expansion. Hence it is that the western field is commanding the attention of some of the brightest and shrewdest of Canadian salesmen.

In this issue Hardware and Metal takes pleasure in presenting its readers with a portrait of Mr. C. D. Waldon,



Mr. C. D. Waldon,
Sales Manager Pease-Waldon Co., Winnipeg, Man.

sales manager of the Pease-Waldon Co., Limited, of Winnipeg. It is a portrait that will be recognized by many readers in the east as well as in the west, for Mr. Waldon's business experience has brought him in touch with the trade in many parts of Canada.

Mr. Waldon has had considerable experience in the heating business, having made his first trip at the age of nineteen for Clare Bros. & Co., of Preston, Ont. For the last few years, prior to his coming to Winnipeg, he was traveling salesman for the Pease Foundry Co., of Toronto. During his years on the road he has made a host of friends for himself among the Canadian heating trade, and he has established an enviable record as a successful salesman and popular traveler.

About one year ago the Pease-Waldon Co., Limited, of Winnipeg, of which J. T. Sheridan and W. J. Jones, both of the Pease Foundry Co., Toronto, are president and vice-president, respectively, was organized as a separately incorporated company to conduct the rapidly growing western business of the Pease Foundry Co. Mr. Waldon acquired a financial interest in the company and was made sales manager.

Quite recently the Pease-Waldon Co. have moved into spacious showrooms and offices on Portage avenue. Their new premises are in the centre of the best retail section of Winnipeg, and they are the admiration of the heating trade.

OF INTEREST TO HARDWAREMEN.

Now is the time to order goods for early Spring delivery. Wire cloth, poultry netting and kindred lines should be booked well ahead if prompt delivery of goods is wanted.

* * *

Every hardware merchant should be a preacher of the gospel of good roads. Supply good roads and the farmers will not be nearly so much inclined to send mail orders to the concerns in the city. Given roads with mud axle deep and do you wonder that the catalogue houses get trade? Good roads will advance not only the hardware trade, but all others, and at the same time improve the value of land. It is a matter that every hardware merchant should take up and actively push.

* * *

Now is the time for hardware merchants to advertise Christmas presents. What would be better for a boy with a mechanical turn of mind than a tool set or a scroll saw? For exercise and amusement what is better than a bicycle, boys' wagon or a velocipede? There is nothing that will please the housewife better than a sewing machine, tea set, set of knives and forks or a nice clock. For the older boys and men what will be more appreciated than a good shotgun, safety razor or pocket knife?

* * *

The hardware business has plenty of opportunity and will continue to have for the merchant who uses the right methods. There is no doubt that the catalogue houses have made it harder for the local merchant to do business, but when you come right down to it, that is like any other competition, must be met with new and better methods. Associations are doing much to protect the interests of the retail hardwareman at the buying end. When it comes to the selling the problem is up to the individual merchant.

PERSONAL MENTION

Ontario.

J. D. Sheridan, plumber, Woodstock, was a visitor in Toronto this week.

T. Norris, of Norris & Lockhart, plumbers, Galt, spent last Saturday in Toronto.

Mr. J. T. McCall, of Drummond & McCall, metal merchants, Montreal, was a visitor in Toronto on Thursday.

L. A. De LaPlante's new hardware store at East Toronto is nearly completed, and will open for business shortly.

Mr. A. C. Adam, assistant manager of the Canadian Iron Furnace Co., Midland, spent a few days in Toronto this week.

The Brantford Screw Works intend to build an extension to their factory at Brantford, according to a dispatch from that city.

The Toronto Bolt & Forging Co. are suing the Le Page Door Check Mfg. Co. for $373. The Le Page Co. has put in a contra claim for $700 damages.

Charles Bogardus, of Morristown, has sold out his hardware business, the change to take place at once. Mr. Bogardus has accepted a position as traveler for a hardware wholesale house.

C. L. Race, Port Hope, has sold his hardware business to Wm. McGibbon, of Brighton. Mr. Race leaves on Dec. 15 for Edmonton, where he has accepted a position with a wholesale hardware house.

Roberts & Hetherington, painters and decorators, Toronto, intend opening a branch store at Peterborough. Both are former residents of Peterborough, and should make a success in business in that town.

John McIntyre, of Eganville, has opened a new hardware store in the fine brick block of Robt. Reeves, in that town. As Mr. McIntyre is an experienced hardwareman, his prospects of success are of the brightest.

A new firm for the manufacture of wire fence has recently started in Woodstock, known as the Standard Wire Fence Co., in the building formerly used as an automobile works. A new machine has been installed capable of manufacturing 800 rods per day of fencing.

Mr. Joy, manager of the Joy Mfg. Co., makers of steel ranges, Toronto Junction, was a caller on Hardware and Metal this week. Mr. Joy was formerly president of the Retail Hardware Dealers' Association in North Dakota, and will probably be heard from in the discussion of the competition to organize a similar association in Ontario.

Quebec.

Mr. Hope, of Kynochs, Limited, England, is visiting some Montreal friends.

Ed. Bonneterre, tinsmith, plumber, etc., of Laprairie, visited Montreal during the week.

L. P. Beaulne, hardware merchant, of Hawkesbury, Ont., visited Montreal a few days ago.

J. E. Scale, general merchant, of Morin Flats, paid a visit to Montreal last Wednesday.

E. Chevalier, plumber, of Joliette, was an out-of-town purchaser in Montreal a few days ago.

W. H. Evans, of the Canada Paint Co., Montreal, spent part of the week at St. John, N.B.

D. Racine, general merchant, of Casselman, Ont., called on some of the Montreal jobbers recently.

Mr. Bissonette, of Bissonette et Freres, St. Sebastien, visited the Royal City during the week.

I. England, of Israel England & Sons, general merchants, Knowlton, was in Montreal this week.

Mr. Akin, of Akin & House, general merchants, Beebe Plain, was in Montreal on business a few days ago.

P. J. Powers, of Powers & Co., boiler manufacturers, Ottawa, paid a business visit to Montreal a few days ago.

Louis Beaulieu, manager of the Pontbriand Co., Sorel, was in Montreal this week placing orders for supplies.

Mr. McCarty, of J. C. McCarty & Co., manufacturers' agents, New York, called on the Montreal trade this week.

Gordon Baxter, manager of the Maritime Engineering Co., Moncton, N.B., was in Montreal during the present week.

John Shaw, general merchant, of Shawville, Que., has sold out his dry goods and boot and shoe departments with the intention of handling only hardware and groceries in the future.

Caverhill, Learmont & Co., Montreal, are extending the telephone system in their main warehouse on St. Peter street. Their number henceforth will be Main 5350.

The Traders' Co., of Buckingham, Que., are making a fine record for themselves as expert window dressers. Their latest display is a most attractive window of cross-cut saws and Winter goods.

The Coulonge Hardware Co. have just completed a fine new store at Fort Coulonge, Que., to replace the building which was burned last March. The new structure is of brick and contains two storeys.

A. J. Vallerand, who represents Frothingham & Workman, Limited, in Southeastern Quebec, has been under the weather for a couple of weeks and has been unable to get out on his ground during that time.

In the forthcoming elections in Westmount, it is expected that Jas. R. Walker, of Jas. R. Walker & Co., dealers in junk and paper stock, Montreal, and formerly mayor of Westmount, will be a candidate in Ward No. 2.

G. G. Grundy, purchasing agent of the Temiscouata Railway, Riviere du Loup, was in Montreal this week. The Temiscouata Railway runs from Riviere du Loup to Edmunston, N.B., forming a connecting link between the I.C.R. and C.P.R.

Hardware and Metal is in receipt of a neat little booklet entitled "Concerning Ourselves," published by Herbert Rodgers & Co., Saracen House, Snow Hill, London, Eng. As manufacturers' agents, this firm act as direct representatives in the United Kingdom of manufacturers of hardware and allied lines.

Great interest is being manifested among the Quebec trade in the technical books of the MacLean Publishing Co. Many orders are being received, and especial mention may be made of the reception which is being given "The American Hardware Store." Its hints are invaluable to the up-to-date retailer. All inquiries addressed to the Montreal office (232 McGill street) will receive prompt attention.

Western Canada.

S. Johnson, late of the Brandon, Man., Hardware Co., has accepted a position in J. R. Meldrum's hardware and furniture store at Capar, Man.

Smith & Ferguson, Regina, have completed the erection of a large warehouse costing $5,000. It contains four floors, three of which will be used for heavy hardware, and the fourth for light goods. The company intend to branch out into the wholesale business next Spring.

DEATH OF FRED W. MORSE.

News was received in Toronto on Thursday of the sudden death in Winnipeg on Wednesday of Mr. Fred W. Morse, vice-president of the Miller-Morse Hardware Co., and one of Winnipeg's best known business men. Mr. Morse died very suddenly of heart failure, having just telephoned down to the office that he would not go down to business until the afternoon and having returned to bed just before being stricken. Mr. Morse was apparently in the best of health and his death was a great shock to Mrs. Morse as well as to all of his many friends and acquaintances in the hardware trade.

Mr. Morse learned the hardware business under the late Henry Rutledge, buyer and manager of Samuel Benajmin & Co., and in 1882, while still a young man of about twenty-five, he removed to Winnipeg and assisted in founding the great hardware firm of which he was a member, the business being first established as a retail concern and later developing its wholesale character.

Speaking of Mr. Morse's death, Mr. Thomas Dexter, manager of H. S. Howland, Sons & Co., Toronto, feelingly referred to his friendship with Mr. Morse in days gone by, saying that Mr. Morse was the character of a man who made friends with everyone with whom he came in contact, always having a smile and a word of cheer for friends or customers. His old friends in Toronto were proud of his success in the west and have learned with regret the sad news of his death, occurring as it did in the prime of his life.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 74.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Cotton Rope is being quoted at 22½c.
Linseed Oil has advanced 1c.
Turpentine declined 2c.
Ingot Copper is now 19¾c. to 20c.
Ingot Tin has advanced to 37c. and 37½c.
Pig Lead is now quoted $4.30 to $4.35.
Londonderry Pig Iron is up to $20.00 to $20.50.
Scrap Lead and **Scrap Copper** have advanced.
Solder has advanced 1c.

TORONTO.

Solder—Prices have been advanced 1c.

Turpentine—Quotations are from 2c. to 5c. lower.

Rosins have experienced a slump in southern markets.

Pig Iron—A general advance of from $1 to $1.50 has been made.

Ingot Copper—Prices have advanced $1 and $18.75 is now quoted.

Pig Lead—A 10c. advance has been made.

WINNIPEG.

Cold Blast Lanterns have advanced 50c. per dozen.

Pig Lead has advanced 25c. per cwt.

Petroleum has advanced ½c. per gallon.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 1, 1905.

TRADE is rather quieter this week than it has been for some time past, though a fair movement of seasonable goods is still going on. Weather conditions during the week have been discouraging to trade and all the local jobbers are looking forward to genuine Winter weather to boom things.

There are few price changes of any moment, the most important being in cotton rope, which is now quoted at 22 1-2c.

Sales in shovels, sleigh bells, and skates are satisfactorily large, while carvers and other lines of silverware are going out well.

Axes—The opening of the lumbering season is creating a good demand. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Large sorting orders are being received from all parts of the country. Our prices are: No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—The Christmas trade is in full swing. Prices remain steady and are as follows: Hand sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—Our quotations remain unchanged. We quote the following prices: Cold blast, $4.50; No. 0, Safety, $5.00.

Rivets and Burrs—Business is as usual in this staple line. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 40 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We still give the following prices. Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—The turnover is large and the trade in every way satisfactory. Our prices are: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—Dealers are selling great quantities. Prices remain as follows: C brand, 40, 10 and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P.B. brand, 55 per cent

Wire Nails—Our prices are from $2.10 to $2.20 per keg, f.o.b., Montreal.

Cut Nails—Few orders are being received at the present time, but prices remain at $2.20 per keg, f.o.b., Montreal.

Horse Shoes—The demand for these goods is keeping up and frequent shipments are being made in all directions. We quote: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M Co. latest improved pattern iron shoes, light and medium pattern No. 2 and larger, $3.65; No. 1 and smaller, $3.90; snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4, No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60. Toeweight, all sizes, No. 1 to 4, $6.85. Packing, up to three sizes in a keg, 10c. per 100 pounds. More than three sizes, 25c.

Sporting Goods—Rifles and ammunition are selling in good volume. Our prices are: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.. American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred pounds; chilled, $7.00 per hundred pounds; buck and steel, $7.50 per hundred pounds; ball, $8.00 per hundred pounds. We quote discounts 10 per cent. on shot, f.o.b., Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Conditions are about the same as was reported. The season's building operations are rapidly drawing to a close, so that the demand for building paper is abating. Prices are unchanged.

Cement and Firebrick—Trade in cement is slack, except for small jobbing orders. Firebrick, on the other hand, is in splendid demand, orders being both large and frequent. We quote prices: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch, $17.00 to $21.00; American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags, $2.05 in barrels in round lots.

Coil Chain—This line is in brisk demand, owing to the logging season being at hand. Good sized orders are being sent into the lumbering districts. We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Skates— There are very few orders coming in, which do not require skates. Sales are very large. Prices are from 25c. to $2.50, according to quality.

Sleigh Bells—This is one of the best selling lines on the market at the present time. Our prices are: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape, $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Our prices are: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes— Local jobbers report an unprecedented demand for snowshoes, with the result that stocks are very scarce and some sizes cannot even now be obtained. We quote from $15 to $35 per dozen pairs, according to quality.

The Cleveland-Sarnia Saw Mills Company has adopted a unique method to keep its plant running all Winter. A portion of Sarnia Bay has been enclosed with sheet piling, and the water will be kept above freezing temperature with steam all Winter, for storage of logs.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, December 1, 1905.

BOAT navigation has been discontinued and trade will fall off slightly. Sorting orders for the Christmas trade are still being received, however, and business is better than at this time a year ago. Silverware and cutlery continue to be in strong demand, while shooting materials are holding their own. Skates and sleigh bells are also being included in most orders.

The steadily increasing price of pig iron is having its effect on bolts, nuts and similar goods and prices are very stiff. No advance has yet been made, but as the price of raw material increases advances on the finished products become all the more certain.

Axes and Handles—Dealers are sorting for the winter trade and shipments are quite large.

Cutlery and Silverware—Business continues active and sorting orders are plentiful.

Sporting Goods—Shotguns and ammunition are still being called for.

Lawn Mowers—Orders are not being placed so much at present as a month ago, most Fall orders being booked.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chain is being included in most orders being placed. Our quotations are: 1-4 inch, $6.50; 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Manufacturers are busy and prices firm. Our quotations are as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Prices are steady and business fair. We still quote: $2.42 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire—The average business for this season is being done.

Wire Nails—Prices are quite firm, some dealers quoting $2.10 and some $2.15.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths' orders are very satisfactory and shipments are large.

Horseshoes—Trade continues brisk prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes. No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—Sleigh bells and skates are in active demand.

Screws—The market is very firm with prices unchanged.

Rivets and Burrs—Trade is active with prices very firm.

Bolts and Nuts—Quotations are very strong and business lively.

Cordage—Sorting orders are plentiful. We still quote: Manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are unchanged and trade is seasonable. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick— Business is more active. Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Shipments are heavy and prices continue unchanged.

Hides—Local markets continue firm, and active, all arrivals being easily placed and no prospect of any accumulation of stocks. It is generally thought that the market must soon find a more stable basis. Winter arrivals do not generally show good quality and will not, therefore, be so readily placed. The U. S. markets are showing distinct weakening, although still on a parity with this market. Wool is slow and unprofitable, many would-be buyers holding off to see result of coming London reports. We quote:

Hides, inspected, steers, No. 1		0 12
" " " No. 2		0 11
" " cows, No. 1		0 11½
" " " No. 2		0 10½
Country hides, flat, per lb	0 10	0 1-
Calf skins, No. 1, selected		0 13
" " No. 2		0 11
Lamb skins, best city slaughter		1 10
Deer skins, green		0 13
" dry		0 22
Moose hides, green		0 08
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, per lb	0 1-	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 1, 1905.

ADVANCES have again been made in almost wholesale fashion in the metal markets this week and no one can see the end of the present movement upward.

After a period of gradual advance in pig lead, dealers were surprised this week to receive notice of another sharp jump in price, ruling figures at time of writing being quite twenty cents per hundred pounds above those quoted at the same time last week. In explanation of this phenomenal situation, comes the simple statement that the demand greatly exceeds the supply.

Another surprise was furnished by the big rise in the price of copper, the remarkable strength being quite unexpected, in spite of the known firmness of the market. No attempt is made to explain logically the big jump, but the probability is that the upward tendency will be unchecked for some time with far-reaching results in all kinds of copper and brass products.

Not to be outdone in the stampede for higher prices, tin has also fallen into line, having advanced one cent and a half above previous figures and showing great strength at the revised price.

Pig iron is also a feature in the market, though there has been no such widespread readjustment of figures as has taken place in other metals. The very last arrivals of the season are now in and iron not contracted for has been taken from the docks and stored, which accounts for the higher prices this week. There are fairly heavy bookings, as everyone seems to be wanting iron, and consumers requiring special grades are being forced to pay high figures.

From the strength of all kinds of ingots and brass a general advance in sheets seems imminent.

Canada Plates—Tendency is decidedly upward. Our quotations for the present are as follows: 52's, $2.50; 60's, $2.55; 75's, $2.60; full polished, $3.60; galvanized 52's, $4.00; 60's. $4.25.

Copper—The advance in this metal has been the strongest feature of the week. Prices now current are 2 cents in advance of last week. We are quoting: Ingot copper, 19 3-4c. to 20c.

Ingot Tin—As forecasted last week, prices have been advanced, and are now from 37c. to 37 1-2c. per lb.

Pig Lead—A bigger jump than has occurred for some time has been made this week. We are now quoting from $4.30 to $4.35 per hundred lbs.

Boiler Tubes—We quote: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Changes in price this week are accounted for by the fact that pig iron is now being sold only ex store. Special grades are at present commanding high prices and good all around orders are being booked. We quote.

"Dom.," No. 1, $19 50 to $20.00 delivered Montreal.
Usual difference in price for lower grades.

Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19 00	"	"
" No. 3	18 50	"	"
" No. 4	18 00	"	"
Londonderry	20.00 to 20 50	"	"
Carron No. 1	22 50	"	"
" (special)	22 50	"	"
Summerlee No. 1	22 50	"	"
Clarence No. 1	19 50	"	"
" No. 3	19.00	"	"

Tool Steel—We are quoting: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Colver's, 10c. to 20c.; "Air Haradening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel—Our last week's quotations are stationary. Prices are as follows: Sleigh shoes, $2.07 1-2; tire, $2.22 1-2; spring, $2.75; toecalk. $2.77 1-2; machinery iron finish, $2.17 1-2; reeled machinery steel, $2.75; mild. $2.07 1-2 and upwards; rivet, $2.07 1-2 and upwards. Net cash 30 days.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch. $3.50 per 100 lbs.

Galvanized Iron—Importers have been compelled to face another advance on the part of the producers, and the feeling among the jobbing trade is distinctly "bullish." We quote: Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand: 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch. 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—In common with all sheet metals, there is a brisk demand and prices will likely go up soon. We quote as follows: 28 gauge, $2.25; 26 gauge, $2.20: 22-24 gauge, $2.15; 19-20 gauge. $2.15: 8-10 gauge, $2.30.

Antimony—Conditions remain as before stated. We quote: 14c. to 14 1-2c. for Cookson's.

Tin Plates—The market continues very firm as ingot tin is still advancing. We quote: Cokes, $3.75; charcoal, $4.00.

Terne Plates—We still quote $6.75.

Ingot Zinc—Prices are still unchanged, but remain even firmer than before. We quote: 6 3-4c. to 7c.

Sheet Zinc— Although we make no change in our quotations, it is thought that they will be soon advanced. Our prices are: In casks, 7 3-4c.; sheet, 8c.

Bar Iron—We are still quoting: $1.97 1-2, f.o.b., Montreal.

Old Material—The week just past has been somewhat quiet, though there is more demand than before for scrap lead. High prices seem to have taken out stocks pretty well and they are now scarce. The price locally has advanced to 3c. The rubber market continues quiet, but stocks are very light and manufacturers are likely to be compelled to raise their prices above those now being quoted. Scrap copper, in sympathy with the advance in ingot, is now selling at rather higher prices. Wrought iron scrap is the same as formerly and prices on cast scrap are slowly advancing to keep pace with the advance in pig. We quote: Copper wire, 14 3-4c.; light copper, 13 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 3c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $10; mixed rags, 75c. to 90c. per 100 lbs. old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, December. 1, 1905.

ADVANCES have been made on several metals during the week, pig iron being very active and the prices of Midland and Londonderry having advanced from $1.00 to $1.50. Pig lead has also been moved upward 10c. and it is now quoted at $4.35 per 100 pounds. Copper also shows another advance, the increase being $1.00 per hundred and the ruling price now being $18.75 per hundred lbs. for ingot copper.

Jobbers report a very large business being done, particularly in ingot metals, orders for forward delivery being also very satisfactory.

The strong position of pig iron is likely to be continued and keen students of market conditions predict further advances during the Winter. All the mills are very busy and some are booked ahead for fully a year. The demand is much greater than the consumption and there is every indication of the market strengthening in tone for some time to come.

Pig Iron—Prices have advanced again, the general advance of about $1.00 being caused by increased prices for coke and ores. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	19 50
" No. 2, "	19 00
Midland, No. 1, "	20 00
" No. 2, "	19 50
Radnor, at furnace	31 50
Londonderry, f.o.b. Toronto	21 50

Bar Iron—Business is very lively with manufacturers asking time to make shipments. We quote $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Tin Plates— Demand is active with prices very firm.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Business is more active, with another advance of 10c. reported. We quote: Pig lead, $4.35 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market continues active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—A big jump has been made during the week, an advance of $1.00 on ingots being reported. We quote as follows: Ingot copper, $18.75 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—The demand is fair, with stocks in hand light.

Old Material—The high price for new metals is creating a better demand for old material and prices are strengthening. Dealers' buying prices as follows: Heavy copper and wire , 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought. $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—No change is reported, prices being steady. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N.P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, November 30, 1905.

SO far as pig iron is concerned the markets have quieted down, but maintain their full strength. There have been few large transactions in foundry grades, but some pretty good inquiries are still in the market.

The scarcity of metal for steel making purposes continues. Last week the leading interest purchased 25,000 tons of basic pig in the eastern markets for delivery to the Pencoyd Works. This iron takes the place of metal which it was the original plan to ship from the Pittsburg district, but which has now been diverted to the steel plants there, where it was sorely needed.

For the first time in many months there has been a softening in the price of coke, which is due to the fact that makers have rushed every available unit of plant into commission and that there has been a better supply of cars.

Merchant firms in the lake ore trade have been filling up their order books for deliveries of ore during the next season. The movement, which began some time since with the booking by one large firm at an advance of 25c per ton over last year, has now spread and buyers and sellers have met on the basis of an advance of 50c per ton, which makes the basis for Bessemer Old Range $4.25 for the next season. The ore men have acted with very much more conservatism than the coke producers.

There has been a little relief in the congestion of the plate mills. A good deal of new work is coming up for the structural mills in Chicago, Pittsburg

and other cities. Thus far the threatened strike of the housesmiths in New York has not affected the rolling mill programmes.

The principal hoop mills have decreed a further advance of $2 per ton, which puts the price up to 1.85c., Pittsburg. Bars are stiffer and higher prices are being asked.

The international markets have been gaining in strength. The United States Steel Corporation, not having any open space for export orders before August of next year, has just authorized the booking of orders for the last half. Since the interest in question has been holding back for a month, resisting the demands of buyers, it is likely that a considerable tonnage will be booked at an early date.

An international incident has been the capture by the Steel Corporation of a round lot of girder rails for London tramways. Yet another English order has been recently awarded to British makers, in spite of the fact that the American bid was $8 per ton below that of the local mills.

In the domestic rail markets the principal transaction has been the sale of 25,000 tons additional to the Gould lines and 18,000 tons to the Lehigh Valley.

LONDON METAL MARKETS.

From Metal Market Report, November 29, 1905.

Pig Iron— Cleveland warrants are quoted at 52s. 7 1-2d, and Glasgow Standard warrants at 51s. 7d, making prices as compared with last week 6 1-2d. lower for Cleveland warrants and 5s. lower for Standard warrants.

Tin— Spot tin opened strong at £156 5s., futures at £156, and after sales of 300 tons of spot and 400 tons of futures closed easy at £156 2s. 6d for spot and £155 12s. 6d for futures, making prices as compared with last week £2 15s. higher on spot and £3 5s. higher on futures.

Copper—Spot copper opened easy at £77 5s., futures £76 15s., and after sales of 200 tons of spot and 600 tons of futures closed firm at £77 15s. for spot and £77 5s. for futures, making prices as compared with last week £2 2s. 6d higher on spot and £2 13s. 6d higher on futures.

Lead—The market closed at £16, making price as compared with last week 11s. 3d higher.

Spelter—The market closed at $28 12s 6d, making price as compared with last week 2s. 6d higher.

MINES AND METALS.

There was a large attendance at the meeting held at the King Edward Hotel, Toronto, November 27, to prepare resolutions for presentation at the Provincial Mining Convention to be held in Toronto on the 12th of December.

A report from the Assistant Commissioner at White Horse states that a rich vein of gold ore a mile and a half long has been struck in the Montana mines. It is said this is worth $12,000,000.

English capital stands ready to purchase the Lenora and Mount Sicker mining properties and all assets, and if the private sale planned to take place in Victoria on Wednesday, November 23, is interfered with the legal representatives of the assignees of mortgages on the properties fear the deal may fall through. The price to be paid for the property is $100,000.

Lawrence Godkin, of New York, has been appointed receiver of the Colonial Copper Co., which owns mines in Nova Scotia and other portions of Canada. A petition of bankruptcy has been filed against the company amounting to $6,550. Mismanagement on the part of the company's officers was alleged. This company is capitalized at $5,000,000 and an authorized bonded indebtedness of $300,000, of which $115,000 has been issued.

The Wellington Colliery Company, Cumberland, B.C., are making extensive improvements to their new anthracite mine at Hamilton Lake.

A seam of coal 5 feet thick and about 30 feet from the surface has been struck at Turtle Mountain. The quality is said to appear superior to the ordinary Souris coal, and tests are to be made at other points.

Messrs. B. E. Pearson and J. Johnson, of Halifax, who have taken up a large field of coal areas adjoining the territory which is now being developed by the Standard Railway & Coal Co., have succeeded in interesting a number of wealthy capitalists from Pennsylvania in the property held by them, and it is their intention to make borings and to otherwise prospect their areas in the view of opening up mines in that section of the country.

A deal has taken place by which the Bugaboo iron mines in the Alberni district, Vancouver Island, have become the property of Seattle people. It is expected that development will be commenced at once on a large scale.

Survey parties are prospecting at the head waters of the Skeena River, B.C., and it is reported that coal has been found in large quantities in this district. Seams are found running in all directions, cropping out from the ground in many places.

The Cape Breton Coal & Iron Co. are doing considerable development work and contemplate opening large areas of coal beds near Cochrane's Lake, on Cape Breton Island.

WORLD'S PRODUCTION OF PIG LEAD.

World's production of pig lead as compiled by Mr. Matton, of London, in tons of 2,240 lbs., is as follows :

	1903.	1904.
United States	266,691	298,820
Spain	172,521	183,014
Germany	141,558	133,498
Australia	93,500	117,105
Mexico	95,000	100,000
England	30,958	24,438
Italy	21,405	23,422
France	22,965	18,006
Belgium	20,015	23,469
Greece	13,075	11,0[illegible]
Austria-Hungary	14,008	14,428
Turkey	7,493	10,588
Canada	8,121	13,600
Japan	4,000	4,000
Sweden	661	576
Russia	300	300
South America	150	280
Africa and East India..	179	60
Total	912,600	981,100

New Brunswick Trade News

St. John, Nov. 25, 1905.

OUTLOOK for the hardware business here at present is satisfactory. The Fall season, generally speaking, has been one of good trade for the hardware people and with the Christmas business beginning there is little reason for dissatisfaction.

Lumbermen, of course have been complaining of the poor business consequent upon the lowness of the water in the St. John River during the Summer and Fall and it is possible that the Christmaas and the general Winter trade in hardware and other lines will suffer as a result. Moreover, if the present difficulty between the longshoremen and the steamship companies here is not settled soon business is sure to suffer to a greater or less extent. But, in spite of these facts, the present outlook is not discouraging.

* * *

As a reference has been made to the lumbering industry it may not be amiss to speak of the unusual demand for saws among lumbermen this year. Comment upon this demand has been made in several provincial papers. Where axes were used almost entirely in felling trees in the province in former years, saws are now coming into use. Consequently, the sale of saws to lumbermen is increasing. There is, of course, a corresponding decrease in the axe sale. Edge tool manufacturers here, however, are kept busy and the several firms are reported to be doing good business. They are understood to be meeting with a considerable measure of success in their efforts to push their goods in other parts of the Dominion.

* * *

The transfer of the control of the Maritime Nail Works to the Copewell Horseshoe Nail Co., Hartford, Conn., is still being talked about. The plans of the reorganized company are not made public, but it is not thought that any startling changes are contemplated. The staff of the works has not been changed to any extent, though Mr. Fred Elkin has resigned, and, it is said, will be succeeded by Mr. Stanley Elkin. Increased activity in efforts to enlarge the business done by the concern in the eastern provinces is sure, however, to follow this assumption of control by the reorganized concern.

All metals are showing a very firm tone in price just now. Several have advanced somewhat of late and it will not be wholly unexpected if other advances are recorded ere long. Shelf goods are also showing an upward tendency.

The business done in ammunition during this Fall was perhaps somewhat in advance of that of other years. Certainly, it was up to the average of former seasons. Prices were good and in

every way the trade was satisfactory Now, of course, the demand is dropping off, though there are still some sales recorded.

This is the time when stove dealers are rushed with the calls of anxious householders desirous of having all in readiness when the Winter cold sets in. For some of the dealers this is proving even busier than other similar seasons. Some good stove sales have been made and it is interesting to note that province made stoves are the variety that are sold here almost entirely. The growth of the stove making industry in New Brunswick goes to show that provincial manufacturers can compete successfully with those of other places, something that has been shown in several instances before.

British Columbia Trade News

BRITISH COLUMBIA wholesalers have received word from Montreal that their efforts have been successful in securing a satisfactory arrangement with the railroads that goods will not be shipped to the coast, as threatened, in mixed carloads.

This is a matter which affected all the wholesalers established in Western Canada, from Winnipeg to Victoria. If the rule had been restored to the tariff it would have meant that the distributing areas now occupied by the merchants of the coast and the northwest would be invaded by the large wholesalers of the eastern centres, and business, it was predicted, have been affected badly as a result.

Mr. C. P. Schwengers, of E. G. Prior & Co., Mr. W. G. Mackenzie, of Wood, Wallace & Leggett, of Vancouver; J. E. Elliott, of McLennan & McFeeley, and J. H. Hickaby, of R. P. Rithet & Co., formed the committee of the local wholesalers who went to Toronto and Montreal upon the mission. They went to Toronto, where they discussed with the Canadian Manufacturers' Association the stoppage of their application to have Rule 2 restored to allow of mixed carloads of hardware, liquors, groceries, etc., being sent to the coast, and failing to meet with success in Toronto, the Toronto wholesalers stating they could not see their way to meet the visiting representatives, they went to Montreal to interview the officers there and also the C.P.R.

Having learned that the Manufacturers' Association and the C.P.R. officials could not meet on a common basis, they held a joint meeting, at which a basis of agreement was reached. The telegram now received states that the application for the restoration of the rule by the manufacturers has been abandoned.

The recent purchase of the Bruce copper mines by an English syndicate is already having the effect of creating activity in the town of Bruce and the indications are that it will become before long one of the most prosperous towns in New Ontario. It is expected that the syndicate owning the mines will employ 500 men so that a daily output of 500 tons will be procured.

A HANDY NAIL PULLER.

A handy nail puller, new to the Canadian market, is being sold now by the Munro Wire Works, Limited, of Winnipeg, Man. The illustrations show more clearly than can be expressed by words how this handy tool works. One or two sharp taps with the hammer gives the nail puller a secure hold of the most obstinate nail, and the rest is easy. As this tool can retail at 50c., it is meeting with a ready sale.

CANADIAN INDUSTRIAL NEWS.

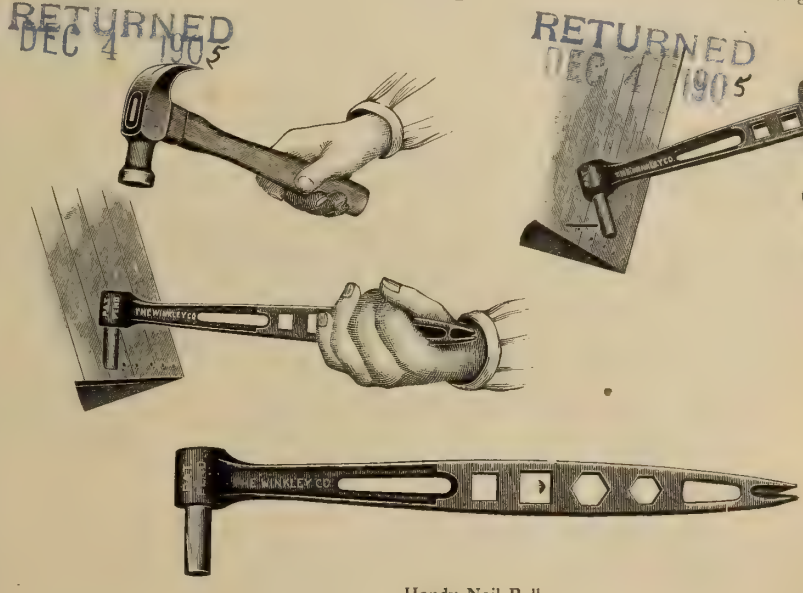
The Ontario Government has announced that the new Colonial Cordage Co. has contracted to pay the Government 50c per day per man for the labor of prisoners at the Central Prison. The Colonial Company has taken over the machinery formerly operated by the Independent Cordage Co. and their new arrangement with the Provincial Government is much more profitable to the province that the contract which was approbated on November 1.

The prospects of Port Hope becoming a manufacturing centre are growing brighter every day. The enlargement of the Standard Ideal factory is a practical certainty, the probabilities of the establishment of a paper factory are extremely bright, and the representatives of a great metal industry have been recently in Port Hope looking over the situation with a view to establishing a large factory to employ 400 hands. These men were strongly impressed with the advantages possessed by Port Hope.

The Shawinigan Water & Power Co. has closed with the Westinghouse Company for a second 12,000 horse power generator, to be added to its present plant. An order for the first was placed with the same firm some ten months ago, and the Shawinigan Co. will presently have the two largest generators in use in Canada. Each will have a diameter of 28 feet. The new generator will be used largely in developing the mining districts of the province, particularly those relating to the production of asbestos. A considerable portion of the power, however, will be taken to Montreal for industrial purposes.

The advantage in a national sense of leaving the latch-string out and displaying a little hospitality is shown by the fact that already, as a direct result of the one day's visit to Canada of the National Association of Implement and Vehicle Manufacturers on September 29 last, American capital is being invested in three Ontario factories. Of these the largest is the Baines Carriage Works of Buffalo, which are being removed in toto to Hamilton. The factory gives employment to about 350 hands, with an output of about $350,000, and the reason for removing to Canada is simply that Canadian prospects are so bright. Two other American firms are establishing branches at Galt and Preston respectively, their representatives having realized during the one short day on the Canadian side that Canada was a good place to get into as fast as possible.

It is rumored that the Carriere & Laine works, Quebec, are likely to pass into the hands of a syndicate to be purchased by the Federal Government to be used as workshops connected with the Intercolonial Railway. The works did not shut down on account of scarcity of work. The firm had a large amount of most important orders to fill, in connection with contracts, when the Bank of Montreal made the demand for assignment. The failure of this old firm will be felt by dealers all through the Lower Provinces. The list of creditors is a long one. The firm was founded by Messrs. Wm. Carriere and Racine in 1862 and did a large business in stove, machine, engine and boiler manufacture. At one time they were engaged in shipbuilding, and they have lately conducted a hardware store in Quebec city. The rating was high, being placed by Bradstreet's at $100,000—$150,000 with first grade credit.



Handy Nail Puller.

Amongst the buildings to be erected in Hamilton are the following: G. J. White, two brick houses, $3,200; F. J. Lyne, dwelling, $1,600; J. Thompson, two houses, $3,400; J. Byers, dwelling, $1,500; F. S. Depew, two houses, $3,200; John Duff & Sons, factory, $10,000; F. W. Bird & Co., painting shop, $4,000, and W. Havercroft, dwelling, $1,500; J. W. Fernihaugh, four houses, $4,800.

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada.

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Dec. 1, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

WITH the arrival of cold Winter weather the first of the week came a renewed activity in many lines of hardware. In some lines trade was retarded by the mild weather but this condition of affairs is now at an end. There are not many changes to record this week, but all are advances. Petroleum has advanced 1-2 cent per gallon. Pig lead is now quoted at $4.75, an advance of 25c. There has been a general advance in lanterns of about 50c. per dozen.

Game Traps—There is still a brisk demand for game traps. Prices are maintained steadily as follows:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—The wholesale price is advancing and although the market is "open" the general advance is about 50c. per dozen for cold blast lanterns. We quote as follows:

Cold blast lanterns	$5 25 per doz.
Coppered cold blast lanterns	7 25 "
Cold blast dash "	7 75 "
Lift Lanterns	4 25 "

Bluestone—Price for 1906 delivery is $5.75 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized, 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire, 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—As noted last week, there has been an advance of 10c. in steel horseshoes. Prices are now quoted as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—Prices are quoted as follows since the recent advance:

Pressed spikes, ¼ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅜ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9 25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9 00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits—Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.

Malleable bushings ..... 50 p.c.
Malleable unions ..... 60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz $8.75
Grass " per doz. 1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Royal Canadian per doz $30 05
R. B., per doz 34.07

Files—Discounts are quoted as follows:

" Arcade " ..... 75 p.c.
" Black Diamond " ..... 60 p.c.
" Nicholson's " ..... 62½ p.c.

Building Paper—There is a steady demand for all lines at firm prices. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned ..... 70 and 10 p.c.
" " plain ..... 75 and 2½ p.c.
" pieced ..... 30 p.c.
Japanned ware ..... 37½ p.c.
Enamelled ware, white ..... 45 p.c.
" Famous ..... 50 p.c.
" Imperial ..... 50 and 10 p.c.

Cordage—The price is steady since the recent advance. We quote as follows.

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 75
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17½ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 6 ft.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red 3 10

Vises—Prices are quoted as follows:

" Peter Wright," 30 to 34 ..... 14½c. per lb.
" " 35 to 39 ..... 14c. "
" " 40 and larger ..... 13½c. "

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN. NEW GLASGOW, N.S.

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6 The "1904" sheep shearing machines are sold at $13.60.

Ammunition, Etc.—As noted last week, shot has been advanced 25c. per cwt. Prices and discounts are now quoted as follows:

Ammunition, cartridges, Dominion R.F. 50 and 5 p.c.
Dominion, C.F., pistol ..... 20 p.c.
" military ..... 20 p.c.
Ammunition, cartridges, American R.F. 33⅓ p.c.
C.F. pistol ..... 5 p.c.
C.F. military ..... 10 p.c. advance.

Loaded shells:
Dominion Eley's and Kynoch's soft, 12 gauge.

black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 50
Chilled	7 00
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2.75
Spring steel	3 2
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	12 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge,	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—The price has advanced 25c. per box. We quote:

Canada plate, 18 x 21, 18 x 24	3 50
Canada plate, 20 x 28	3 75
Canada plate, full polished	4 25

Sheet Zinc—As noted last week there has been an advance and the price is now $8.50 for cash lots and $9.00 for broken lots.

Pig Lead—The price has been advanced to $4.75 per 100 lbs.

Iron Pipe—Prices are steady at the recent advance. We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 55
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— There has been an advance of 1-2 cent per gallon in petroleum. Prices are now quoted as follows:

Silver Star, per gal	21c.½
Sunlight "	22½c.
Eocene "	24½c.
Pennoline "	25½c.
Crystal Spray "	24½c.
Silver Light	22½c.
Gasoline, 72-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints and Turpentine—Business is brisk in general lines. We quote as follows:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.00
26 to 40 "	2.25
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

TORONTO TRAVELERS' OFFICERS.

At the general meeting of the Commercial Travelers' Association held in Toronto last Saturday evening, President T. McQuillan was elected by acclamation for a third term. First Vice-President L. A. Howard was re-elected by acclamation, and the following were nominated:

Second vice-president, F. C. Armstrong, George West (one to be elected) treasurer, J. H. Butler, E. Fielding (one to be elected).

Directors (Toronto board)— J. W. Charles, E. F. Crossland, J. G. Cane, W. M. Fielding, Robert Gemmell, T. Glover, John Gibson, James Knowles, Robert Keys, James Lumbers, M. Lamont, W. J. Micks, A. C. Rogers, S. M. Sterling, C. J. Tuthill, Joseph Taylor, R. J. Wylie, F. J. Zammers. Nine to be elected.

The annual meeting will be held on December 28.

HINTS FOR THE YOUNG CLERKS.

THERE is a kind of notion abroad that anyone can run a store, and that neither education, nor technical training, is necessary to effect sales.

There is little question but that this lack of knowledge is the primary cause of the failures of so many storekeepers. The ordinary mechanic is expected to serve some time at least in the educationary process. The bookkeeper, the accountant, and the lawyer are all expected to go through a course of training before being considered qualified to follow their respective callings, but the storekeeper is considered as outside such categories and the idea has grown of late that ignorance is no barrier to his success.

It would be well for the young store-clerk to at once dispel from his mind any such thought. Although the day for a lengthy apprenticeship to merchandising has no doubt passed, the methods of having to deal with staple goods in their natural state having fallen into disuse, owing to the introduction of advanced and scientific methods still the fact is, that one class of knowledge has only given place to another. The time is fast approaching when it will be necessary for hardware clerks to be intimately acquainted with the goods which they handle, not merely as to commercial knowledge, but as to their technical and scientific character.

The storekeeper occupies the position of the true "Middleman," the public have little knowledge beyond him, and the storekeeper who sets himself to become completely master of the position which he occupies, is the one who will ultimately gain the confidence of his clients, and the supreme place in his business.

To the young clerk just starting in his business there is one characteristic that should be invariably present and that is "neatness" in his personal appearance. Nothing strikes a customer on entering a store like the personal appearance of the attendants in it, and the customer naturally, at once expects the store to take character from the attendant who approaches them. A neat and tidy clerk invariably means a neat and tidy store. To cultivate neatness in his person soon develops a character of tidiness which follows every act.

The next point of importance for the young clerk to study is his "manner" of handling the goods. He should cultivate a graceful, almost fastidious manner of touching and handling the goods with his customers. A careful gentlemanly manner in this regard goes a considerable way towards impressing the purchaser with the importance of the particular article he is selling to them.

Another important feature and one which cannot be too strenuously insisted upon, is that of "order." "A place for everything and everything in its place." Nothing is more annoying to a customer than to have to stand by while a search is being made for the article required. Everything should be kept in regular order, This, no doubt, causes a good deal of regular supervision and necessitates constant care, but its importance cannot be over-estimated, not only with regard to importance to the customer, but also, from a point of economy and saving of expense. An instance of this came recently to light in a certain store in which an article commanding only a very small sale was relegated to an unimportant place in the rear of the store. It, however, sometime afterwards became a ready seller and a great amount of time was lost by the salesmen having to travel backwards and forwards whenever it was wanted. A new clerk who had just entered the store, noticed this inconvenience and suggested placing sufficient stock for immediate requirements in a handy position. The amount of time thus saved meant a good deal of momentary value to his employer.

Another feature of no less importance is that of "promptitude." Few customers really come to purchase until they are actually in need of the goods themselves. Promptitude, therefore, in dealing with his business is of the first importance and the young clerk should cultivate from the outset to be prompt in all his actions. "Do it now" is the motto which is being adopted by the up-to-date business men. Nothing should be adjourned till to-morrow which could possibly be finished to-day, even though it may mean remaining at one's post a few additional hours occasionally. By this means a spirit of promptitude is cultivated in every act of the clerk which will ultimately tell in minimizing the amount of work which he has to accomplish. If from the moment of rising in the morning he sets himself to be at his post immediately on time to commence his routine according to a given order, and to complete each duty before taking on his next, he will soon find that his duties are performed with an ease and regularity which will make business a pleasure instead of a drudgery. This principle of promptitude should be in evidence when dealing with customer's orders. Never promise delivery of goods unless the certainty of carrying out that promise is assured. Nothing is more annoying to a customer, or more detrimental to the reputation of a store, than for a customer to be disappointed in the delivery of an order. Once this occurs reputation is affected in such a way as to be very difficult of amendment.

FOREIGN COPPER MARKET.

MORRISON, KEKEWICH & CO., London, under date of November 17, say:

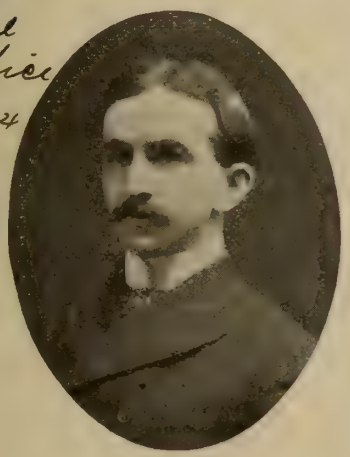
"Bi-monthly copper statistics show a decrease of 912 tons in stocks, now reduced to 5,685 tons, and an increase of 413 tons in total visible supplies, which now stand at 10,185 tons. Larger shipments from Australia and Chili are responsible for the increase. Refined sorts have been in active demand and consumers, recognizing the scarceness of supplies have shown no hesitation in paying higher prices. Notwithstanding the commendable disposition on the part of American producers to prevent

further advances, the demand has been so enormous that by sheer force of compulsion, prices have been raised. The outlook for great activity for next year is practically assured, and if the values are kept at a reasonable level an urgent demand seems certain. Standard warrants are still strongly controlled, bears having been obliged to pay advancing prices on almost every transaction. Cash standard is £2 2s. 6d higher and three months £1 7s. 6d. The principal American producers are not sellers before February shipment."

A BRAND NEW TRAVELER.

MR. W. A. WOOD, who has been for the past eight years connected with the firm of Caverhill, Learmont & Co., in their Montreal warehouse, has received a highly deserved promotion, and is now making his first trip as representative for that firm in Eastern Ontario. His long training has given him an experience which will be

RETURNED
DEC 4 1905
To Montreal
Office
Cut Book 424
Page 18
Clerk



W. A. Wood

To Succeed R. D. Leslie as Representative of Caverhill, Learmont & Company in Eastern Ontario.

of the utmost value to him in selling goods and his success is assured.

Mr. Wood is taking the place of R. D. Leslie, who is going into the agency business in partnership with A. C. Jenkins, agent for Smith & Hemenway, of New York, and other firms. Mr. Leslie is now introducing Mr. Wood on his ground.

MILLER-MORSE HOCKEY CLUB.

THE first annual meeting of the Miller-Morse Hardware Co. hockey club was held in the warehouse in Winnipeg on November 10. If the enthusiasm displayed at the meeting is any criterion, prospects are bright for a successful year. The election of officers resulted as follows: Patrons, F. M. Morse. F. W. Morse, A. Reed, H. Robson; hon. president, H. Miller; president, F. A. Sermon; 1st vice-president, W. A. Kenning; 2nd vice-president, J. J. Sullivan; secretary-treasurer, W. L. Cordingley; captain, D. G. Sibbald; executive committee, Messrs. W. M. Irwin, J. H. Foulds and F. N. Rowat; delegates to association, Messrs. Irwin and Sibbald.

PRESENTATION AT LONDON.

Last Friday Mr. J. A. Brownlee, successor to Wm. Wyatt & Son, was called to the tin department of the McClary Manufacturing Company, London, and on his arrival the foreman, Mr. T. A. Greer, handed him a fine smoking set, accompanied by the following address:

"Mr. J. A. Brownlee:

"Dear Sir,—Having severed your connection with this firm, we, as fellow employes of the McClary Manufacturing Company, feel that we cannot let the occasion pass without expressing our regret at the ending of many years of good comradeship and pleasant association. We ask you to accept this as a slight token of our regard and hope that in time to come as you draw comfort from its contents your mind may revert to the old shop and the boys. We wish you success in your new enterprise.

"(Signed) JAS. BOYLE,
"G. BULL."

Mr. Brownlee though very much surprised, suitably thanked his former fellow employes.

N. W. C. T. NOMINATE OFFICERS.

ON Saturday night, November 25, the Northwest Commercial Travelers' Association held their annual general meeting for nomination of officers in the Board Room of the Winnipeg Exchange. President John Horne presided. The following nominations were made:

President—D. J. Dyson (elected by acclamation.)

Vice-President—A. H. McEwen (McClary Mfg. Co.), W. W. Bole (Bole Drug Co.), J. E. McRobie (Secretary Retail Hardware Association), J. H. J Murphy (Royal Crown Co.)

Treasurer—L. C. MacIntyre (Paulin-Chambers Co.), elected by acclamation.

Directors—Geo. Wilson, W. H. Johnston, F. W. Drewry, F. H. Nesbitt, S. R. Roe, F. W. Adams, A. S. Lock, F. M. Morgan, Thos. Montgomery, D. J. McTaggart, Geo. Barrett, N. Musgrave, E. Dagg, J. M. Scott, R. Neve, Jno. Brockish, Thos. Davidson, W. C. McLean, D. Dingle, A. E. Whyte.

Nominations for B. C.

Vice-Presidents for Vancouver—E. F. Gerster, T. J. Stephens, Thos. Parkinson.

Vice-President for Victoria—W. W. Duncan.

Directors for Vancouver—R. Potter, C. P. Egan, F. A. Richardson, C. A. Ross,

Director for Victoria—J. C. Devlin.

Director for New Westminster—Fred Lynch.

Director for Kootenay—Geo. Munn.

There was a long discussion of a project to rent club rooms for the members in Winnipeg, and a committee was appointed consisting of Messrs. A. L. Johnson, McGowan and Wilson to make inquiries as to suitable rooms and report at the annual meeting on December 16.

As some changes in the charter of the association were deemed advisable a committee composed of D. J. Dyson, G. F. Bryan, A. L. Johnson and F. J. C. Cox was appointed to make recommendations and report.

GENERAL MANAGER RESIGNS.

MACHINERY circles in Montreal have been interested in the announcement made public a few days ago that Mr. H. H. Henshaw has resigned from the directorate and general managership of Allis-Chalmers-Bullock, Limited, of that city.

Mr. Henshaw spent his early childhood at St. Hyacinthe, Quebec, and afterwards, coming to Montreal, he entered the service of the Grand Trunk Railway. He gradually gained the recognition of Montreal business men, and was appointed secretary of the Royal Electric Co. When this company became merged with the Montreal Light, Heat & Power Co., Mr. Henshaw was chosen secretary-treasurer, a position which he occupied until last Spring. On June 1 last he was appointed director



H. H. Henshaw, Montreal,

Who has resigned from the General Managership of Allis-Chalmers-Bullock, Limited.

and general manager of Allis-Chalmers-Bullock, Limited, but has retired within the past few days.

WINDOW ADVERTISING.

A hardware store that pays a great deal of attention to its ledge trims, fixtures and interior arrangement generally and lets the window stand from one week's end to the other is getting things reversed. If there is any difference the window should be better than the interior of the store. The window is to get people to come inside. A fine trim on the inside is no good for that purpose. If you get customers inside the store once you have progressed far towards getting their trade. Hence the importance of "pulling in" windows.

Thos. Oliver, hardware merchant, of Copper Cliff, Ont., accompanied by his wife, was a visitor in Montreal this week.

TARIFF COMMISSION'S MONOTONOUS LABORS

THE Dominion Tariff Commission is a model investigating body, and the patience, thoroughness and urbanity displayed by its members in prosecuting the work they have in hand cannot otherwise than impress most forcibly the people of the country. The tales they are compelled to listen to must become monotonous to the Commissioners, because they are oft-told and sometimes poorly told, but these gentlemen never display any lack of interest and are never lacking in courtesy.

A review of one day's proceedings demonstrates the complex character of the tariff, and the practical impossibility of reconciling conflicting interests. There are the farmers, who complain, ably, and not without reason, of the hardness of their lot, and demand the wiping out of all unnecessary taxation. They would have no duty on binder twine, and as for agricultural implements they would have the protection now given the manufacturers in these lines reduced to 15 per cent. The implement men, on the other hand, find too many American-made goods coming in, and would like either a higher duty on the finished article, or lower duties on the raw material. The malleable iron men, who supply raw material to the implement men and others, think they must have more consideration if they are to live, and if they are given what they want the users of their lines of goods, if not given an equivalent, must suffer. Then there are the binder twine men, who have no protection at all, and think they should have at least 20 per cent., and are willing to give a guarantee that if their request is acceded to the price of their product to the Canadian farmer will not be increased. And so on down the list.

Almost every man knows about how to frame a tariff to suit his own interests, or at least he thinks he does, but the men who have the duty of deciding between so many conflicting views and framing a tariff which will best suit the interests of the country as a whole, are to be more pitied than envied.

During the week the Commission has held sessions at various towns and cities between Windsor and Peterboro and is now rounding up its labors in Ontario. It is practically decided, however, that a general tariff revision will not be made at Parliament's next session.

At the Windsor meeting the Standard Paint & Varnish Company asked that no duty be imposed on tin plates. Mr. Brodeur asked if they had ever got any rebate on tin cans. The company's representative replied no, and did not know of any combine among tin can manufacturers.

D. B. Anthony, wire fence manufacturer, requested that No. 11 gauge wire for fence purposes be added to the free list, while the McGregor-Banwell Fence Company, of Walkerville, asked that the duty on structural iron tubing for farm gates be removed, as it is not made in Canada.

Requests Made at Hamilton.

At Hamilton A. B. Petrie, of the Petrie Manufacturing Company, manufacturers of cream separators, asked that these articles should be taken off the free list and be placed under a duty of 25 per cent., and within the action of the dumping clauses. The industry was a struggling one, and was not yet able to satisfy the whole demand. The United States manufacturers, however, were trying to kill it altogether by selling separators in Canada at half the price at which they are sold in the United States.

J. A. McMahon, of the Union Drawn Steel Company, and H. J. Waddie, of the Canada Drawn Steel Company, wanted the duty on cold-drawn steel shafting made 30 per cent. in place of 5 per cent., as at present. This latter duty they did not consider fair, as they were paying a duty of $7 a ton on the raw material.

Other deputations heard by the Commission at Hamilton made the following requests :

Window Glass Machine Company, Cayuga : Refund of duty on plant or increased duty against Belgium on window glass.

Hamilton Gas Light Company : Removal of duty on coal or imposition of two cents a bushel on domestic coke, though they are now paying 8 per cent. dividend.

John Bertram & Sons Company, Dundas : An increase of 5 per cent. in duty on tools, machine tools being now 25 per cent. and small tools 30 per cent.

Canadian Westinghouse Company, now employing 650 men, asking that request for duty on brass be not granted, and promising to double their employes in four or five months if industry is not interfered with.

H. Barnard, stamps and stencils : That a duty be placed on name plates on cream separators.

The International Harvester Company not being ready with their case, it was arranged that it should be presented at Ottawa if there was an open session there.

Farmers Heard at Brantford.

Demands for a lower tariff were made by farmers at Brantford, the farmers insisting that farming could not be made to pay under existing tariff conditions, and pointing out that it was impossible to obtain hired help because the tariff discriminated in favor of the manufacturer, who thus gobbled up all available employes.

W. C. Good, once a professor in the Agricultural College at Guelph, now a Brant County farmer, declared that he had made only $120 a year out of a 120 acre farm. He held the tariff laws to blame.

The binder twine manufacturers stated that they could not live another year under present conditions. They suggested an ad valorem duty of 20 per cent., or a bounty of at least $25 a ton on all twine made in Canada.

About a dozen cement manufacturers were present and through Mr. Kilborn, of Owen Sound, pictured the industry as in a very bad way. They thought a straight duty of 10 cents a barrel would give relief.

L. E. McKinnon, of St. Catharines, wanted higher protective duties on certain lines of saddlery, hardware and builders' hardware. The Malleable Iron Works also asked for an increase in the duty on steel and iron castings.

Takes Issue With Farmers.

Farmers were again heard from in large numbers at Guelph, but they met with sharp criticism from Mr. J. M. Taylor, of the Taylor-Forbes Company.

Mr. Taylor in opening referred briefly to the cream separator question. He presented a letter from the Vermont Farm Machine Company in which they made a tempting offer to the Taylor-Forbes Company to take over their agency. A proposition was also received from an English concern in which they stated that they could put cream separators on the Guelph market at 20 per cent. less than the present local market price. He thought the farmers were the only men making money to-day and quoted the Bureau of Agriculture statistics showing an increase in farm values of $69,000,000. In Guelph alone, he said, there are reported about 500 retired farmers who are loaning money at 1 per cent. per month. On the other side, there are not 500 retired manufacturers in the country. "Judging from the high prices they exact," said Mr. Taylor, "the farmers are the biggest combine of all the combines existing to-day. They should live and let live."

Mr. Taylor then went on to speak of the requirements of his firm, the Taylor-Forbes Company. They were at present selling goods below the price obtained four years ago, and their pay roll showed that to-day their workmen were being paid 30 to 35 per cent. more than when increased prices were being obtained for goods. Then there was the American competition to be met, and though the dumping clause was no doubt meant for good, it had signally failed in the purpose for which it was intended. The employment of foreign low-priced labor and the enormous field of distribution were cited as reasons why Americans were enabled to manufacture at less cost than in Canada. An instance was cited where lawn mowers were shipped here, duty and freight paid, at a figure below factory cost. This accounted for a diminished sale of 60 per cent. The want of regularity or similarity in appraisement at the various ports was complained of. They asked that the dumping clause be vigorously enforced, that steam coal for power purposes be admitted free, that lawn mowers be appraised upon values at which they are regularly sold in the United States, that a competent hardware appraiser be given charge of a department of hardware at Ottawa, and that printed matter of values for duty be sent to every Customs port, covering such articles—when a value has been determined upon—so that all will be uniform.

In closing Mr. Taylor stated that the manufacturers of hardware had no association and were not in any combine.

At Berlin Mr. W. J. Moody, of the Alpha Chemical Company, protested against the proposal to put a duty on tin plate, and asked for an increase on stove polish and shoe polish from 25 per cent. to 35 per cent., and on ink from 20 per cent. to 35 per cent., and for the free admission of carnuba wax, used in making shoe polishes.

At Peterboro the only manufacturers heard were the Canadian General Electric Company, for whom Mr. G. W. Watts appeared. He claimed that at present there was practically no protection for that industry, the tariff on the finished product being 25 per cent., while that on the raw material was 20 per cent., being only a net protection of five per cent. against the world, except Great Britain. He asked that if the duty on the raw material was increased, a corresponding increase be made on the finished product.

FREE TRADE AND COMBINES.

CONSERVATIVE and Liberal newspapers are again in controversy over the tariff question as a result of the airing of the opinions of farmers, manufacturers, etc., before the Tariff Commission. One of the most interesting contributions to the discussion is the following letter by Watson Griffin, in the Toronto Globe of Nov. 29 :

"In the course of an editorial on combines, the Globe of Nov. 24 said : 'But under a protective tariff the big firms in combination crowd out the little ones by arranging for the shutting off of their supplies. This can easily be accomplished by the aid of tariff restriction, but is impossible without it.' Mr. H. W. Macrosty, who has made a thorough study of combines in the United Kingdom, states that the big firms in combination in that country do exactly what the Globe says is impossible without protection.

"But it is not necessary to go to England for examples of how combines can cut off supplies and dictate to consumers under a free trade system. Several years ago, when Canada had absolute free trade in wire rods, all the consumers of steel rods in the Dominion, excepting James Pender of St. John, N.B., were forced to sign long-term agreements not to buy steel rods except from the United States Steel Trust, which not only arranged to cut off their supplies of raw materials, but threatened to crush them out of existence by underselling their finished products unless they yielded. The consumers of steel rods were absolutely prohibited from buying in England. James Pender, of St. John, N.B., who held out against the trust, would have soon been forced to yield but for the fact that Parliament enacted the dumping clause, a purely protectionist measure. In all the world's history of tariff legislation there was never enacted a measure whose aim was more unqualifiedly protective than the dumping clause, and it would never have been thought of but for the fact that under a system of absolutely free trade in steel rods the United States Steel Trust took the Canadian consumers by the throat. If Canada had had a high protective tariff on all manufactures of steel the United States Steel Trust would never have dictated terms to the Canadian consumers of steel rods. If the Canadian tariff on all kinds of manufactures were abolished or reduced Canadian manufacturers would be absolutely at the mercy of United States combines, which would dictate where they must buy their raw materials and the prices at which they must sell their finished products. While the dumping clause is a purely protectionist measure and has made it less easy for United States manufacturers to dictate terms to Canadians, it is a poor substitute for a stable protective tariff.

"An old farmer, being asked what he thought of the 'dumping clause,' said : 'It reminds me of the draw-bridge we used to have over the river near our market town many years ago. The farmers on their way to market were often put to great inconvenience while waiting for vessels to pass up and down the river, while, on the other hand, the vessels sometimes had to wait for the farmers' wagons to pass over. It was a great inconvenience to everybody, and one dark night, when the bridge was open, a young farmer drove into the river and was drowned, with his horse. After that a permanent bridge was built, high enough to let the boats pass under while the farmers' wagons went overhead. The dumping clause seems to me to be draw-bridge protection, and the sooner it is replaced by permanent, stable protection the better for everyone.' "

lathing

If you are catering to the Building Trade you know that builders who have once used "Hayes" Metallic Lathing cannot be induced to use any other. Its grip upon the mortar is so tenacious that it takes but half the quantity required by wood or cheap metal lathing, makes partitions much narrower and has a lightness, rigidity and freedom from "buckling" found in no other make of metal lathing. It's fireproof, ratproof, and sanitary. No live builder should overlook the superiority of "Hayes" Metallic Lathing.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto Winnipeg

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding, (Stone, Brick etc.,)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

413

NO SAW-MAKERS' COMBINE.

MR. DIETRICH, of the firm of Shurly and Dietrich, Galt, manufacturers of the Maple Leaf brand of saws, takes very strong exception to the article in the Toronto Star dealing with the saw-making industry of Canada, and alleging a combine on the part of the manufacturers. It declares that the allegation is wholly unfounded—that, as a matter of fact, no combination whatever exists in this industry, so far as his knowledge extends.

"I regard the article," Mr. Dietrich says, "as rather a slur on Canadian manufacturers, inasmuch as it glorifies the American saw-maker over his competitor on this side of the line. But the fact that Shurly and Dietrich are enabled to enter the American field and compete successfully with the American saw-maker, in quality if not price, will, perhaps, be accepted as establishing the status of the Canadian saw-making industry to-day.

"The price of saws in Canada, it is said, has risen. I may say that the very opposite is the case. All kinds of our saws are sold much cheaper in this country to-day than ever before. This has been the case since the adoption of the tariff of 1878. Up to that time the saw-making industry was struggling against the competition of the United States manufacturers, who almost controlled this market. The business done by Canadian saw-makers was too small to admit of their embarking in it on a large scale and with improved machinery; but when the tariff was raised from 17 1-2 to 35 per cent. it gave an impetus to the home trade, which has since been maintained. As a result, prices, instead of advancing, were reduced 5 per cent. the first year, and have been gradually dropping until now we are selling many lines of saws at over 50 per cent. lower than before the tariff change. Indeed, in several lines we are selling absolutely without profit, and the profit on any saw we make is only very reasonable. The volume of business enables us to maintain prices at a low level. We can say, without boasting, but as a mere mention of industrial fact, that we manufacture more saws than any other two or, perhaps, three manufacturers in this country. And this reminds me that the Star article gives the number of Canadian saw factories as three. The fact is there are nine.

"The Star's intimation that American saw manufacturers are establishing in this country is really no part of the question at issue. An explanation, I fancy, lies in the circumstance that recently our shops were destroyed by fire. Destruction of the factory was a serious setback, and for a considerable time crippled us in our efforts to meet orders. What more natural than that our neighbors should come over with the object of occupying our territory and taking away our trade. Our extremity was regarded as their opportunity, you see. But

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1,000) are allowed as one word.

Cash remittances to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED—Two first-class tinners for furnace work; $3.25 per day, eight hours; steady employment. Apply The Wm. Ralph Co., Vancouver, B.C. [51]

WANTED—Position as salesman by hardware man with twelve years' experience; would like connection with manufacturers selling to the Canadian wholesale hardware trade; best references. Address K, 607 Ave. Hotel de Ville, Montreal. [49]

WANTED—A partner to take half interest in old established hardware business in central Eastern Ontario and manage it; must invest at least $3,000; full particulars on application. Box 297, HARDWARE AND METAL, Toronto. [49]

WANTED—Agents all over Canada to sell hardware, safety razors, useful novelties, warmers, pipes, etc.; state lines specially interested in. Write G. Bishop, Mary-Ann Street, Birmingham, England. [48]

AGENCIES WANTED.

A FIRM of general hardware dealers in Kingston, Jamaica, is prepared to accept agencies for every description of hardware, cutlery, glassware, enameled ware, household furniture, leather goods, coach-builders' materials, etc. All enquiries should be addressed to HARDWARE AND METAL, Toronto, and full particulars will be given. [49]

SITUATIONS VACANT.

SHEET METAL WORKERS WANTED—Men accustomed to heavy galvanized iron; permanent job for good men, as our machine is undoubtedly the best and is rapidly growing in public favor all over Canada, West Indies and South Africa; good mechanics seeking investment may take preferred stock if desired. St. Thomas Acetylene Manufacturing Company, Limited, St. Thomas, Ont. [49]

WANTED—A first-class horseshoer and general blacksmith; steady job; highest wages; must be sober. Tuck & Weber, Burlington, Ontario. [f]

WANTED—Wire workers and fitters. Canada Foundry Company, King Street Subway, Toronto. [f]

A WANT SUPPLIED

THE EVER-READY TUB HOOP

Adjustable to any size Tub or Pail, no rivets required Packed 2 doz. in a case. A ready seller.

Canadian Distributors

WATT & SQUIRE

BRANTFORD, ONTARIO

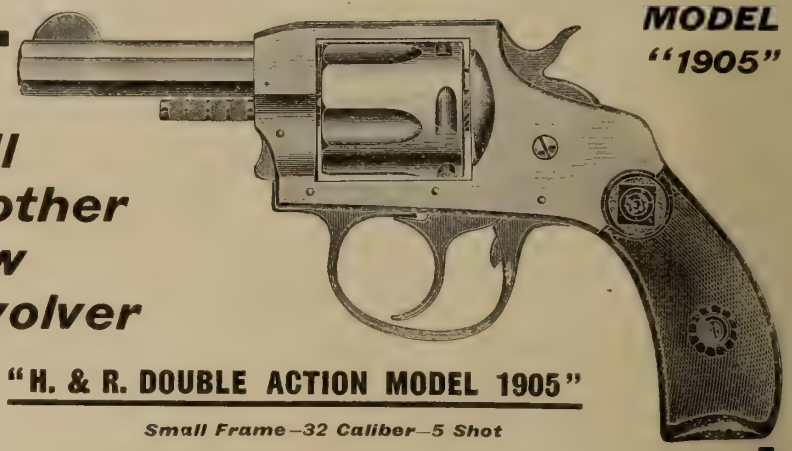
We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON
OTTAWA WINNIPEG



MODEL "1905"

Still Another New Revolver

"H. & R. DOUBLE ACTION MODEL 1905"

Small Frame—32 Caliber—5 Shot

Following the announcement of our Model "1904" we are now ready to supply this new revolver, conforming closely in frame and stock to the lines of our well known "H. & R. Premier."

Harrington & Richardson Arms Co.,

Worcester, Mass., U.S.A.

Makers of H. & R. Single Guns

Catalog on request

Sharratt & Newth's Glaziers' Diamonds

are unequalled for cutting and wearing qualities.

To be obtained from the principal Hardware Dealers and Glass Merchants.



Agents for Canada: **A. Ramsay & Son Company, Montreal**

we're solidly on our feet again, prepared to meet any and all competitors.

"Now, so far as the allegation of our control of the R. H. Smith Co., Limited, of St. Catharines, goes there is no truth in it. Shurly and Dietrich as a firm own no stock nor have any proprietary interest in that company. It is true that individually we hold stock in it, as we do in other manufacturing industries, but that circumstance does not by any means justify the assertion that we control the business—which we most assuredly do not. The board of directors, elected by the six shareholders, do that. We make this explanation in fairness to the other directors of the R. H. Smith Co., who are not concerned in our business and against whom an unfair and undesirable imputation has been cast by the statement of the Star, which journal, it is to be regretted, did not apply to us for its facts before proceeding to class the saw-making industry in Canada among combines, which it is undertaking to expose."

It has been announced that plans are being prepared for a copper smelter at Bruce, which has been designed to treat all the copper produced in the district. The smelter will be under the control of J. J. Case, of Dollar Bay, Mich., who is said to be one of the leading authorities on copper smelting on the continent.

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
Drummond, McCall & Co.
MONTREAL, QUE
or to
Canada Iron Furnace Co.
MIDLAND, ONT. Limited

Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cement, Firebricks, Ore Sacks, Grain Bags, etc, etc.

ADVERTISING IN THE COLONIES.

AT the October dinner of the Sphinx Club, in London, England, the subject, "Why Should we Advertise in the British Colonies?" was discussed. In referring to the matter the Engineering Times publishes the following:

"Mr. J. H. Turner, agent-general for British Columbia, said that there was no doubt that good advertising would tend to the advancement of British merchants in the colonies. British Columbia was increasing in population, had an excellent position on the Pacific, and must become an important part of Canada.

"Mr. J. W. Taverner, agent-general for Victoria, pointed out that the colonies were anxious to trade with the Mother Country. Germans and Americans, however, were very successful in getting hold of a large part of that trade. There was still a large field for British manufacturers, and it was the duty of people in Great Britain to do all they could to do business with their brethren across the seas.

"Mr. J. Howard, agent-general for Nova Scotia, said British manufacturers must advertise in order to counteract America's natural advantage of geographical position.

"Mr. J. E. Jenkins, agent-general for South Australia, thought advertisements must be of a nature to 'fetch the people.' The Americans were the best advertisers in the world. Australia wanted trade with Great Britain, but it was the best bargain which was most taking, and British manufacturers should see to it that their goods were the best bargain. Australians did an enormous trade with a small population.

"We have in our columns repeatedly called attention to the importance of advertising in the colonies."

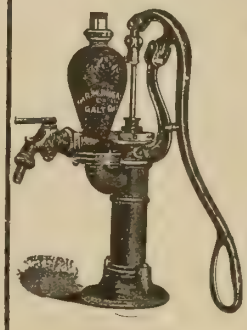
One of the distinguishing traits between the British manufacturer and his American competitor lies in the eagerness with which the latter seeks publicity and the indifference of the former as a rule. To this very fact can be attributed a large measure of the success the American manufacturer has had in competing with the outside world. He realized before any other the all important of having his name and goods well known by the class of people to whom he catered.

It is not from mere undirected publicity that results are obtained. There is a law in advertising as well as in any department of business. A writer in American Industries, speaking of publicity that pays, says: "It is characterized by the same traits that 'pay' in other walks, by earnestness, by sincerity, by persistence, by integrity, by aptness, by adaptation, and by seizing your topic in such a way as primarily to make it interesting."

When the British manufacturer realizes the big field there is for him in the colonies, a large part of which can be secured only by advertising in a proper medium, and makes a more thorough study of the science of advertising, then will he secure a trade that he is not now getting, but which belongs to him by the fact that tariff regulations were made to have it so.

"DOMINION"
The hall mark of quality on
Bar and Hoop Iron
Polished Steel Sheets
Polished Canada Plates
Charcoal Tin Plates

A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen
handle our
ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited
GALT, ONTARIO.

B.C. BRAND DRILL STEEL
is just what it is claimed to be—**the best steel.** If you are looking for the right brand, correspond with

BAINES & PECKOVER, Agents, Toronto, Can.
E. G. PRIOR & CO., Agents, Victoria, B.C.
D. W. CLARK, Canadian Representative.
P O. Box 521, Toronto, Can.

Manufactured by
B. K. MORTON & CO.
SHEFFIELD, ENG.

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

PAINT, OIL AND BRUSH TRADES

ENGLISH LINSEED OIL MARKETS.

IMPORTATIONS of seed for English linseed oil crushers for the first ten months of 1905, are 1,700,301 qrs. against 2,454,708 qrs. in 1904. With ten months expired the figures are 700,000 qrs. behind last year, and actually 66,000 qrs. behind 1903, so that there is no fear of a great excess of seed. The force of reviving trade ought, therefore, soon to make itself felt in linseed oil, and higher prices are likely.

The following table shows the receipts in England for the first nine months in the past three years :

	1903. Qrs.	1904. Qrs.	1905. Qrs.
Imports of linseed—			
From Russia	159,778	135,477	139,050
" United States	30 057	960	——
" Argentine	798,394	1,417,416	798,132
" East India	630,839	624,15	514,767
" Other countries	78,057	82,341	94,116
Totals	1,702,915	2,290,309	1, 42,685

It will be noticed that the abnormal imports from the Argentine Republic have ceased, and that India is sending us less than for the two preceding years and nothing whatever from the United States.

THE CARE OF PAINTERS' TOOLS.

In the paint shop, says the American Blacksmith, a place is needed for the storing of all tools and appliances, or a place for everything and everything in its place. Sponges and chamois should be kept in dry places. Shellac brushes should be washed after being used, and kept in a drawer or box, so that when they are needed they will simply have to be placed in alcohol or shellac a day before. New or partly-used brushes should never be placed in water; the only proper way to keep them in good condition for any length of time is to place them in a large pot or keg of mixed color, just enough paint so that the bristles will not touch the bottom. Varnish, enamelling, and staining brushes are best kept clean and straight by suspending them in oil, either with a patent brushholder or by boring holes through the handle and fixing them with a wire.

TURPENTINE'S HIGH PRICES.

VARIOUS explanations of the high prices of turpentine have been offered, some stating that the high prices are due to actual shortage in production and receipts and a simultaneous increase in demand and shipments. This is hardly borne out by the figures in the case of the Savannah market, since the total supply of spirits on this crop to date, and the stock remaining on hand this year are not much less than last year at this time. In partial explanation it may be said that the southern ports have suffered this year from the fear of yellow fever, and the shipments that usually pass through those ports have gone to Savannah instead. With respect to rosins the figures show a considerable shortage, the receipts this year having been about 2,000 barrels less than last year, while the shipments have exceeded those of last year by over 22,000 barrels. This partly accounts for the advance, but it does not explain why the normal supply of rosins has not come to market. It is well known that there are a number of organizations of producers or factors, or both, whose avowed purpose is to maintain prices of naval stores, and that in some instances these organizations resort to artificial measures to keep up the market. They make no secret of the fact that they are organized to keep prices at a high level, and this they seem to be doing with signal success.

A RECEIPT FOR LUMINOUS PAINT.

A base for the preparation of luminous paint is made by calcining oyster shells at a red heat and then grinding them very fine and mixing the powder with half its weight of flowers of sulphur. Put this mixture into a closed crucible and maintain at a red heat for an hour; then allow to cool. The product should be white. It is then ground fine and sifted. This is made into a paint with gum water for a water paint or a thin colorless oil varnish for an oil paint.

DISPLAYING BRUSHES FOR SALE.

It is a good plan for the paint dealer to save his barrel tops and hoops. Bind a hoop with red cloth or other suitable material, and place small screws, hooks or nails on the inside of the hoop. Adjust a small eye or hook in the end of each brush, and fasten the whole with hanger to the ceiling or window, just as you would hang a picture. This method of display may be utilized for all classes of brushes. Barrel covers may be used to good advantage by tacking or glueing them together, covering them with some colored material, and fastening brushes with tape, elastic or wire on both sides, and hanging the whole from the ceiling or window.

For 1906 consider what distinctive lines you will have control of by securing the agency in your town for

HOLYWOOD PAINT
ELASTILITE VARNISH
OROLITE OIL FINISH
GRANITINE FLOOR FINISH
CHIJAP FLOOR LAC
M-L VARNISH STAINS
M-L COACH ENAMEL

and other Imperial Specialties. Standard quality for years.

Manufactured only by

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

A RAPID SELLER

GRANITE FLOOR PAINT

Made from the purest materials. Has no superior anywhere. Dries quickly and hard and resists the rough usage to which Floors, Piazzas, Steps and kindred surfaces are necessarily subjected. Just the article your regular customers are likely to be in need of.

Our catalogue gives full details. Don't miss getting a copy.

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

GUELPH AXLE WORKS

THE GUELPH SPRING & AXLE CO. LIMITED

GUELPH, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Get your GLUES from

The GROVE CHEMICAL CO., Limited

Appley Bridge, Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter.

OILS

Raw Linseed
Boiled Linseed
Pale Boiled Linseed
Pale Refined Linseed

"DOMINION" BRAND

OILS GUARANTEED GENUINE.

Canadian Agents—
J. A. BERNARD,
21 St. Peter Street., Quebec
HOMER TAYLOR,
Temple Bldg., Montreal

FRED'K FENNER & CO., LTD.
PENINSULAR HOUSE, MONUMENT ST., E.C.
LONDON, ENGLAND.

"USE DOTH BREED A HABIT"

Get the people to buy and you have won half the battle. Get them to buy the ***right*** goods at the ***right*** time and victory is yours. That is where

"Island City" Brand

Paints and Varnishes score a point for the dealer who carries them. They are not purchased on any haphazard plan, but are sought time and again because they bear "Island City" stamp, which spells ***Excellence.*** "Island City" Brand Paints and Varnishes are the most profitable goods ***you*** can carry.

P. D. DODS & CO. Toronto, Montreal, Vancouver, Winnipeg

Harping The Same Old Tune

regarding the merits of

ANCHOR LIQUID HOUSE PAINTS



TRADE MARK

still continues to increase their sale. These are the Paints in which **the only WHITE LEAD used,** is

BRANDRAM'S B. B. GENUINE

the world's standard for the last **187 Years.**



Manufactured by

HENDERSON & POTTS, Limited

HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED

MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 1, 1905.

BUSINESS for the season is now practically closed, although quite a number of sorting orders are still in hand.

Turpentine has declined in the south, and the local market is easier to the extent of 2 cents per gallon. The situation is somewhat uncertain and it would be no surprise to see a further decline next week.

Linseed oil has been quite steady, with a firm tendency As usual, at the close of navigation, dealers are marking prices up one cent per gallon.

The advances in ground white lead have been well maintained, and the demand is still heavy. Many inquiries are coming in for prices on next year's delivery, but manufacturers are, for the most part, refraining from quoting in view of certain advances in raw material at primary markets.

Other lines are in the usual demand for this season.

Turpentine—As predicted in Hardware and Metal some time ago, the high water mark for turpentine was reached at 98 cents. During the past week prices have declined 2 cents and the market at present is unsteady. We quote: Single barrel, 96c. per gallon. Two barrels or over, 95c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil — Conditions are steady and the usual advance of one cent per gallon has been made in view of the close of navigation. Our prices are: Raw, one to four barrels, 46c.; five to nine barrels, 45c.; boiled, one to four barrels, 49c.; five to nine barrels, 48c., f.o.b. Montreal. Net 30 days.

Ground White Lead—The situation is such that manufacturers are shy of taking contracts for delivery next year, owing to the impression that prices will, by that time, be advanced. We are still quoting: Best brands Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—A decidedly upward tendency is manifest. We quote: Barrels $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—Firmness is characteristic of the market and is due to strength in the primary markets. Our quotations are as follows: Pure dry in casks, 7 1-2c.; in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.; in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We quote: 25-lb. irons, 8c. to 10 1-2c.; No. 1, 6 3-4c.; No. 2, 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barre's, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Our prices are as follows: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Great strength is shown in European markets, which gives firmness to the following prices: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75; and smaller quantities, $5.50.

Gum Shellac — We still quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish — Our prices are: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Prices range from $1.20 to $1.40 per gallon.

Castor Oil—There is no change in the situation this week. Prices are from 7 1-2c. to 8 1-2c., according to lot.

Refined Petroleum—The demand locally continues very good and prices are unchanged. We quote as follows: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—Until navigation reopens in the Spring there will be little news to report in this market. Our prices are as follows: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

It ought to be always "No trouble to show goods," and you have a show window.

TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

Here Is A Seller!

You can sell a pair of **SCHUCHARDT & SHUTTE** Cogged Scissors to every one in your town who works with such materials as **leather, rubber, packing, linoleum** and **asbestos.**

The lower blade is cogged, thus holding the material in place for the sharp upper blade to cut it.

Canadian Agents

McLEAN & SOPHUS, 301 St. James Street, MONTREAL

SIGNS AND SHOW CARDS

advertise you so well that it does not pay you to be without them. It will pay every Merchant in Canada to have our catalogue before him for reference. It gives styles and prices for almost every sign made. Free to all Merchants.

THE MARTEL-STEWART CO., LTD.
681-683-685 Craig St., - - MONTREAL

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.



EXTRACT from the

FARMERS' ADVOCATE

"THE CANADA PAINT COMPANY. — The question of what paint to use is one of very great importance to the farmer. It isn't a matter of the original cost, because the paint that costs the least on the start is often the most expensive in the long run. Where the possibility of making mistakes is so evident, it is wise to buy the product of a well-known and thoroughly reliable concern, and we would refer our readers to the manufactures of the Canada Paint Company, of Montreal and Toronto. This company has been before the public for a great many years, and has proved in that time that its paints, colors and varnishes are absolutely good and dependable. You will make no mistake when you buy paints that come from the Canada Paint Company. Ask for their paints from your dealer, and, if he isn't handling them, write to the firm at Montreal, and they will advise you how to get them. On no account allow any substitutes to be forced upon you."



ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto December, 1, 1905.

SOUTHERN turpentine and rosin markets have been broken during the past week and accumulated stock gathered during the contest between conflicting interests in Jacksonville, Sav., have resulted in much lower prices being quoted for the two articles named. No cheap stock has been received on the local market as yet, but prices have fallen, some dealers quoting as low as 95c., while others are selling at 97c. and 98c. Rosins have also declined considerably owing to the slump in the south, but as jobbers have bought goods at the high prices recently quoted, the cut here will not be so marked as in other markets for some time. It is unlikely that there will be a reaction and higher prices again quoted for turpentine during the slack season.

Linseed oil is quoted at the same figures, but as navigation has practically closed and there has been an advance in Montreal, prices are likely to stiffen considerably on the local market and further advances are possible later on.

Business in ready mixed paints and white lead is quite large for this season of the year. A falling off is noticed, but the expected high prices next season is causing more buying than usual at this time.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75; ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V., M., in casks, $6.50; in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gallon lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c. to 48c.; boiled, 50c. to 51c.; 5 to 9 barrels, raw, 46c. to 47c.; boiled, 49c. to 50c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, 95c. to 98c., f.o.b., point of shipment, net 30 days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Trade is falling off as dealers have stocked up fairly heavily. We quote as follows: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

LINSEED OIL AND LOW TEMPERATURES.

TESTS were recently made to determine whether linseed oil transported at temperatures below freezing point could sustain such alterations as would cause it to become cloudy at ordinary temperature, and form a flocculent deposit when heated to 270 C. Three freezing tests were performed by placing the oil in a large test tube and immersing the latter in a freezing mixture. In fifteen minutes the oil temperature fell to 76 C., and turned cloudy, and cooled down to 17 C. within two hours, at which temperature the oil was thick, but had not lost its fluidity. On repeating the test with a freezing mixture of snow and calcium chloride, which gives a temperature as low as 63 C., the oil was found to set hard at 29 C., without exhibiting any trace of crystalline structure. The samples were left in the freezing mixtures until these ceased to act, and were then kept for three days in a warm room. Each of them was found to be perfectly clear and bright, free from any deposit or flocculent matter in suspension, and quite undistinguishable from the original sample; and no flocculence was obtained on heating them to 270 C. It therefore seems evident that cold has no unfavorable influence on linseed oil.

Buyers of screws need not be alarmed by the reports current regarding the formation of trusts and combines in the screw-manufacturing business. The time has long gone by when owners of screw-cutting lathes enjoyed a monopoly, and when English and foreign screw-makers could combine to force higher prices from the buyer. There are independent firms in the screw-manufacturing industry who will act as a check upon any attempt to obtain exorbitant rates on the part of the reported combination of English and German screw-producing companies. Their existence can be readily made known, and much of the business now in the hands of the "combine" may ere long be diverted to equally competent and less exacting concerns.—British Trade Journal.

BRUSHES

SPRING, 1906

Trade Bulletin

Owing to our having been fortunate in making some very large and favorable contracts on Bristles and other raw material, we have been able to reduce our prices on many lines of **"Boeckh's"** and **"Bryan's" Paint Brushes** handled by the General Trade, and by the introduction of new machinery it has been possible to also make reductions on many lines of Household Brushes, and we are now revising our prices and preparing our 1906 illustrated catalogue, which will be ready for distribution about Dec. 1st. We therefore wish to impress upon you the importance of first seeing our samples and getting our prices before ordering for your Spring requirements, as we feel confident that you will find our values much better than those of any other manufacturer.

Our representative will call on you in due course with a complete line of samples, when you can see exactly what we have to offer. We trust you will be in readiness to order by the time he calls, and would specially mention that it is decidedly advantageous to place orders for Spring requirements as early as possible, as by doing this the Brushes are sure to be delivered before the rush season begins, you protect yourself against any advance in prices which may be necessitated through the possible and probable advance in bristles, etc., when the large Spring demand is on, and also you get the benefit of being able to display your goods well in advance, without any extra cost to you, as we always give a liberal dating on stock orders for Spring trade.

Trusting that we may be favored with your orders, we remain,

Yours truly,

Factories: TORONTO LONDON NEWMARKET

UNITED FACTORIES, Limited

Head Office, TORONTO.

Branches: MONTREAL LONDON WINNIPEG

BEST ELBOWS

— FOR —

CONDUCTOR PURPOSES

BEAR

TRADE MARK

F. Dieckmann

CANNOT BURST

— from —

ICE PRESSURE

Made in . . .

6 Materials.

5 Angles.

14 Sizes.

1,225 Varieties.



For Sale by the TRADE in Canada. Write for catalogue and samples to

FERDINAND DIECKMANN

1180-82-84 HARRISON AVE.

CINCINNATI, O., U.S.A.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

WINNIPEG financiers are preparing to erect a pipe and tile factory at Medicine Hat and a company known as the Great West Sewer Pipe & Tile Co. is being promoted at a capitalization of $1,000,000.

The Canada Cordage Co. are to locate their factory at Glencoe.

A branch factory of the London Fence & Machine Co. may be established at Brandon.

The Brantford Felt & Rubber Company has purchased considerable new machinery.

Another lime burning plant is to be established in Owen Sound by David Chalmers.

A by-law to grant $20,000 to the Aylmer Iron Works was carried at Aylmer, Ont., this week.

The Canadian Electric Force Company is being organized at Victoria, B.C. A. Maxwell Muir is secretary.

Natural gas is expected to be ready for sale at Brantford, St. George and Galt during the next week or two.

Haslem's saw mill at Nanaimo is to be operated again, having been purchased by J. S. Emerson, Vancouver.

The R. Watt Machine Works, Ridgetown, are to manufacture the Bidwell Threshing Machine.

Thomas Shafer and H. J. Mills, of Philadelphia, propose to establish a boot and shoe factory at New Westminster.

The Canadian Northern Railway has been constructed as far west as Edmonton, this being the first railroad to enter the new capital of Alberta.

John Studebaker, the great wagon manufacturer of the United States, is looking into the possibilities of opening a branch factory at Fort William.

St. Catharines is to have a new industry, the manufacture of scientific products having been commenced by the St. Catharines Building & Paving Co.

The strike at the Kingston Locomotive Works, which has been on for nearly four years, has been called off by the International Association of Machinists.

The brick work on the foundry extension at the Peterboro Lock Works has been completed. As soon as the works close down for stock taking the new machinery will be put in.

A New Brunswick foundry, Fredericton, are manufacturing the attachments for looms to be used in textile mills, they having secured the right to manufacture this machinery in Canada.

The rail mill of the Dominion Steel Co. at Sydney has been out of operation for about a week on account of an accident to the main engine of the plant. The mill has been turning out an average production of five tons per day.

The people of Kingston will vote on a by-law in January to exempt the Canadian Locomotive Works from taxes for ten years. If the by-law carries the company agree to enlarge their works. The capacity now is sixty engines per year.

The Home Telephone Co. is negotiating with the city of Vancouver for the installation of a new automatic telephone system in that city. The company is installing a $1,000,000 plant in Portland and state that they are prepared to spend $1,000,000 in Vancouver if a satisfactory agreement can be arrived at.

The annual meeting of the Rand Drill Company was held at Sherbrooke a week ago. The financial statement as submitted to the shareholders showed a remarkably good record of expansion during the past year, and it was decided to proceed at once with the enlargement of the plant at Sherbrooke, Que.

The United States Steel Corporation have announced that about 2,500 acres of land in Indiana on the shore of Lake Michigan has been purchased in the interest of the United States Steel Corporation, which will erect thereon blast furnaces, open hearth furnaces, by-product coke ovens and various mills for the manufacture of a diversity of steel products.

A plant is to be established near Tweed to utilize the silver ores of Hastings County and to extract sulphuric acid by the context. The Canadian Chemical Co. will invest $1,500,000 in the plant and the enterprise will greatly stimulate the mining interests of New Ontario and will make possible the working of large bodies of ore not yet developed.

The Canadian Northern Railway Company has ordered forty new locomotives, which may be increased to sixty, four hundred flat cars, one thousand box and stock cars and several hundred passenger cars. This new equipment is for delivery during 1906 and if Canadian firms can meet the company's demands the orders may all be increased. An expenditure on equipment exceeding $2,000,000 is anticipated.

The Canadian Northern Railway has secured $6,000,000 in England, and it is understood that the company will early next Summer begin the construction of their transcontinental line between Port Arthur and Montreal, and that within three years Montreal will be connected with the Saskatchewan River by three distinct railway systems. It is understood that the new line will be built between the C.P.R. and the Grand Trunk Pacific.

A petition in bankruptcy has been filed against the Colonial Copper Company, which owns copper mines in Nova Scotia and other parts of Canada. Mismanagement on the part of the company's officers is alleged by the creditors filing the petition, who have claims amounting in all to $6,550. The Colonial Copper Company is capitalized at $5,000,000, and an authorized bonded indebtedness of $300,000, of which $115,000 has been issued.

Companies Incorporated.

The license to do business in the province of Ontario by the Buffalo Tool & Machine Co. has been revoked.

The Mount Forest Carriage Co. have been granted permission to increase their capital stock from $50,000 to $100,000.

The Plymouth Cordage Co., of the State of Massachusetts, has been authorized to manufacture cordage in Ontario, provided they do not use any larger amount of capital than the sum of $80,000.

Window Glass Machine Co. of Canada, Cayuga, share capital $40,000, purpose to manufacture and sell glassware. The directors are: M. McClung, M. McConnell, J. W. Sheppard, D. P. Foster, and A. K. Goodman, all of Cayuga.

West, Taylor, Bickle & Co., Toronto, share capital $20,000; purpose, to manufacture and sell and deal in brooms, baskets, mops, matches, wash boards, etc. The directors are G. West, E. J. Taylor, W. J. Bickle, J. W. Berney and S. Smith, all of Toronto.

Temiskaming Reduction Works, Cobalt, share capital $166,000, purpose to carry on the business of a mining, milling, reduction and development company. Directors to be: Peter Kirkegaard, of Delora, and C. L. Benedict and G. Ritchie, of Toronto.

The Silver Five Mining Co., New Liskeard, share capital $40,000, purpose to carry on the business of a mining, milling, reduction and development company. Directors are: J. Matthews, W. McKnight, D. Stewart, W. Roebuck and H. Loudin, all of New Liskeard.

The Standard Tin Works, Toronto, share capital $40,000, purpose to buy, sell, manufacture and otherwise work and deal in tin, iron, copper, brass and other metals. The directors are to be: T. H. Cook and R. MacKenzie, of Sarnia, and J. A. McGolpin, W. F. Boddy and H. F. Bodd of Toronto.

Canada Turpentine Co., Ottawa, share capital to be $200,000; purpose, to manufacture, sell, renne and deal in turpentine, wood alcohol, acetic acid, creosote, etc. The directors are R. A. Sibbitt, A. K. McLaren, A. McKillop, and F. X. Laderoute, all of Ottawa, and J. A. Thompson of Winnipeg.

The Anglo-American Varnish Co., Montreal, share capital $20,000; purpose, to manufacture, buy, sell, and deal in varnishes, Japan lacquers, driers, oils, etc. The incorporaters are W. Marshall, G. M. Ballard, T. F. Clarknall, of Newark, N.J.; and P. Davidson and A. Wainwright, Montreal.

Temagami Mining & Milling Co., Toronto, share capital $40,000, purpose to carry on the business of a mining, milling, reduction, smelting and development company. Directors to be C. L. Beckwith, L. O. Hedden, W. E. Thatcher, J. B. Wilson, F. L. Luff and E. J. Meeker, all of East Orange, N.J., and R. N. Brundage and F. F. Guild, of Newark, N.J.

The Cambrian Mineral Co., Sudbury, share capital $100,000; purpose, to carry on the business of mining, milling, smelting, refining, or otherwise dealing with metal, minerals, coal oil, or any other substance connected with same. The incorporators are R. G. Leckie, J. E. Leckie, W. J. Montgomery, all of Sudbury, and R. G. Edwards of London, England, and D. G. Gillies of Montreal.



No. 31. OSHAWA, ONT. Dec. 2, 1905

WHAT WE HAVE DONE

Mr. Hardwareman, you know that we have placed on the market a **Fireproof Partition Stud** and a **Sheet Steel Furring Strip**. Do you realize the part that these manufactures are going to play in modern buildings? The fact that they have been taken up so quickly by men interested in securing substantial structures is the best proof that the Studding and Furring fill a long-felt want.

Then there is our **Perfect Metal Lath** which can be used in conjunction with the **Fireproof Partition Stud** and the **Sheet Steel Furring Strip** to splendid advantage. **Perfect Metal Lath** is the cheapest metal lath on the market, **and the only metal lath that is "perfect."**

WHAT YOU SHOULD DO

Don't you think there is room for you to sell these goods? Don't you think it will pay you to drop us a line for full particulars? We can show you How and Where sales are made. We can also give reasons why you should carry a stock of our "Steel Ceiling," "Wall Covering," "Metal Shingles," "Tile," "Siding," "Cornices," "Store Fronts," "Ornamental Zinc" and "Copper Work," "Eavetrough," and "Conductor Pipe," etc.

There is no time like the present. WRITE NOW.

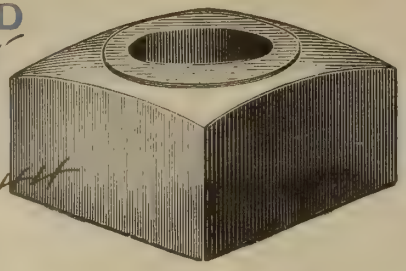
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IN CHARCOAL TINPLATES

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"ALLAWAYS"
"JUANA"
"SPARTAN"

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MONTREAL
Wholesale Trade Only Supplied

Hardware Store Business Methods

Compiled and Edited by R. R. WILLIAMS, Hardware Editor of the IRON AGE.

The thorough and practical treatment of the important subjects discussed, the embodiment in these articles of the experience of men of ability and enterprise, the suggestiveness of the principles and maxims thus presented, will, it is hoped, render the volume useful to many and tend to elevate still further the business methods of the hardware trade.

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The American Hardware Store

A Manual of Approved Methods of Arranging and Displaying Hardware.

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This book is descriptive of the best methods of accommodating and displaying the large variety of goods which are carried in stock in representative American and Canadian hardware stores. Copiously illustrated, and worth many times its cost to every progressive hardware dealer.

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Business Changes

Ontario.

Wm. Gallaugher, agricultural implements, Shelburne, has assigned to Thos. McKim, Shelburne, and there was a meeting of creditors on Nov 29th.

The stock of Coxall & Co., grocers and hardware merchants, Colborne, has been sold.

The assets of John W. Oldfin, plumber, Kingston, are to be sold.

Hamilton Facing Mill Co., Hamilton, were partially burned out, but were insured.

The assets of D. Belleau, plumber, Ottawa, were sold

Quebec.

The assets of L. C. Giguere, hardware merchant, Quebec, are to be sold.

British Columbia.

Thompson & Peace, blacksmiths, Grand Forks, have dissolved.

Nova Scotia.

The A. C. Thompson Co., hardware and foundry, North Sydney, lost by fire at Lunenburg.

Western Canada.

H. L. Gryte, agricultural implements, Elm Creek, has been succeeded by R. J. Wilson.

TREE BRAND SCISSORS.

An oak cabinet, having five illustrations of Tree Brand Scissors, is given away with an order for one-half dozen of each line illustrated, that is, one embroidery, one bent nail, one 4½-inch pocket, one 5 and one 6-inch regular scissors, all finest finished and fully nickeled with bevelled bows, and very best quality. The goods fit exactly over the illustrations so that the salesman cannot put the scissors in the wrong place. The cabinet will help to increase the scissor trade. It may be had through any leading wholesale hardware firm.

HOW TO FILE SAWS.

A comparatively new method for filing saws is to take a cut-off saw, No. 6 or 7, and file it square across with the file level. Then start on the back corner of the tooth one-third or one-half way down and file it to a point on the set side. This gives it a bevel point but leaves the face square. Rip saws may be filed in the same way, only a little more time is required. This method is said to be superior and very effective if the timber to be cut is curly or knotty.

Work will be commenced next Spring on the new cement plant to be established at Belleville by the Lehigh Portland Cement Co. The plant will have a capacity of 4,000 barrels a day.

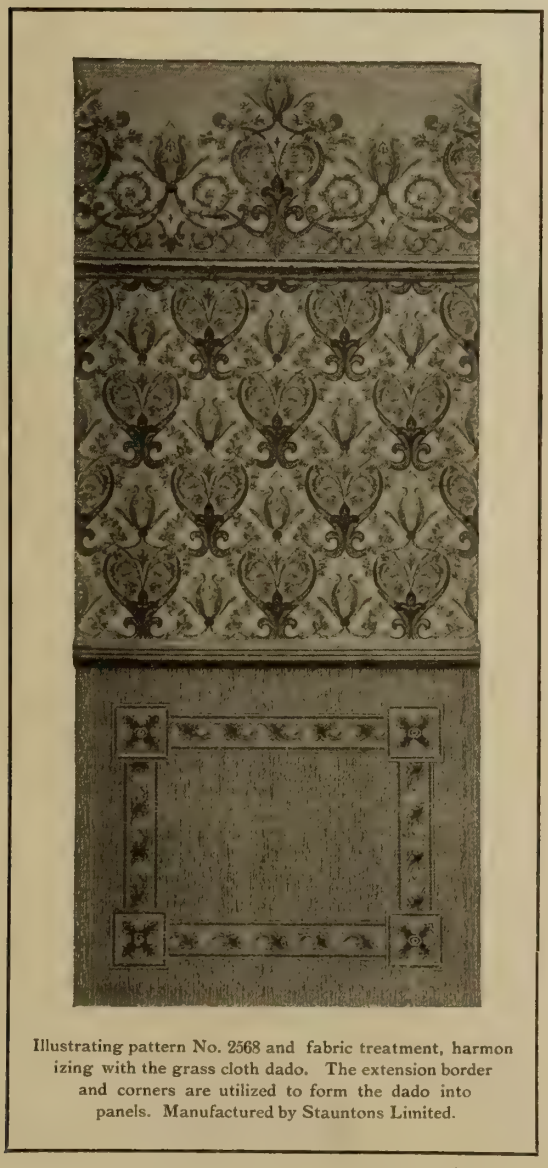
WALL PAPER

PROSPECTS BRIGHT FOR WALL PAPER.

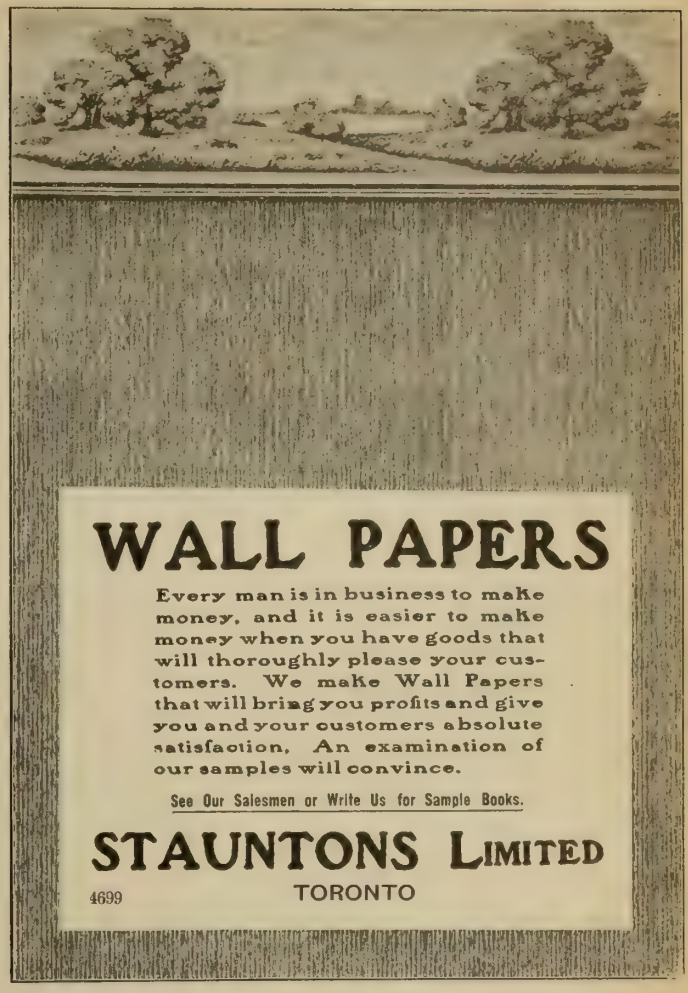
WALL paper mills are working to their full capacity to get out their orders for Spring delivery. The season has proved better than was expected even by the most optimistic manufacturer. Orders have been uniformly heavy, and as the samples show there should be an attractive season ahead for the retail merchant.

A noticeable feature of the orders which are now coming in is the large number of drygoodsmen who are seeing the advantage of handling this profitable line. It has become recognized as an integral part of the house-furnishing stock, and a progressive merchant cannot afford to neglect it.

Development and expansion are the watchwords of the present time. From the biggest departmental store in the great cities to the small store in the country village, the one idea running through all is to carry as many lines as can be handled economically.



Illustrating pattern No. 2568 and fabric treatment, harmonizing with the grass cloth dado. The extension border and corners are utilized to form the dado into panels. Manufactured by Stauntons Limited.



Carpets have always been recognized as belonging primarily to the dry goods store. They are practically the same material as the other lines in the store. So, too, curtains are distinctly a part of the dry goods stock. But you cannot separate two parts of the house-furnishing department. Wall paper must go with carpets and curtains, and hence it must be included in the dry goods store.

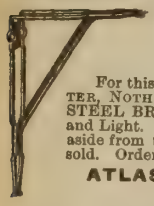
Make your preparations now by seeing samples and ordering a line of wall papers. The advantages of handling this stock are many. Its immediate benefits consist in a good profit and a quick turnover. If the stock is judiciously bought there will be very little left on the shelves when the season is over. The time when much space or attention has to be devoted to it is short, and the regular selling staff can handle it. There is nothing intricate or technical to require the care of an expert. An eye for artistic effects is enough, and it is always possible to find a person with this in a dry goods store, where the harmony of colors must be constantly considered.

In addition to this, every new department brings people into the store who might not be attracted by anything else. All of these are possible buyers for general dry goods, and by bringing them into contact with the goods sales should follow. It is an important thing to induce the buying public to come into the store. The attractions inside should do the rest.

For all of these reasons we strongly recommend drygoodsmen to take up this line of business. It will add perceptibly to the gross sales and to the net profits. It is worthy of close consideration.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
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Walter Mills, General Manager
Ask for quotations for Septic Tanks.
Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
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"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
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DERBY SNAP
With Plated Rust Proof and Guarded Springs
"The Latest and Best."
For Sale by all Jobbers at Manufacturers' Price

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PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
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BUILDING AND CONSTRUCTION

GROWTH OF THE SKYSCRAPERS.

THERE is a growing wonder on the part of many people about when the limit will be reached in the height of buildings, and what the limits of the possibilities of the architects and builders.

Considerable discussion has been brought about by the startling announcement that the Metropolitan Life Association proposes to erect an office building in New York that will top the Washington Monument in the nation's capital. It is said that the plan suggested is to make the building 560 feet high. Of course there is much objection to this on the part of the lovers of beauty, yet it is still to be demonstrated that such a structure would be devoid of beauty.

Broadway, as a result of the skyscrapers, has become known as the "Grand Canyon of New York," not because of its beauty, but because of the great heights to which the buildings rise on either side.

Leaving out of the question the architectural beauty the fact remains that the skycrapers have been found to be of great utility because of their accessibility, as well as the fact that they make possible the concentration of business in which the saving of a few minutes, in these strenuous days, means dollars. The natural result is that they are profitable investments, and there is a stronger disposition on the part of property owners to increase the accommodations per building by increased height, rather than toward a reduction or any particular interest in the aesthetic side of the question.

BUILDING IN MONTREAL.

Building operations in Montreal are still going on with marked activity, and, as the supply of all kinds of rentable space is short of the demand it is apparent that this activity is likely to continue.

Real estate sales during October amounted to $1,023,331 in the city proper and $345,243 in the surrounding municipalities, which would seem to bear out the prediction that the building trade have still lots of work in sight.

During the month of October, 1904, real estate sales in Montreal showed a total value of $676,268, so that the present year is a decided advance. Moreover, the building operations for the past ten months of 1905, exceed those of the corresponding period in 1904, by about 50 per cent.

BUILDING NOTES.

A new Methodist church is to be erected at Elgin, N.B.

A $4,000 rink will be built at Q'Appelle this Winter.

An eight-storey apartment house is to be erected in Ottawa.

A new Grand Trunk depot is to be erected at Kincardine.

A. E. Short is erecting a $12,000 business block at Vancouver.

The Dominion Natural Gas Co., Brantford, are erecting a new building.

A new Y.M.C.A. building to cost $60,000 is to be erected in Winnipeg next Spring.

Operations have been commenced on the extension of the C.P.R. freight sheds at Regina.

John Drummer, Toronto, has taken out permits to erect eleven houses in Toronto Junction.

Wm. Speers has plans out for a business block at Toronto Junction to cost about $6,000.

Permits have been issued in Toronto for the erection of twenty-eight buildings to cost $88,400.

The American-Abell Engine & Thresher Co. are to build a large addition to their warehouse at Regina.

The contract for the erection of a three-storey building for W. J. Pendray & Sons, Victoria, B.C., has been let.

New houses are being built in St. Catharines by S. E. Bosworth, G. Burch, E. C. Nicholson, and Mrs. E. A. Wilson.

The Plymouth Cordage Co. propose to erect nine houses at Welland to cost $6,000 each, according to a Welland paper.

Regina Methodists have secured a site on which next Spring they will commence the erection of a $50,000 up-to-date edifice.

S. J. Thompson, photographer, Vancouver, has purchased a site on Granville street, and will erect a three-storey building.

The Cornwall Furniture Co., Cornwall, Ont, have almost completed the new brick addition to their already well equipped factory.

A Montreal fur manufacturing company are to erect a three-storey building at Brandon. Over 60 employes will be given work when the building is completed.

The Keystone Sugar Co., Whitby, have let the contract for the erection of their new factory to a Michigan construction company, the price being about $15,000. The structural steel used in the deserted factory at Wiarton, and the machinery of the same plant will be transferred to Whitby. The work is to be completed next August.

WE WANT YOU TO KNOW WHY

DOMINION BRAND
TARRED FELT

our Tarred Felt, Roofing Pitch and Coal Tar will give you better satisfaction than any other you can handle. We can't tell you all about it here, but, if you will write us, our traveller will call on you and convince you.

"Dominion Brand" Roofing Materials

Are made only by us

LOCKERBY & McCOMB, 65 Shannon St., Montreal

THERE IS NO FEATURE

In the sale of an article that inspires the dealer to recommend, and induces the customer to buy, equal to the merit of the article itself. As one knows a true friend from long acquaintance and association, so it is that stock in trade that has stood the test of time is recognized as something safe to invest in.

CHURCH'S

ALABASTINE

Is a **PERMANENT** and **SANITARY WALL-COATING**, that **hardens with age**. Has been on the Canadian market and made in Canada for more than twenty years. Is extensively sold and persistently advertised. Sells without effort and affords a good margin of profit. The country is full of cheap kalsomines, foreign-made; but what does it profit a dealer to sell them and lose his reputation for dealing in only first-class articles?

ALABASTINE is **NOT A KALSOMINE**. We make **JELLSTONE, which is a Kalsomine,** and in point of merit as such has no competitor. If you **must have a temporary coating**, stock **JELLSTONE** which is Canadian-made goods. **ALABASTINE** satisfies the customer, and a satisfied customer is a splendid advertiser. **PUSH ALABASTINE.**

Look up your **ALABASTINE** stock. Do it this fall. Order now, from jobber or manufacturer. Spring dating.

THE ALABASTINE CO., Limited, - - Paris, Ont.

There's No Denying They're The Best

Whether you have written for Catalogue No. 7 or not, you must have been convinced by this time that

Gurney Cylinder Locks

afford a Hardwareman more profit and builders more lock value than any other cylinder locks you can think of.

And if you are convinced, why not act? If you believe the GURNEY-TILDEN guarantee is *something*, the GURNEY-TILDEN quality *something*—why not enjoy the advantages accruing? To see opportunity is good, to *seize* it—better. Delay no longer but get a copy of Catalogue No. 7. In it will be found full details concerning *Gurney Cylinder Locks*, and also numerous designs in artistic trimmings.

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Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

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Now ready for distribution and will be mailed on application.

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STEAM SUPPLIES and SPECIALTIES for

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Stationary and
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Locomotive and
Marine Brass Work

PIPE CUTTING TO SKETCH


Safety Valves


Reducing Pressure Valves


Steam & Oil Separators


Exhaust Heads

The James Morrison Brass Mfg. Co., Limited

89-97 West Adelaide Street, Toronto

PLUMBING AND STEAMFITTING

THE PLUMBING OF A COTTAGE.

UNDER the above heading Mr. J. A. Cardiff, architect, has commenced a series of articles in the National Builder, Chicago, the writer stating he proposes to illustrate modern plumbing in all its branches as applied

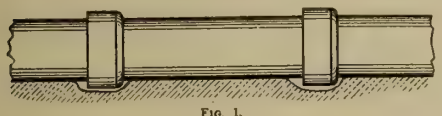


FIG. 1.

to cottages. By modern plumbing is meant all those sanitary improvemnets that have been made within the last few years, raising the standard of plumbing to its present state of excellency. Mr. Cardiff writes :

The bathroom that only a short while ago was looked upon as a necessary evil is to-day one of the foremost features of the modern home and one of which every progressive housekeeper is justly proud. It is well lighted; the walls and floors are tiled; the old foul-smelling, disease-breeding, boxed-in fixtures have been supplanted by "open plumbing" with modern fixtures that are the acme of sanitary perfection; and all exposed piping and fittings are nickel-plated. These improvements, with such appointments as nickel-plated soap dishes, towel racks, tooth brush holders, etc., have all combined to make the modern bathroom a "thing of beauty and a joy forever."

Equally important improvements have been made in the drainage and ventilating systems and the sizes and weights of pipes have, after careful study and much experimenting, been properly proportioned and definite rules and principles now take the place of guesswork.

The drainage system is so sealed and ventilated that it is impossible for sewer gas, with disastrous effects, to enter.

The water supply has also been greatly improved, reducing to a minimum the chances of disease from this source.

In presenting the subject, the first point we shall consider will be the house sewer, then the main trap and fresh air inlet, the house drain, and so on in the



FIG. 2.

order which the work is installed, until the entire system has been completed.

The House Sewer.

The term "house sewer" is applied to that part of the drainage system extending from a point about five feet outside of the outer wall of the building to its connection with the street sewer or other means of disposal.

When a foundation, consisting of a natural bed of earth or rock, can be obtained, the house sewer may be of salt-glazed earthenware pipe.

When the ground is made or filled in, or in any case where there is danger of settlement by frost or from any cause, and where a cesspool is used as a means of disposal, the house sewer should be of cast iron pipe of the grade known as "extra heavy."

When earthenware pipe is used it should be well burned, straight and cylindrical, and should be salt-glazed both inside and outside except that portion of spigot end and inside of hub to which the cement is applied. Common unglazed terra cotta pipe should never be used.

One of the best methods of laying earthenware pipe is to dig the trench so that the bottom will have the proper slope to the main sewer. The bottom should then be tamped down solid, and wherever a hub occurs, the earth should be hollowed out for it so that each length of pipe will have a solid bearing at every point, as shown in Fig. 1.

Unless the pipe has a solid foundation an uneven settlement is likely to occur. This forms a pocket as shown in Fig. 2,

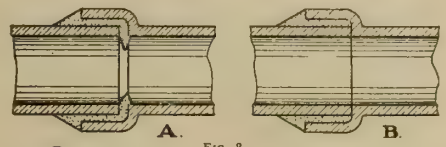


FIG. 3.

and usually breaks the cement joint, allowing the sewage to escape and sometimes leaving an opening through which the earth may enter, thus obstructing the flow, if not entirely stopping it, Even though the joint does not open up, the pocket forms a lodging place for water and solid matter, which retards the flow and in time causes stoppage.

In cementing the joints, only the best portland cement should be used, mixed half cement and half clean, sharp sand. Care should be taken that the spigot end fits well into the hub of the adjoining piece so that the cement will not protrude into the pipe as shown at "A" in Fig. 3. As an additional precaution, each joint, as soon as it is made, should be wiped on the inside so as to insure a smooth inner surface as at "B." If the cement was allowed to protrude, it would soon collect enough hair, lint and other matter, to entirely close the opening.

A better joint may be formed by first caulking the hub with oakum and then cementing. This joint prevents the cement from protruding in the pipe, and, as there is a tendency on the part of the mechanic to neglect wiping the joint on the inside, it is preferable, for this reason also, to use oakum and cement joint.

There are, of course, many ways in which the objections to the use of earthenware pipe may be overcome, but

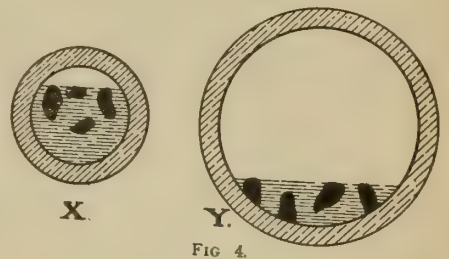


FIG 4.

they so increase the cost that it is advisable to use cast iron pipe, which, for many reasons, is preferred.

In filling in the trench, the earth should be carefully packed around the pipe and every foot in depth should be well tamped.

When cast iron pipe is used, it should be pitch-coated both inside and outside, sound, cylindrical and smooth, free from cracks, sand holes and other defects, of uniform thickness, and of the grade known as "extra heavy." The use of standard pipe, although permitted by the plumbing laws of many cities, should be discouraged,

The weights of standard and extra heavy cast iron pipe per lineal foot are as follows :

Diameter	Standard.	Extra Heavy
3 inches.....	4½ pounds	9½ pounds
4 inches.....	6½ pounds	13 pounds
5 inches.....	8½ pounds	17 pounds
6 inches.....	10½ pounds	20 pounds

The joints should be made with picked oakum and molten lead and hand-caulked gas-tight. Twelve ounces of lead should be used at each joint for each inch in the diameter of pipe. Another joint occasionally used is made by caulking with picked oakum and filling with "Smooth-on" or a rust compound. This joint, however, has no particular advantage over the preceding one for cottage work. The lead-caulked joint in-

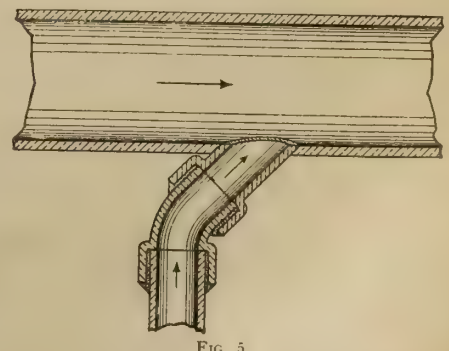


FIG. 5

sures a perfectly tight connection and is not easily broken by uneven settlement.

Drains should have a straight and

uniform fall throughout so as to give the water a velocity sufficient to carry along the solids that accompany the water. A fall of one-half inch to the foot will accomplish this result, but a greater inclination should be given where possible.

The pipe should be large enough to readily carry off the largest amount of water that will enter it at any one time; yet must not be so large that the ordinary flow of the water will be too shallow to float and carry along the solids. Fig. 4 at "X," illustrates the proper flow of water through a four-inch pipe and at "Y," shows the result of using an eight-inch pipe for the same amount of water. In the first case, the solids float and move along as rapidly as the water; while in the latter case, the solids rub against and cling to the inner surface of the pipe, thereby retarding the flow.

A drain four inches in diameter is usually sufficient for an ordinary dwelling unless the rain leaders empty into it, in which case it should be five inches or six inches in diameter, according to the size of the house.

The house sewer should enter the street sewer at an angle of 45 degrees through an eighth bend, so that the

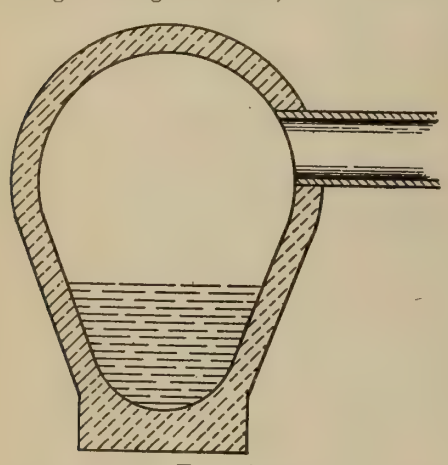


FIG. 6.

sewage from the house enters in the same direction as the flow in the street sewer. See Fig. 5.

The arrows indicate the direction of the flow. A Y branch is usually provided on the street sewer for the connection with each house sewer.

When the street sewer is constructed of brick, the house sewer should enter it at a point just above the centre of the arch as shown in Fig. 6.

HUMIDITY OF AIR.

In a recent investigation, it was discovered that while the normal humidity of outside Winter air is about seventy-two per cent, the average relative humidity of the air in a house heated by steam and hot water with an average temperature of seventy-two degrees, was twenty-eight per cent. The humidity of the same air after being heated by a hot air furnace, was twenty-four per cent. From these observations it is safe to assume that the average relative humidity of dwellings and offices during the portion of the year that requires artificial heating, is about thirty per cent or perhaps forty-two per cent. less than the average outside humidity —dryer than the dryest climate known.

MORE SENSATIONS IN PLUMBERS' TRIAL.

ANOTHER eventful week has passed in the "combine" investigations, the chief features being the wholesale issuance of summonses calling upon practically every master plumber and supply man in Toronto to appear in the Police Court on Friday, December 1; the extension of the case by the seizure of the books and commencement of the prosecution of the members of the Hamilton association, and the practical calling off of the investigations into the existence of other trade "combines."

* * *

It is common talk on the street that the plumbers are to be made the scapegoats of the cases against the various trade associations, public sentiment against combines being strong enough to demand the sacrifice of some heads. Rumor has it that Crown Attorney Curry dug too deep and having unearthed an association of manufacturers having a rebate of 30 per cent., one of the prominent members of the Dominion Cabinet being interested, the Crown Attorney will now devote all his energies to punishing the plumbers, leaving the investigation of the other "combines" to a commission to be appointed later on, after the public's wrath has been appeased by the punishment of any plumbers convicted of wrong-doing.

* * *

Informations were sworn out last Saturday charging that during the years from 1902 to 1905 these defendants conspired together "to unduly limit the facilities for producing, manufacturing, supplying, and dealing in plumbers' and steamfitters' supplies, brass goods, boilers and radiators, articles and commodities which may be the subject of trade and commerce, and also that they tried to injure trade, to prevent competition, and to raise the price of such articles 'to the evil example of all others in like cases.'"

The representatives of the larger firms within and without the city against whom informations have been sworn are: Edward Gurney, F. Somerville, P. McMichael, C. E. Morrison, J. H. Paterson, A. D. McArthur, H. W. Anthes, L. L. Anthes, Toronto, A. W. Mann, Canada Brass and Supply Company, London; T. A. Stevens, Empire Manufacturing Company, London; J. M. Taylor, Taylor, Forbes & Company, Guelph; Alex. Saunders, Goderich Organ Company, Goderich; W. W. Near, Page-Hersey Company, Guelph; C. J. Brittain, Canadian Fairbanks Co., Toronto; L. Payette, Warden King & Son, Montreal; R. J. Cluff, Toronto; W. V. Shaw, Robert Mitchell & Co., Montreal; W. G. Harris, Canada Metal Co., Toronto; R. Crashley, Toronto; W. Minhinnick, Empire Manufacturing Co., London; W. C. Gurney, Gurney Foundry Co., Toronto; A. E. McArthur, Standard Ideal Sanitary Co., Port Hope.

* * *

The individual plumbers resident in Toronto summoned to appear are: W. B. Malcolm, J. T. Aggett, E. W. Aikins, G. Ashdown, W. G. Adams, B. Bryan, W. H. Benson, G. Clapperton, J. H. Berry, Nathan Blumbergh, Edward B. Bird, W. E. Boddington, John R. Bolan, E. Butler, J. R. Brown, David Clark, George H. Cooper, A. E. Cottrell, Wm. Clewes, Thomas Cook, Henry Dummond, J. Down, J. H. Erwood, A. A. Earl, James J. S. Ellacott, J. Elliott, James Furey, J. J. Graham, A. Gibson, S. J. Greer, J. Gibbs, F. Gates, J. Gray, Jas. Fiddes, Alex. Fiddes, H. Hogarth, R. G. Henderson, A. J. Hutchinson, J. M. Haydon, T. H. Hutchinson, T. E. Hoar, W. B. Inwood, P. Jessiman, E. A. Janes, H. E. Jarman, Jas. B. Fitzsimons, J. E. Knott, J. Lawrence, J. J. Lyndon, R. G. Leaman, J. T. Lendreville, E. Larter, G. E. McDonald, John E. Fullerton, James W. Fullerton, Charles Robertson, W. J. McGuire, George G. F. McGuire, Neil McMullen, Denis McMullen, Angus MacPherson, W. J. McNamara, J. Monahan, Francis R. Maxwell, Herbert Johnson, J. I. Matthews, Daniel Menzies, G. F. Mason, Edward Myers, Carl J. Hillier, W. G. Minns, Watson Mashinter, S. J. Nixon, E. T. Needham, J. W. Oran, Henry J. Pell, W. Parmenter, John J. Power, James T. Power, J. L. Pincombe, Alexander Purdy, Percy C. Mansell, E. H. Phillips, C. E. Pickard, A. F. Passmore, J. H. Parkes, R. Paterson, Henry Richards, Alfred Richards, William H. Raine, Jacob Raine, John Ross, Robert Ross, R. T. Robinson, R. W. Robinson, A. J. Richardson, E. Restall, S. Ryding, John R. Seager, George Moore, T. W. Slean, W. J. Street, Abraham H. Stinson, John Toop, Arch. Allison, C. J. Tomney, W. Telford, Geo. J. Thompson, Wm. N. McConnell, J. H. Thorn, H. Tweedy, George Wallis, E. J. Wallis, W. E. Wiles, W. Walker, G. W. Wallace, H. Warwick, M. P. Warren, A. Welsh, Joseph Westwood, E. Willett, John Wright, R. Wright, S. Wright, Walter Wraly, Daniel J. Morgan, R. M. Yeomans, A. M. Bond, James J. McKittrick, James H. Wilson, Wm. Bush, James Richards, Peter McCann, and J. W. Priestley.

* * *

Crown Attorney Washington, of Hamilton, on Tuesday seized the books of the Hamilton Master Plumbers' Association and the following were summoned to appear at the Police Court on Thursday to answer to a charge of conspiring to prevent competition and keep up prices: Adam Clark, J. F. Cummings, Robert Fitzsimmons, William Fitzsimmons, H. Harding, Herbert Jones Co., J. F. Kennedy, G. T. Myles, Henry Morley, Stephen Mellon, Andrew Rogers, W. D. Smith, J. H. Stewart, Hugh Wallace, W. J. Walsh, Isaac Walsh.

* * *

On Monday the cases before Judge Clute came up for hearing in the Assize Court. Rev. J. A. Macdonald answered to the charge of publishing a scurrilous poem attacking plumbers. "I think the lines are a prejudgment of the case," said Justice Clute. "If it were the right of the press in any criminal case to express opinions as to the guilt or innocence, nothing would interfere more with the administration of justice. I am surprised at the stand taken by Mr. Macdonald in refusing to apologize for the assertions he has made. I should have thought that the responsibility would be met by a statement that not knowing anything about its publication he regretted it and would promise that it would not be repeated. As it stands, however, I decline to inflict any punishment on this application. However, the

court demands that the press should not give any expressions of opinion during the time a trial is pending.

* * *

Evidence was given by G. W. Guest, a non-member of the association, who recited the troubles he had in securing supplies, stating that he had bought for cash several thousand dollars' worth of goods. His credit he admitted to be bad and his buying such large quantities for cash is denied by the supply houses, their cash sales never having been as large as he stated.

Mr. A. W. Mann, of London, produced, on the order of the court, originals and copies of letters he had received from and sent to plumbers not members of the combine. In every case such firms were refused goods by Mr. Mann, who frankly stated in all his letters that he refused the supplies because the would-be purchasers were not members of the Master Plumbers' Association. Other witnesses called were Secretary Morris, of the Supply Association, and Secretary Meredith of the M.P.A. The latter swore that the association had never received the $2,000 said to have been added to the School of Science job by the McGuire and Purdy-Mansell Companies. As the Government has not paid this account in full the association's $2,000, to be given in lieu of a percentage, may be deducted from the amount due the contractors. Mr. Meredith stated that the association's receipts had been $35,000, of which $7,500 had gone towards running expenses, $20,000 had been paid in dividends to members and the remaining $7,500 was in the custody of President Armstrong. The court adjourned until Monday, December 4, when it is expected to sit continuously until the cases are disposed of.

* * *

On Tuesday the police court trials were resumed, members of the Plumbers' Union being put in the witness box to show that the journeymen were working in agreement with the bosses. Crown Rttorney Curry made a close examination of the union's minute books and asked numerous questions of the witnesses regarding the withdrawing of union men from shops, the owners of which were non-members of the masters' association. He even tried to point out that the union men restrained trade by agreeing not to buy tobacco without the union label upon it, but Magistrate Denison ruled this point out. The cases continued on Wednesday and until Thursday noon. J. B. Reeves, the complainant, was in the box on Wednesday and gave some damaging evidence regarding the "I.O.U.'s" given by members of the association to him and by him to others before he withdrew from that body. According to him, and to Joseph Harrison, another ex-member who gave evidence, very few of the promises to pay were redeemed. Mr. Reeves made a distinctly grand stand play when he endeavored to show that he could not give evidence because of the oath he had taken as a member of the M.P.A.

* * *

Mr. B. J. Morris, secretary of the Central Supply Association, was recalled, and said there was a list of preferred buyers, dated March 8, 1904, to whom supply houses could sell at open prices. On that list were Bennett & Wright, Keith & Fitzsimons, Purdy, Mansell & Co., John Ritchie Co., W. J. McGuire & Co., W. Mashinter, and Fiddes & Hogarth. All the members of the old Plumbers' Supply Association became members of the Central Supply Association as a section. The new association had only one branch, with many interested, there being twenty-one members of the new association.

* * *

Other evidence was taken to verify agreements entered into between the various branches of the trade. At the close of the case the magistrate overruled several legal points made by Lawyer O'Donoghue, and committed the accused for trial. Messrs. Wm. Bush, W. J. Storey, W. J. Mason, C. J. Connor, F. Lawlor, L. Legrow, R. W. Harrison, C. H. Beavis, K. J. Allison, P. Hayes and Fred Armstrong were, therefore, bound over on $200 personal bail, and will appear at the assizes in January for trial. The case against W. J. Carrick, H. T. Bush and Alex. McMichael, supply men, and Messrs. Allison, Armstrong and Beavis, master plumbers, was adjourned for hearing in the police court on Friday, Dec. 8.

* * *

There is little to report regarding the other branches of trade charged with being controlled by "combines." During the week the grocers have become entangled in various charges made before the Tariff Commission, and by Crown officers at Hamilton. Various representatives of the hardware houses have made statements repudiating the charges made that certain branches of their business are governed by combines. The Radiator Association are said to have removed their books from the secretary's offices, and it is said that it will go much harder with their witnesses in court in consequence.

* * *

The drag net set out to draw practically every master plumber and supply man in Toronto into court may develop additional features of interest to the trade, but our report of Friday's trial must necessarily wait until next week's issue. It is deplorable, however, that the entire trade, fully 75 per cent. of whom have not been participants in the "I.O.U." or other systems taken exception to are to be given police court notoriety. If the action results, however, in clearing them before the public and centering the prosecution upon those who profited most by the procedures now said to have been illegal, the wholesale charges will have been productive of some good. It must be remembered, also, that so far the prosecution has only been heard. Later on the defence will have its inning, and there may be a different story to tell.

TORONTO PLUMBERS DEFENDED.

ALBERT WELCH, stove merchant and plumber, 302 Queen street west, Toronto, has taken up the defence of the master plumbers in the daily papers and in an interview with the Star brought out some strong points. Mr. Welch said that because a few members of the association had stepped beyond the bounds in the giving and taking of I.O.U.'s all those engaged in the trade should not be put under suspicion of having done the same things.

"I never gave nor took a rake-off of any kind, and there are plenty of others who would not countenance anything of the kind," said he.

Only What They Put In.

"Then we have been accused of making money out of the association. Though we did receive $100 apiece out of the funds at the end of the year, that was only getting back some of what we had put in for the running expenses of the association. While much has been said of how much we took out, little has been said of the sums we put in. If it were looked up, I think you will find that in most cases we put in a lot more than we got out of it.

"I joined the association, as did many others, so as to get supplies, and have not attended a meeting in a year and a half. The association was formed primarily with the object of meeting unfair competition from journeymen plumbers, who would take contracts to do jobs at 30 or 40 cents an hour, and charge nothing in the way of profit on the work. They had no capital to buy the necessary supplies, and would ask the owner to advance the money for them, just as is done to-day by some journeymen carpenters. It was impossible to meet such competition as this, and the result was that most of the smaller plumbers were in a bad way financially. There was scarcely a supply house in the city that would trust one of the smaller firms with $100 worth of goods. I went out of the business for a while myself.

Not Getting Rich Now.

"During the past two or three years things have been somewhat better, but even at that the majority of the plumbers have not been making money. I would not stay with it to-day if I could get out of it without injury to the rest of my business. I will give anyone the liberty to use my name, men and tools if they will pay me 5 per cent. on the business done. I am ready to show my books to anyone, and they will prove that there is not much profit in the plumbing business. I do not make more than 10 per cent. annually, if I make that, and it is hardly worth the worry.

"Talking about profits," he continued, "why, I make over twice as much per cent. on stoves, and on some lines of hardware four and five times as much. People do not kick, however, and express their wonder that such things can be made so cheaply. Plumbing is not the bonanza that some people think it is.

"Some people will call you up, and ask you to send a man up to fix something that is wrong. You ask what it is, and they don't know. You have to send up a man to see, and he then has to come back for what he wants, which may be one of a hundred different articles. Then, when you send the bill in for the full time taken in the work, the people will kick and want to know why the plumber didn't take what was wanted with him the first time he went. Plumbing is not all bread and honey by any means."

NATURAL GAS EXPLOSION IN CHURCH.

SHORTLY before noon last Saturday the Baptist church at Bunyan, eight miles from Sarnia, was wrecked by an explosion of natural gas, and Geo. Leggott, a farmer, had a remarkable escape from death. Natural gas from the oil wells on the Egan farm nearby had recently been piped into the church and connected for heating purposes, and Mr. Leggott and William Rowe had gone into the building to test the new arrangements in order to have things in shape for morning service. A noticeable odor of escaping gas led Leggett to go under the flooring to find the leak, and the lighting of a match caused the explosion. Both ends of the building were blown out, the front door being hurled 100 feet, and the furniture completely wrecked. The sidewalls and roofs remain intact. Rowe was covered with the wreckage, but escaped unhurt. Leggott's clothing took fire, his hair, eyebrows, and beard were burned off, and his hands and face badly burned, but the doctors are satisfied that he will recover.

ICE FOR HEATING.

THE use of ice for heating purposes is one of the oddities of our modern civilization. Often it happens that a train carrying fruit from the south to the northern market encounters a cold spell while en route. If the temperature goes below a certain point the perishable merchandise will be ruined. But it has been ascertained that such a misfortune may be prevented by covering the fruit car with a coat of ice—a thing easily accomplished by turning a hose upon it and allowing the water to freeze until the whole vehicle is enveloped in a glassy and glittering blanket.

It may, indeed, be appropriately called a blanket, inasmuch as it prevents the radiation of heat from the interior of the car. The ice being a good nonconductor, the warmth is retained and the fruit, or possibly it may be vegetables, goes on its way unspoiled even by zero weather.

Cars used for transporting oranges and other fruit from California to the east are often provided nowadays with large cylindrical "ice stoves," as they might be called, at each end, which, while useful in Summer time for refrigeration, are filled with ice during a cold spell in Winter. When the temperature outside is at zero or below, the ice, at thirty-two degrees Fahrenheit, is relatively warm, and thus the "stoves" described act as heaters.

NOVEL HEATING SYSTEM.

THE city of St. Thomas has just installed a system of heating for the public library and the city hall by utilizing the exhaust steam from the street railway engines and the electric light engines at the power house, which is now a waste product. The system is as follows: The exhaust steam is carried through a heater which is filled with small, corrugated copper tubes. these tubes being filled with water. In passing through this heater the water is heated to a temperature the same as the steam. Then, by means of a force pump, it is forced through a main pipe, 4 inches in diameter, to the buildings, where it is attached to the mains and the radiators in the buildings. There is also a return pipe which carries the water back after passing through the radiators, when it is again heated to any desired extent, the heating being regulated either by the speed of the pump or by control valves placed on the mains as they enter each building. The 4-inch mains and the return pipe which carry heat to the buildings are laid underground. They are covered with asbestos wool to prevent the heat escaping, and then wrapped with hemp packing and inclosed in a 12-inch vitrified tile with cement joints. The saving of this system will be practically the whole cost of heating the buildings with coal. There will also be the saving of the labor attending the firing of the furnaces.

MORE HEAT FROM A RADIATOR.

IN many rooms the radiator is either too small or the steam pressure is too low to maintain a comfortable temperature in severe weather. If the tenant is enjoying the many advantages afforded by central station electric lighting service, the matter can easily be remedied. Take the fan that kept you cool all summer and set it where it can blow against a large part of the radiator's surface. Turn it on at low speed, or at high if necessary, and your cold room will soon be thoroughly warmed. The philosophy of the thing is that steam at a low pressure carries much less latent heat than steam at a high pressure, and therefore warms the radiator so poorly that only a slight draft of air arises around the pipes, and condensation is slow. With the fan in operation there is a forced draft against the radiator that conducts a great deal more heat away from the iron, cooling it so that much more condensation of steam occurs inside it. The heat thus snatched from the reluctant radiator is held in the circulating atmosphere of the room, which is soon changed from cold to warm at a trifling cost for electric energy.

WELDING ALUMINUM.

ALUMINUM is a metal which is more and more extensively used each year. One of the great obstacles to its employment in many cases has been the difficulty of joining two pieces together. This trouble has been overcome by the utilization of a property of the metal, which property is remarkable in the degree of its development in aluminum, for it is in a minor degree recognizable in other metals. If aluminum is heated by a blowpipe it becomes coated with a thin film of oxide, and this forms or aids in forming a sort of bag of some strength. It is possible to melt a rod of aluminum, and to puncture the bag and let the melted metal escape, leaving a hollow shell behind it. The new process of joining two bars consists in heating the ends until they attain this state. They are then by a lever brought suddenly together, and simultaneously a screen is dropped in front of the blast lamp and a douche of cold water is caused to impinge upon the heated part. The result is an almost perfect weld. The theory of the action is this: The melted metal is held intact by the films of oxide which surround it. When the ends are pressed together the film is broken, and the metal of the bars flows together. At the very instant that this occurs the cold water is applied, and before the melted metal can run away it is solidified and the bars are joined. It is hoped, by using a mandrel, which is a cylindrical bar of iron fitting the interior of a pipe, that pipes of aluminum can be joined by this process.—Collier's Weekly.

THE UTILITY OF SYSTEM.

JUST the difference in the way the two men use their heads makes the difference in the way they conduct their business. Misdirected, systemless work will make any business management ineffective, while careful planning, simple, effective system, will aid even moderate ability to accomplish vast results.

* * *

How few business men make a study of the economy of time and energy of employes! They handle their goods over and over again. People are working at cross purposes everywhere, duplicating work, confusing orders. A little planning, a little more shrewd headwork, would save many a house from dry rot and paralysis.

* * *

These systemless men never stop long enough to think deeply into their business to plan comprehensively. They hurry to their offices, open their mail with a rush, look around the establishment a little, without ever acquiring that penetrating eye and sharp observation which characterizes the great merchant who uses his head. They do not penetrate beneath the surface of things, and get down to the core of principle.

* * *

In most of the smaller concerns which have never been able to rise above mediocrity, you will find high priced employes opening mail, sorting letters, sending out circulars, doing work which could just as well be done by low-salaried help. You will find people working at a disadvantage all around the establishment, doing the wrong thing, the uneconomical, unbusinesslike thing, just for the lack of a little thought projected into the system. Everywhere people are using their hands and their feet instead of their heads, trying to substitute muscle for brain.

* * *

All this hurry and flurry, rush and drive about nothing. It is the calm, cool, calculating head that gets things done. A level-headed, keen business man would go through such an establishment in his own line, and in a single day make comments, suggest changes, and give ideas which would revolutionize the whole business, and lift this mediocre concern into excellence.

* * *

Yet the proprietors of these small houses go through life complaining of their hard luck and the fates which kept them down. They lay their nonsuccess to a bad location or change of business, or too many competitors, when competent men all about them know that it is the lack of the proper use of their heads.

Plantagenet Ont.
Nov 6th 05

Messrs Fairbanks & Co
Montreal

Dear Sirs

I have been using one of your platform Scales in my Gristmill for over 25 yrs. It is now out of order - would you oblige and repair it & send it down? Please reply - It is a Platform Scale on wheels

Yours truly
A Hagar

RETURNED
DEC 1905

To Montreal
Cut Book 44
page 29

An Interesting Letter

——————and some people will persist in buying scales of an inferior grade which are constantly in need of repair.

This Fairbanks Standard Scale gave honest service for 25 years without repairs.

This letter was unsolicited.

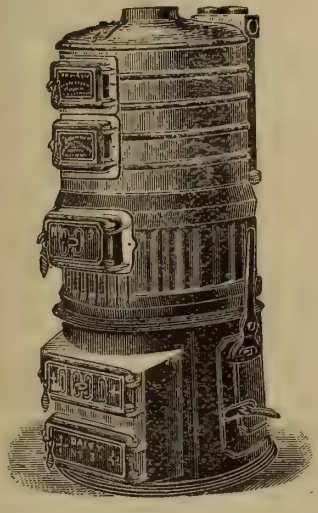
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Sales exceed all others.

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Write us first for our **PRICES** on our **NEW LINES** for 1906

such as **PENBERTHY**

STEAM WHISTLES

PLAIN BRASS TALLOW CUPS

CYLINDER OIL CUPS for Gas Engine

RADIATOR VENTS

We can save you MONEY

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Windsor, Ont.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, December 1, 1905.

ALTHOUGH navigation has closed and rougher weather set in, the local supply houses report they have not as yet noticed any falling off in orders, thus showing that the contracts under way are even more numerous and extensive than was supposed. The plumbing trade has enjoyed a wonderfully prosperous season in this province and indications are that the coming month will see very little abatement in the volume of business done.

There is one important change in price to note this week, namely that in solder, which has advanced one cent. Bar solder half-and-half guaranteed, is now quoted at 22c., while No. 2 (wiping solder) is now 18c. Another change which is likely to occur at any moment is in lead pipe. Owing to the fact that pig lead has once more advanced very sharply, it is expected that all lead products will have to follow the lead.

The shortage in iron pipe has somewhat abated since our last report, though it is still acute and iron pipe fittings remain in about the position previously noted.

Range Boilers—There has been no change in price, and the condition of the trade is just about the same as before. Our quotations are as follows: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The expectation is that prices will soon be withdrawn once more and higher figures substituted, owing to another sharp advance in the primary markets. In the meantime, however, we quote: as follows: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—There is still a great scarcity in this line and no improvement in the situation can be expected for some time. Our prices are: Discounts on all sizes of nipples up to 6-inch, 67 1-2 to 70 per cent.

Iron Pipe—The shortage which has existed for some time has at last abated somewhat, some of the local houses reporting themselves fairly well equipped now to meet orders. Our prices still remain as follows: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings—Business is decidedly brisk and prices are held firm. Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—The strength in the tin and lead markets has at last resulted in another advance in solder and we are now quoting prices one cent. higher than last week. Present quotations are: Bar solder, half-and-half, guaranteed, 22c.; No. 2 (wiping solder), 18c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, December 1, 1905.

SOLDER has advanced owing to the heavy advances of lead and tin, prices having stiffened fully one cent during the week. Lead pipe is still quoted at last week's figures, but another rise is looked for at any time. Pig lead is now quoted at $4.50 in ton lots and $4.75 in less than that amount, an advance of 25 cents. Pipe, therefore, is certain to move upward unless metal market conditions take an unexpected turn.

The supply houses are still loaded up with orders, the continued open weather keeping the plumbers busy. Many lines of material are getting very scarce owing to the heavy call and shipments are behind on closet bowls, woodenware and enameled goods. While there has been a slight falling off, trade is in a most satisfactory state for this season of the year.

Lead Pipe—Recent advances in pig lead make another advance almost certain. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 per cent.

Soil Pipe and Fittings—Buying is very active with prices very firm. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Quotations are steadier and the figures below are held to by most dealers. They are below what the manufacturers will sell for at this time, however. We quote: Black, 1-4 inch, $2.09; 3-8 inch, $2.09; 1-2 inch, $2.39; 3-4 inch, $2.98; 1 inch, $4.27; 1 1-4 inch, $5.84; 1 1-2 inch, $7.01; 2 inch, $9.35; 2 1-2 inch, $15.00; 3 inch, $19.35; galvanized, 1-4 inch, $2.91; 3-8 inch, $2.91; 1-2 inch, $3.22; 3-4 inch, $4.13; 1 inch, $5.93; 1 1-4 inch, $8.09; 1 1-2 inch $9.71; 2 inch, $12.95; 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.: nipples, 75 per cent.: iron cocks, 60 per cent.: Canadian malleable, 35 per cent.: American malleable, 25 per cent.: malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.: C. I. ceiling plates, plain or N. P., 70 per cent.: C. I. floor, 80 per cent.: hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Demand for boilers is very brisk as many contracts are being completed. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, 6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Another advance has been made and the majority of dealers are now quoting: Bar solder, half-and-half, guaranteed, 21 1-2c., and wiping at 20c.

Enameled Ware—Stocks are scarce and orders heavy. Last week's report had the advances on baths given as $15. This was a typographical error and should have been 15 cents. Our new quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

RAMSAY'S ALUMINUM PAINT

The beautiful silvery Paint—better and cheaper than silver—must be made right for right effects. Splendid for store fronts, stove-pipes, radiators, decoration work and a hundred wants. Mixed ready for use, in handsome tins from ¼ pint up.

Ramsay's Aluminum is right Aluminum.

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Est. 1842 MONTREAL PAINT MAKERS

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"Solid-Adjustable" DIE MACHINE

Ask for Catalog J.

The "BORDEN" Machines are constructed entirely of Malleable Iron and Steel.

M. E. MURRAY

CANADIAN DEALER IN

"THE BORDEN"

Pipe Threading Machinery and "Solid-Adjustable" Dies

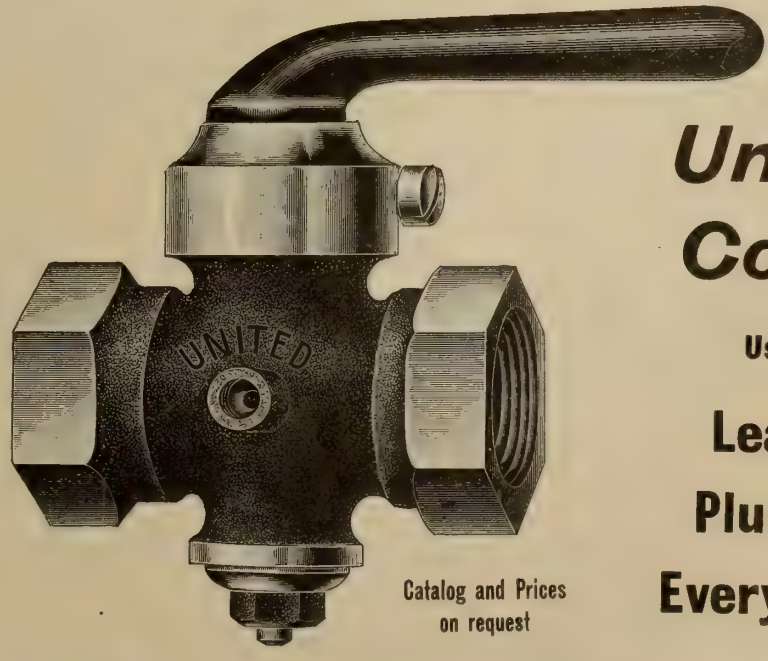
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United Brass Goods for your Plumbing.

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None Better Made

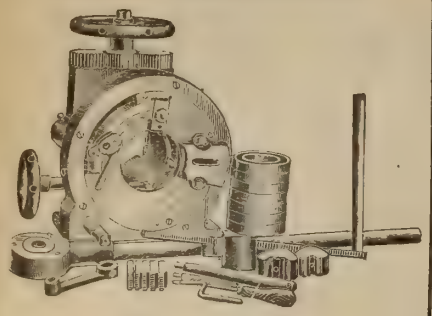


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on United Cocks Used by Leading Plumbers Everywhere.

UNITED BRASS MFG. COMPANY, CLEVELAND, OHIO

Merrell Portable Hand Machines



Nos. 5, 6, 9 and 11

These machines have our standard adjustable quick-opening and closing die head, and our improved cutting-off knife. The chasers are five in number for our Nos. 5 and 6 machines, and six in number for our No. 9 machine, and eight in number for our No. 11 machine. They are set by graduation to any size desired, are released from threading while in motion, opened to permit the pipe to be cut off, and closed instantly and positively, one set being used to thread several sizes of pipe. No. 11 cuts and threads pipe 4 to 12 inches, inclusive.

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NEWMAN'S INVINCIBLE FLOOR SPRINGS

Strong, Quick, Reliable, Effective.

Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.

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At the Same Price

Isn't it Best to use the Kind that are

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ENGLISH PLUMBERS QUARREL.

CANADIAN plumbers are having troubles of their own, but that they are not the only oysters in the soup is shown by the fact that the trade in England is in the midst of a warm controversy. The Master Plumbers' Association, organized in 1895, has now 1,470 members, being well representative of the trade. The Worshipful Company of Plumbers, however, seeks control of the trade and is backed by the Society of Operative Plumbers, the strength of which body is not stated.

In order to throw light on the present dispute, it is necessary to review the past connection of the two factions with the plumbing trade of the country. The Worshipful Company of Plumbers was founded in the fourteenth century, and from what is known of the conditions of town life in those days it may be doubted if the sanitary side of the plumber's craft received much attention then; certainly, from the times when plumbing became a modern calling until about ten years ago the company never claimed connection with the trade. But about the year 1895 those managing the affairs of the company took steps to connect the ancient foundation once more with the craft that had given it its name, and a scheme was started under which plumbers, upon passing certain examinations and paying certain fees, could obtain from the company a certificate of registration, and the right to add the letters R.P. to their names. The scheme is not compulsory, but the company has promoted some six or seven bills in Parliament with the object of securing for itself a very considerable measure of control over the plumbing craft. All these bills have suffered shipwreck, and in the course of their promotion the company has encountered the opposition of the leading authorities on technical education in the metropolis. Discouraged by its Parliamentary ill-success, the company has lately tried to achieve some of its objects by the aid of a Water Regulations Committee composed of representatives of water companies, architects and others, with a view to procuring a set of rules applicable to the supply of water. The clerk of the plumbers' company also acted as clerk of this committee, whose report is now under consideration by the Local Government Board, which must sanction the proposals before they can be put into force.

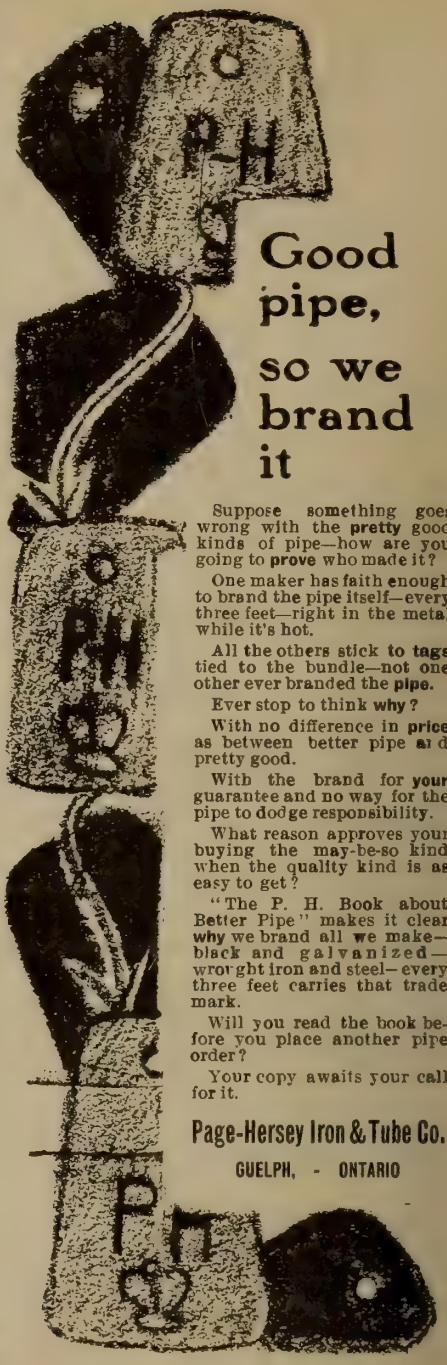
A LETTER FROM OTTAWA.

Editor Hardware and Metal: In all protective countries is it not admitted that the consumer is as well protected as the producer, society being so interwoven that where the methods employed by the one were revealed it was only to show corresponding methods of the other? In Canada the Government protects itself with marvelous success. Has it not facilitated the development of all things? Have not the employer and employe under the magic of combination learned of its virtues? Has not the consumer learned that his powers of consumption are greater under combination? If not he is too blind to see and too deaf to hear.

Let those critics of trade associations ask themselves how much this favored country protects them.

Yours truly,
PLUMBER.

Ottawa, November 27, 1905.



Good pipe, so we brand it

Suppose something goes wrong with the **pretty** good kinds of pipe—how are you going to **prove** who made it?

One maker has faith enough to brand the pipe itself—every three feet—right in the metal while it's hot.

All the others stick to tags tied to the bundle—not one other ever branded the pipe.

Ever stop to think **why**?

With no difference in price as between better pipe and pretty good.

With the brand for your guarantee and no way for the pipe to dodge responsibility.

What reason approves your buying the may-be-so kind when the quality kind is as easy to get?

"The P. H. Book about Better Pipe" makes it clear **why** we brand all we make—black and galvanized—wrought iron and steel—every three feet carries that trade mark.

Will you read the book before you place another pipe order?

Your copy awaits your call for it.

Page-Hersey Iron & Tube Co.

GUELPH, - ONTARIO

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CONTRACTS

mean dollars for the pockets of contractors. The weekly reports in the

CANADIAN CONTRACT RECORD

tell where contracts may be had.
$2 per year buys them. Address

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Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.

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TIME AND PROFITS

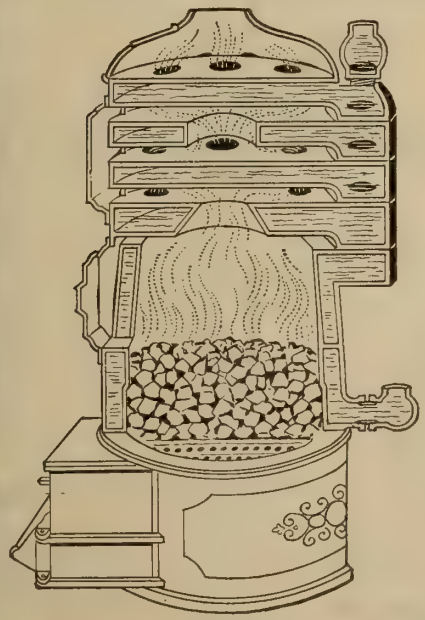
Time wasted in firing up any heating system after the job is finished means profits lost An hour now—a day later—a few hours again don't look much—but count up what all this extra not-paid-for time amounts to you in dollars and cents.

Doesn't it surprise you?

Your margin of profit is profit when you instal the

OXFORD HEATING SYSTEM

because it "stays put," as the boys say. When you're finished with the job you are finished.



Our Oxford ("B" Series) Boiler is the most powerful, as well as economical heating apparatus on the market. As a practical man you will notice its immense superiority by a glance at the cut. The principal feature of the Boiler is the improved build of the Fire-pot, which is wider at the bottom than the top. The heat cannot pass by the overhanging upper walls—as it does with vertical walls—and must add greatly to the effective heating power of these surfaces besides assuring fuel economy.

A joint that cannot leak. The old method of making joints by squeezing in layers of rubber added greatly to boiler defects. Our Oxford Steel Push Nipples make a permanent metal-to-metal joint and we use them in making all connections.

A combination hard to equal. Oxford Steam and Hot Water Radiators used with Oxford Boilers assure a perfect distribution of heat, beauty, economy and a comfortable home.

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WE also manufacture Cast Iron and Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of Cooking and Heating Apparatus, Plumbers' Supplies.

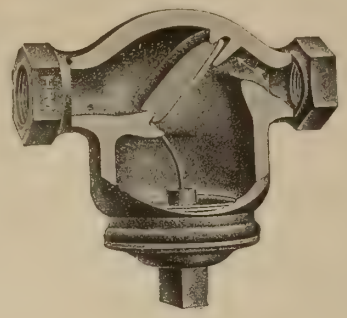
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TORONTO WINNIPEG VANCOUVER

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MUELLER WATER STRAINERS

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It is an easy matter to make a customer feel at first that he has a good job of plumbing, but he isn't apt to remain in that frame of mind if his fixtures become clogged with sediment.

A Mueller Strainer connected in the service pipe will arrest the passage of such matter so that the fixtures can in no way be affected by it. It will make a customer continuously feel that his job is a good one.

The Mueller Strainer is made of cast iron, has a brass gauze screen and brass plug and is made for all sizes of pipe up to 3-inch.

Each Strainer bears the Mueller trade mark and is *unconditionally guaranteed.*

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We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

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If you refuse to "see" our proposition and take advantage of it—
The blame is your own entirely.

Here again we state it, as plainly as possible:—

You exhibit a line of NATURO CLOSETS in your showroom and explain their good features to your customers—
That's all you have to do.
We do extensive advertising
Refer all inquiries to you
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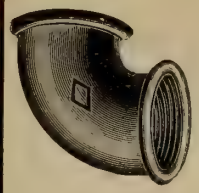
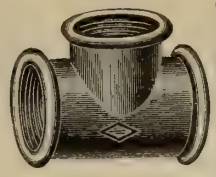


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C. H. MUCKENHIRN, President

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The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

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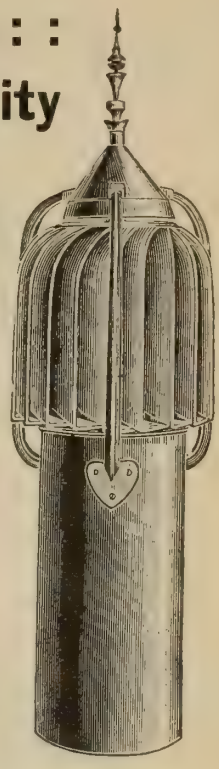
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These are the names that have been made synonymous with the

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We are the manufacturers of it and control the patents.

We have placed it on some of the finest buildings in the Dominion.

It is a scientific fact that no modern buildings can afford to neglect sanitation.

We are contractors and sanitary experts. Our ventilator is guaranteed and is placed in position to suit the building as to quality and size.

One Testimony:

MONTREAL, June 12th, 1903.
Canadian Pacific Railway Company.
Messrs. J. W. HARRIS CO., LIMITED,
7 St. Elizabeth St., Montreal, Que.

Gentlemen,—Answering yours of June 1st, I am not personally familiar with the merits of the "AEOLIAN" Ventilators but our Assistant Engineer, Mr. F. Crossley, reports that the Ventilators of this type manufactured by you and used by this Company at the Place Viger Hotel, Chateau Frontenac, Windsor Street Station and elsewhere, have proved satisfactory. Yours truly,
E. H. MCHENRY, Chief Engineer.

The J. W. HARRIS CO., Limited
Successors to LESSARD & HARRIS
General Contractors and Manufacturers
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WM. STAIRS, SON & MORROW, LIMITED

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Have a complete line in Enameled Sanitary Goods and solicit enquiries, and all Orders given prompt attention.

YOU CAN SELL IT

No doubt you believe there is need for a daylight-increasing system like

MAXIMUM LIGHT GLASS

If you believe that in a general way, why not in a **particular** way?

If MAXIMUM LIGHT GLASS is in demand in one city it is in demand in another city.

If a hardwareman can sell the glass in one town, a hardwareman can sell it in another town—**your town.**

When we tell you that there is no glass like MAXIMUM LIGHT GLASS for giving results we just prove to you that MAXIMUM LIGHT GLASS performs so well that no other glass could possibly compare with it.

MAXIMUM LIGHT GLASS was awarded the **John Scott Legacy Medal of Edinburgh** because it was the **most effective** daylight increasing glass.

Have you had a sample or our booklet?

Sole Canadian Agents

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

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HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our Illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

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A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

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Sole agents being appointed in each district. Write to-day.

Before placing orders for **CHAINS** and **ANCHORS, WIRE RODS, TUBES, ETC. ETC**, communicate with :

Rd. JOHNSON, CLAPHAM & MORRIS, LTD.
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who will quote delivered any point as may be required.

UTICA COMBINATION PLIER *(Six Tools in One)*
The Best Tool Made for All Around Use.



UTICA TOOLS LEAD IN QUALITY, DESIGN AND FINISH.

ASK YOUR DEALER FOR THEM or Write Us. — U TI CA TRADE MARK — ONLY THE GENUINE BEAR THIS MARK — UTICA DROP FORGE & TOOL CO. 296 Broadway

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made and backed up by a concern with fifty years experience, send your specifications to

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Write for prices and quantity discounts.

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Our PATENT WIRE BALE
can be used with the

METALLIC ASH-SIFTER

and the weight of the sifter be thus transferred from the operator to the fence or post. Our **Metal Cover** fits accurately on the sifter and prevents the dust from rising. A nice business can be done with the **Metallic Ash-Sifter, Patent Wire Bale,** and **Metal Cover.** DO YOU KEEP THEM?

C. M. CUTTS & CO., Toronto Junction, Ont., Sole Makers

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO



Kerr's "Copper-Alloy" Disc
GLOBE VALVES

are superior to any other disc valves on the market for high steam.
This is a very superior valve, at a moderate price.

The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE - ONTARIO

"BLACK DIAMOND"

TARRED FELTS
BUILDING PAPER

WRAPPING PAPER
SHEATHING

READY ROOFING

These five lines ought to be pretty well known by this time, for we have been manufacturing them for years. The durability, strength, fine appearance, etc., of our goods are not things that Hardwaremen can forget hurriedly.

"Cyclone" and "Joliette" brands of **Sheathing** enjoy a large trade. If you are not selling them you are missing business.

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Dec. 1 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire s to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 75	8 00
" " 26 "	8 25	8 50

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 97½	2 00
Forged iron "	2 22½	2 43
Refined " "	2 37½	2 40
Horseshoe iron "	2 37½	2 40
Hoop steel, 1½ to 3 in. base		2 75
Sleigh shoe steel "	2 07½	2 10
Tire steel	2 22½	2 25
Best sheet steel		0 12
B K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality, best warranted		0 18
"T" " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 65
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 16
" Silver steel		0 12
" Black Diamond	0 08	0 09
Thos. Jowett & Sons B.P.L. tool steel annealed		0 10½
Self-hardening		0 45
Rapid self-hardening		0 75
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.
The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
14 gauge		2 55
16 gauge	2 35	2 30
18 "	2 25	2 35
20 to 24 gauge	2 20	2 50
26 "	2 25	2 70
28 "	2 30	2 90

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

	Ordinary.	Dom. Crown.
Ordinary		2 75
All bright		3 75
Galvanized Canada Plates, 52 sheets		4 00
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.		Gordon Crown.	
16 to 20 gauge	3 10		
22 to 24 gauge	3 35	3 75	
26 "	3 60	4 00	
28 "	3 85	4 25	

Apollo.

10½ oz.	4 25
28 gauge (American gauge)	4 00
26 "	3 75
24 "	3 65

Comet Bell.	Queen's Head.
16 to 20 gauge 3 10	
22 to 24 gauge 3 35	3 60
26 " 3 60	3 85
28 " 3 85	4 10

American brands, $3.90 for 10½ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	
Jack chain, brass, single and double, discount 40 p.c.	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	19 25	19 50

Bars.

Cut lengths, round, ¼ to ⅜ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	23 00
Plain, 14 oz.	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 50	7 25
Part casks	7 75	7 50

LEAD.

Imported Pig, per 100 lb	4 30	4 50
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 05½
Sheets, 3 to 6 lb. "		0 05½

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.		14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 10 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.			
Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$19 15	17 15	
5 feet " "	20 15	18 15	
5½ " " "	21 65	19 65	
6 " " "	24 40	22 40	
Plate E II			
5 feet 2½ in. " "	18 65	16 65	
5½ " 2½ " "	20 15	18 15	

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c.	30 & 10 p.c.
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality	2 55	
" " " " " B "		2.40

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 09
⅜ "	2 09
½ "	2 37
¾ "	2 98
Black pipe—	Per 100 feet
1 inch	4 27
1¼ "	5 84
1½ "	7 01
2 "	9 35
Galvanized pipe—	
⅛ inch	2 91
¼ "	2 91
⅜ "	3 22
½ "	4 13
¾ "	5 93
1 "	8 09
1¼ "	9 71
1½ "	12 95
2 "	

Lead Pipe discount 25 per cent.
Malleable Fittiogs—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
12 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock net	1 90
No. 4 " "	1 75
No .7 Fuller's "	2 10
No. 4½, " "	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 65 per cent	
" " iron " " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS.

Copper, 30 gallon "	22 00
" 35 " "	24 00
" 40 " "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24 00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND HOUSEHOLD SHEARS

FULLY WARRANTED

The best Shear on the market for general house use, being an exceptionally fine cutting and wearing Shear.

Manufactured by our secret process.



ASK FOR DISCOUNTS

The Clauss Shear Co., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Montreal	Per lb. Toronto
Bar, half-and-half, guaranteed	0 22	0 21½
Wiping	0 18	0 20

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	....	0 08
Chrome yellow	....	0 15
Golden ochre	....	0 08
French "	....	0 06
Marine black	....	0 04
Chrome green	....	0 10
French permanent green	....	0 13
Signwriters' black	....	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 80
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	....	$5 25
Genuine, 100 lb. kegs, "	....	5 50
No. 1, 560 lb. casks, per cwt	....	5 00
No. 1, 100 lb. kegs, per cwt	....	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent
Carriage Bolts, common ($1 list	
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	0018

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb. per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 80

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80
Canadian pitcher spout	1 40

Hardware Merchants Fail

to please their customers and increase their trade if they don't sell Paterson's Building Papers and Wire Edged Ready Roofing.

Popular Goods and Reasonable Prices keep our Paper Mills and Factories running overtime.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90		15 00
91 to 95		17 50
96 to 100		20 50
101 to 105		24 00
106 to 110		27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley s discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ½-inch	per gross	9 00
Rope, ¾ "	"	12 00
Rope, ⅞ to 1-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch		4 50
" 5-inch		6 00
Zenith		9 00
Lane's covered—		
No. 11, 5-foot run		8 40
No. 11½, 10-foot run		10 80
No. 12, 10-foot run		12 60
No. 14, 15-foot run		21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)		3 75
" 1¼ x 3-16 in(100 ft)		4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.		
Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½
Light T and strap, discount 65 and 5 per cent		
Screw hook and hinge—		
6 to 10 in.	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { Head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 5 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to $5 00
Star, 12 to 16-in cut	2 75 to 3 05
Daisy, all sizes	2 50

Woodyatt ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ..... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary s Model galvanized oil can, with pump, 5 gallon, per dozen 10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

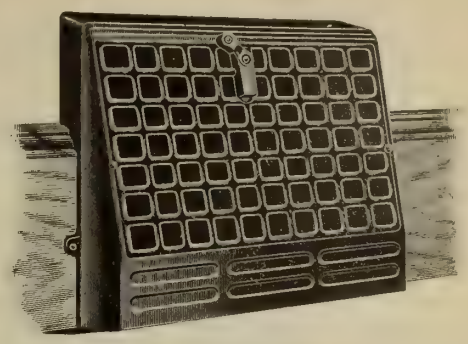
½ pint in tins	per gross	7 80
" "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ 40 per cent.

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers



H. & C. No. 100

HART & COOLEY CO.,
NEW BRITAIN, Conn., U.S.A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros ' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord. 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	0 85
" 18 x 30.....	1 00
" 18 x 36.....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "		6c. extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3.25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80 No. 19, $2.50. All prices per 1000 ft. measure F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 75
Galvanized, plain twist	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

Frequent attempts have been made to imitate

Storm King Track

without success, and it stands to-day in a class by itself—***The most perfect Barn Door Track*** made in Canada.

Every piece stamped "Genuine Storm King" with our name.
Insist on getting ***Storm King Brand.*** You will find it pays.

ASK YOUR JOBBER

MADE BY
SAFETY DOOR HANGER CO., - Hamilton, Canada



WALKER CORK SCREWS

are good holiday souvenirs and live sellers the whole year. Are made well and are made out of good material. That is why we guarantee every one that we put out. When ordering Cork Screws try **Walkers.**

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa., U.S.A.



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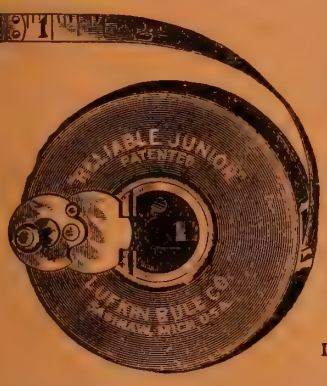
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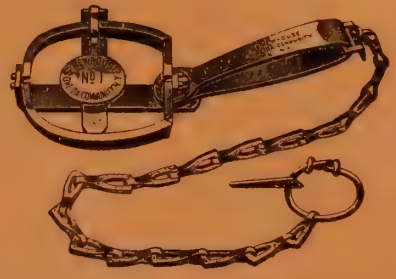
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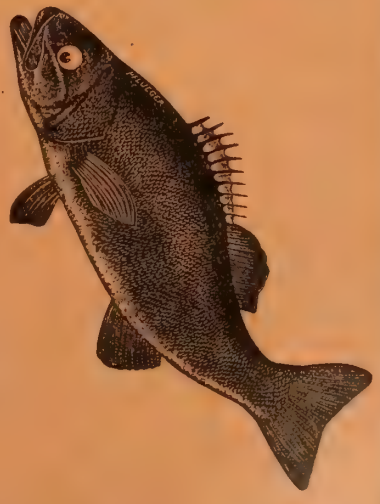
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THE GUTTA PERCHA & RUBBER MFG. CO.
of TORONTO, LIMITED

HEAD OFFICES,
47 Yonge Street, Toronto.
Branches: Montreal, Winnipeg, Vancouver.

SADLER & HAWORTH

LEATHER BELTING

"Crown Brand" Lace Leather

This is a LACE that we can recommend to anybody who is having trouble in getting something good.

Sold by the Side and in bundles of 100 feet.

Montreal, Toronto.

HARDWARE STORE NUMBER.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL, TORONTO, WINNIPEG, DECEMBER 9, 1905 NO. 49

EM BICKINSON'S

CARVERS
CASED GOODS
TABLE CUTLERY

TRADE MARKS
THE MURRAY
THE INVICTA
EL DORADO
CAMBRIDGE & C° ENGLAND
SHEFFIELD

BUTCHERS'
HUNTING &
POCKET KNIVES

CUTLERY.

FOR SALE BY LEADING WHOLESALE HOUSES

BEST STEEL SHEETS

"QUEEN'S HEAD"—softest and flattest made

"SOUTHERN CROSS" — Dead flat, quality guaranteed.

Also, good merchant quality, open and close annealed.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.

A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Canada's Most Expert Radiator Manufacturers

INCREASED SURFACE. LARGER CONNECTIONS.
REDUCED FRICTION. NEW DESIGNS.
SCREWED NIPPLES.

You will find these improvements on the

SOVEREIGN RADIATORS

and you will find them to be strong selling points.

We have been making radiators since 1886, so we ought to know something about Design, Workmanship, Efficiency, Appearance, etc.

SOVEREIGN RADIATORS stand as the evidence of what we know.

We can ship these radiators from our King St. West Branch, Toronto, on short notice. Don't you think you ought to carry SOVEREIGN RADIATORS?



Taylor-Forbes Company, Limited

TORONTO
21 Richmond St. W.

Head Office and Works:
GUELPH

MONTREAL
9 De Bresoles St.

See Classified List of Advertisements on Page 79.

CARVERS AND TABLE CUTLERY

RODGERS' BOKER'S and HARRISON BROS. & HOWSON'S CUTLERY



FISH CARVERS

in

IVORY, STAG OR PEARL HANDLES

RODGERS' BOKER'S and HARRISON BROS. & HOWSON'S CUTLERY

RETURNED
DEC 9 1905
Dinner.
Book 44
page 32
T.A.W.



PEN KNIVES



STAG-HANDLED CARVERS

in

THREE OR FIVE-PIECE SETS



RETURNED
DEC 9 1905

Pocket Knives

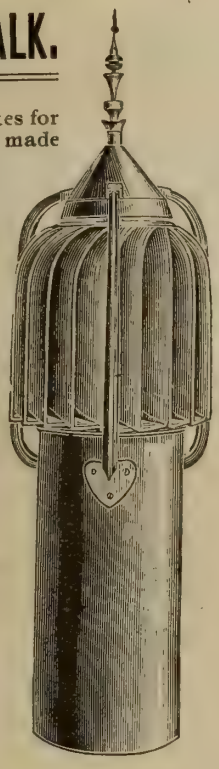
Write for Prices

RICE LEWIS & SON

LIMITED

TORONTO.

A COMMON SENSE TALK.



AIR IS CHEAP. You do not pay rates for air like you do for water, yet a big fuss is made over the impurity of water and very often no thought is taken of the impurity of the air breathed from day to day and night to night.

Crowded rooms, whether in public places, schools, opera houses or factories, require ventilation as well as the private dwellings.

HOUSE BUILDING IS A SCIENCE NOWADAYS AND NO BUILDING IS COMPLETE WITHOUT ONE OF OUR AEOLIAN VENTILATORS.

THE VENTILATOR ITSELF IS AN ORNAMENT and can be made to suit the character of the building either as to size or as to quality of material.

Ottawa, May 30th, 1901.

Ottawa University,

Messrs. J. W. HARRIS CO., LIMITED, Montreal.

Dear Sirs:—Your "Aeolian" Ventilators placed on our University since three years have given us entire satisfaction. BROTHER NORMAND.

Dealers everywhere will find a double profit in handling this ventilator. Write direct for catalogue and booklet to-day.

Learn about our system of ventilating. A pleasure to send books.

The J. W. HARRIS CO., Limited

Successors to LESSARD & HARRIS

General Contractors - *MONTREAL*

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

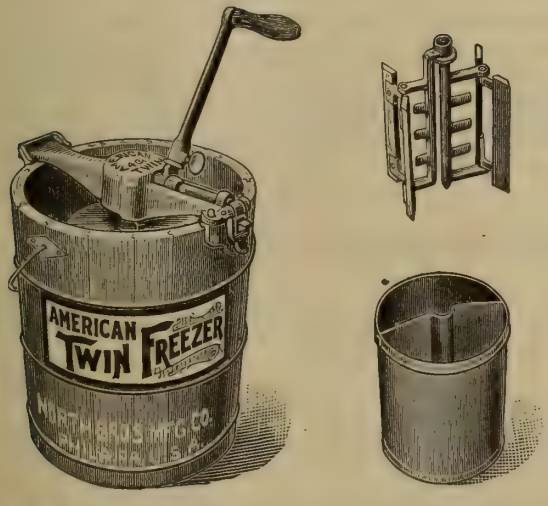
Smokeless and Black Powder.

THOS. BIRKETT & SON CO.,

LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.



"AMERICAN" (2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.

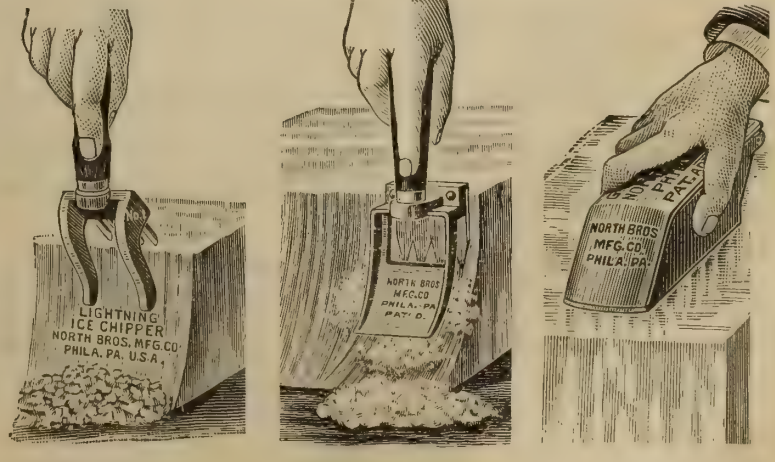
PHILADELPHIA, PA.

"LIGHTNING" "GEM" "BLIZZARD"



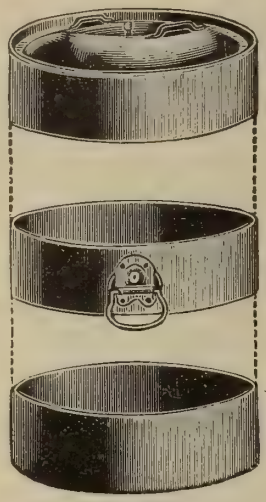
THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



"LIGHTNING" "CROWN" "GEM"
ICE CHIPPERS ICE SHAVE

Davidson's Milk Can Trimmings



IN COMPLETE SETS

"BROAD HOOP" Pattern—Composed of the following: 1 Broad Hoop Bottom, 1 Cover, 1 Centre Hoop 6 inches wide, 20 gauge, 1 Broad Top Hoop, 1 pair Cover Handles, 1 pair Side Handles.

and Milk Cans with Broad Hoop Patent Roll Rim Bottoms

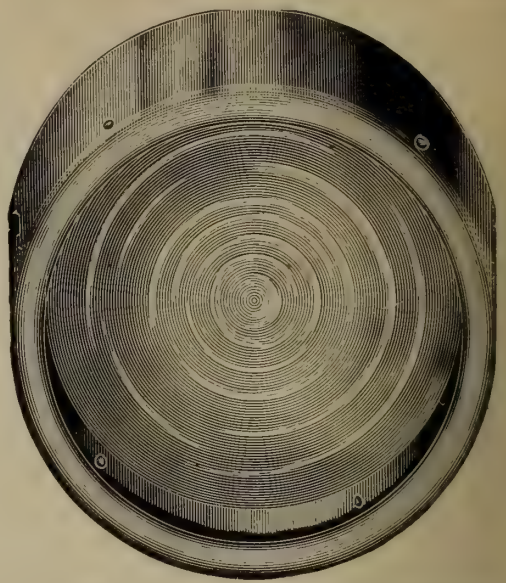
are in great demand and their general popularity is increasing yearly.

They give satisfaction to users and dealers alike.

IMPORTANT

The best mechanical skill obtainable is utilized to make Davidson's Milk Can Trimmings perfect in even the smallest details.

Write for Price List.



Heavy Rolled Edges make our PATENT BOTTOMS doubly durable and waggon and factory floor protectors.

Some customers do not like to send us small orders. That's a mistake. We take them, large or small. We are waiting for your order now.

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

M. & L. Samuel, Benjamin & Co.

have removed their offices and warehouse to 54-56-58 Front West.

M. & L. Samuel, Benjamin & Co.

TORONTO

English House—16 Philpot Lane, LONDON, ENGLAND

RETURNED DEC 9 1905



All Styles All Sizes

DISSTON FILES

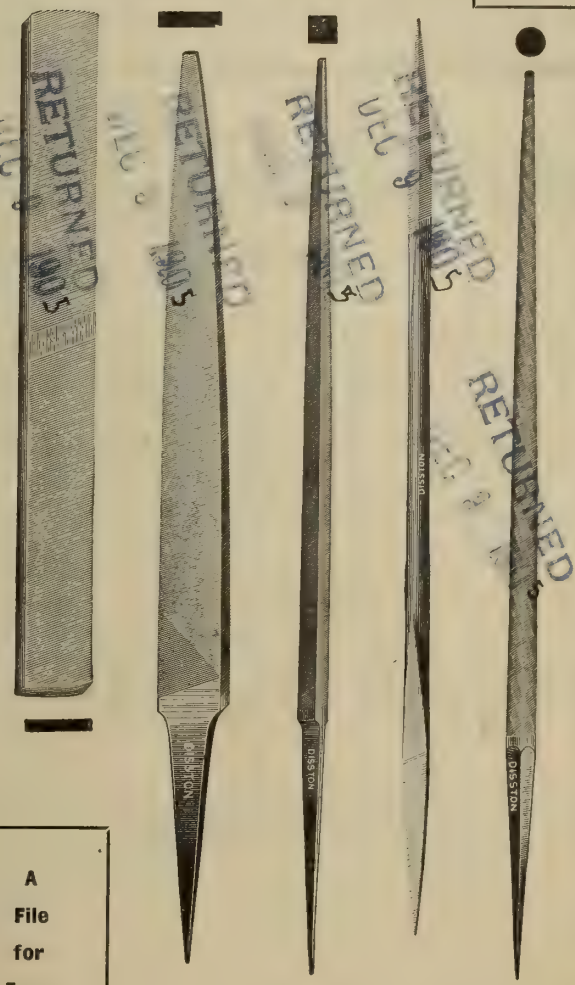
The Best By Test

INSURE SATISFACTORY SALES— TALK NOT NECESSARY

The real value of an article may be judged by the increase in the demand for it.

Judged by this or any other standard, the quality of "DISSTON" FILES cannot be questioned.

The dealer who invests in Disston's goods receives a double warrant—a binding guarantee, and unparalleled workmanship.

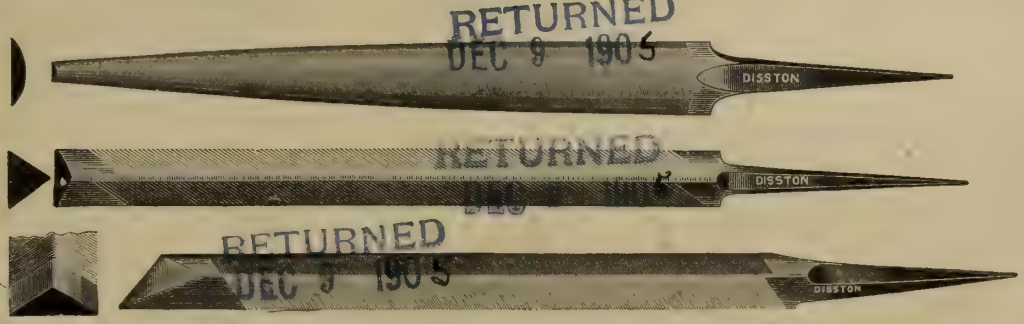


6 IN. 8 IN. 10 IN. 12 IN. 14 IN. 16 IN.

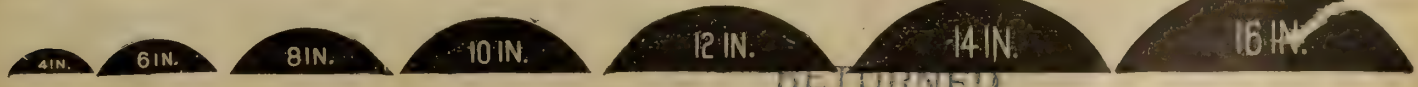
WRITE
LEWIS BROS. LTD.
MONTREAL

Ottawa Toronto Winnipeg Vancouver Calgary

A File for Every Purpose



See Catalog No. 31 for Full Line of Files



THEY CUT TO THE POINT

REGISTERED W TRUE TRADE MARK

"TRUE" BRAND SCISSORS

AND EVERY PAIR IS FULLY GUARANTEED

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE CALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

JOHN ROUND & SON, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
JR & S ALL THE ROUND JR & S
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON

Manufacturers of all Kinds of

GOLD, SILVER, ELECTRO PLATE ON NICKEL and BRITANNIA METAL GOODS, SILVER and PLATED CUTLERY, STEEL CUTLERY, OAK and INLAID GOODS
WITH SILVER AND PLATED MOUNTS

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

We want to mail our Catalogues to all Canadian Dealers, will YOU send us YOUR name?

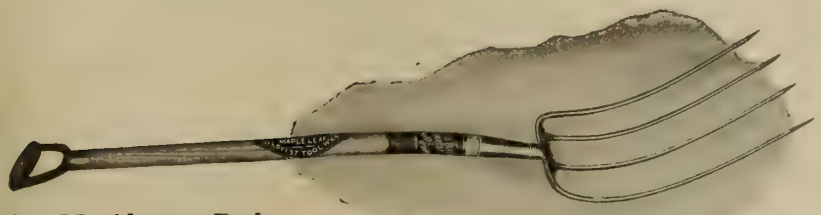
HOTEL and SHIP'S OUTFITS, special goods for hard wear. Special designs for all purposes supplied free.

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

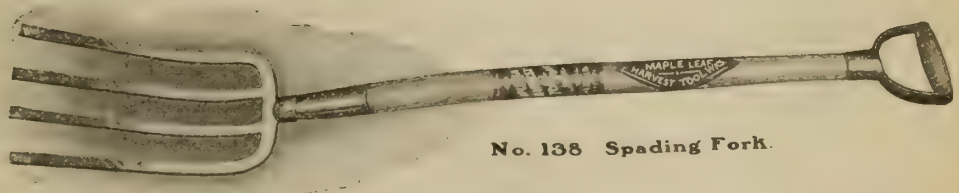
Showrooms and Warehouses: - Coristine Building, MONTREAL

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork.



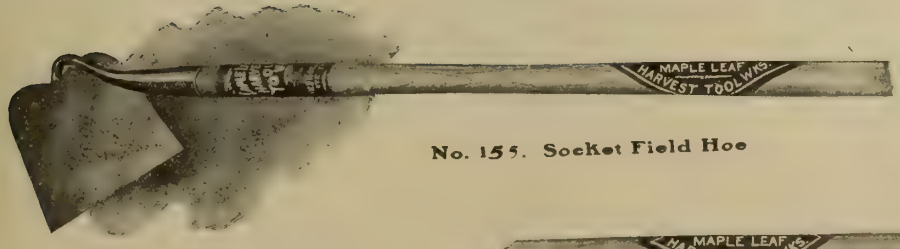
No. 138 Spading Fork.



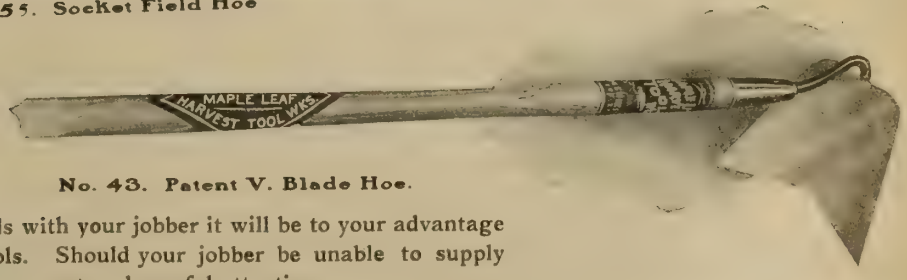
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

TO THE HARDWARE TRADE:—

When placing your order for harvest tools with your jobber it will be to your advantage to specify for the "**Maple Leaf**" Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Pink's Lumbering Tools

MADE IN CANADA

THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

Pink's Duck Bill Winter Cant Hooks, Handled in Split Maple.

Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

Boom Chains, Pike Poles, Skidding Tongs, Boat Winches, etc.

Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

I Can Furnish You with the

Brazil Patent Snow Plough and Road Maker;
also **The DesJardin Patent Log Sleighs**

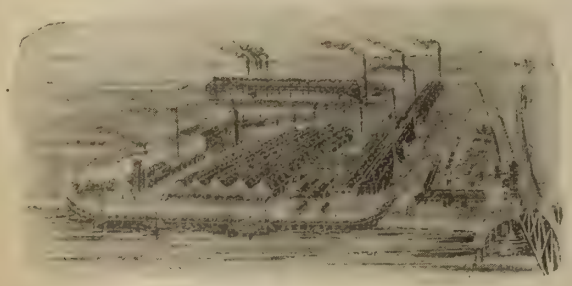
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THOMAS PINK & CO., Pembroke, Ont., Canada

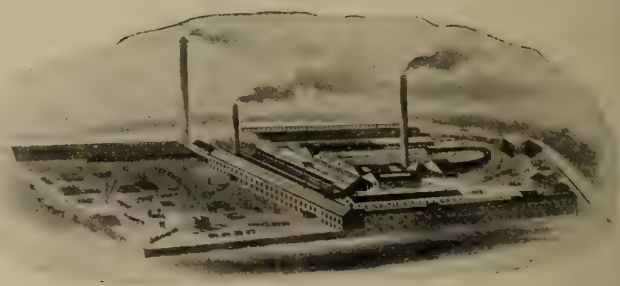
Long Distance Phone No. 87

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

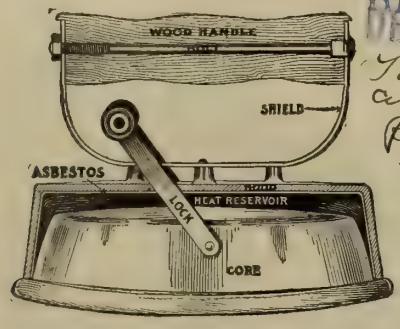
Agent: F. Hankin, Montreal

JUST A HANDFUL

is all there is to the handle of an Asbestos Cold Handle Sad Iron. That gives the best grip.

Beside, the handle is straight and does not tire the hand.

Asbestos keeps it cool.



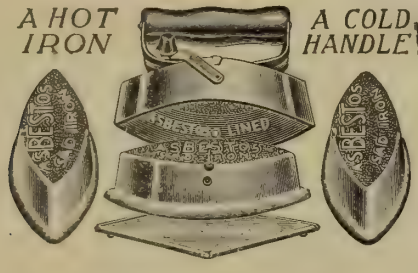
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To Owner
Cut Book 44
Page 35

The Core is solid iron, not hollow and filled with cement.

The Stand is sheet steel covered with asbestos. It is unbreakable.

The Makers protect the buyer with a broad guarantee.

The Irons sell themselves; they are advertised in the papers women read.



RETURNED
DEC 9

MR. DEALER

Don't you think these are good talking points for these irons.

Besides, they pay well.

Let us send some in your next shipment ?

No. 70 set, shown above, consists of 2 seven pound irons, one six pound iron, a handle and steel stand. Packed one set in a wood box.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants

Founded 1809 MONTREAL, CANADA

F. & W.

WIRE ROPE

GREENING

"ACME" BRAND

Highest grade of hoisting rope made.
Extra tensile strength for heavy work,
One strand painted green. Look for it.

Use Greening's Rope Grease for Lubrication.

THE B. GREENING WIRE CO.
LIMITED

HAMILTON, ONT. MONTREAL, QUE.

QUALITY COUNTS



That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

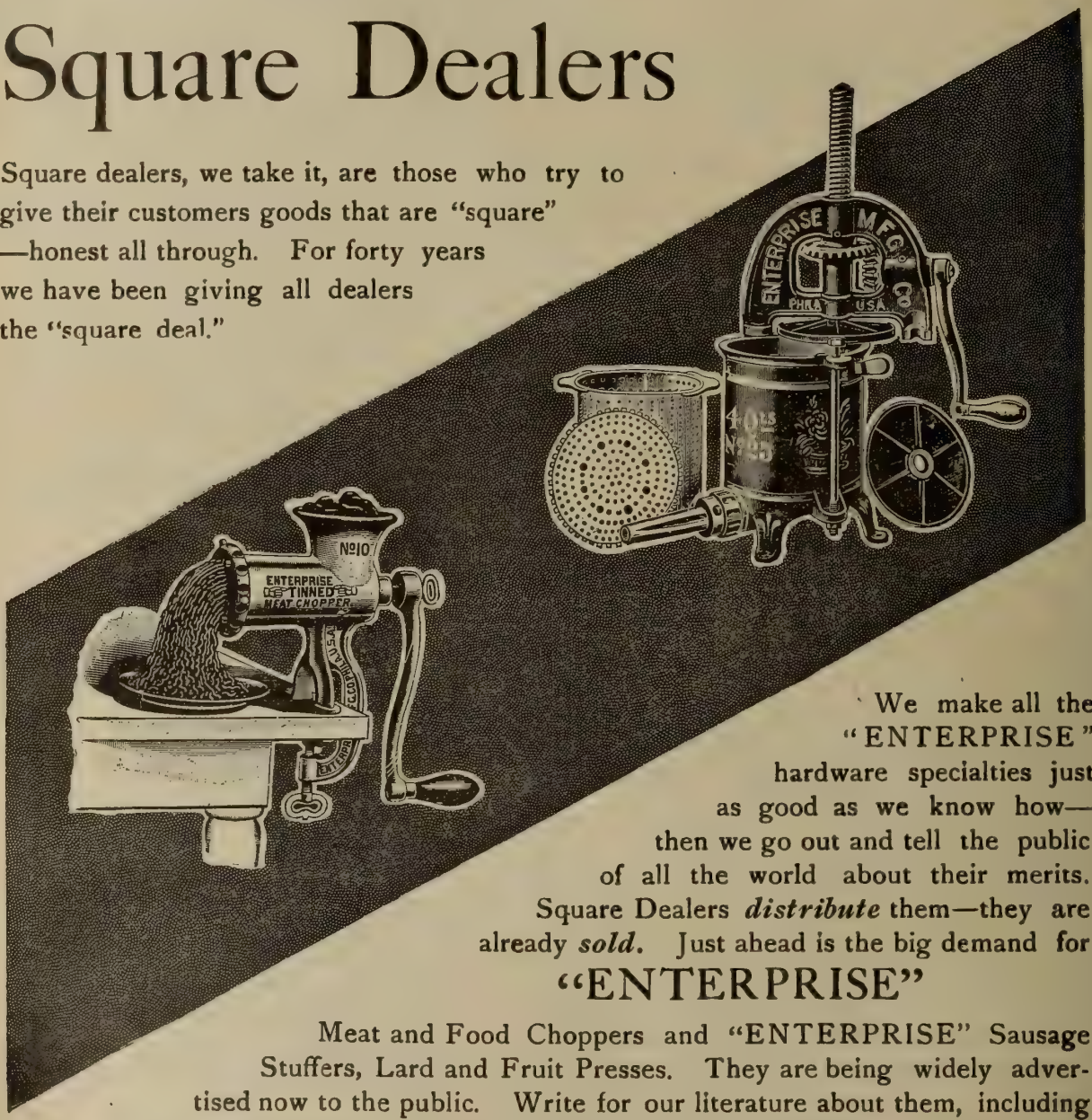
Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS
CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.

A SQUARE DEAL
FOR
Square Dealers

Square dealers, we take it, are those who try to give their customers goods that are "square" —honest all through. For forty years we have been giving all dealers the "square deal."



We make all the "ENTERPRISE" hardware specialties just as good as we know how—then we go out and tell the public of all the world about their merits. Square Dealers *distribute* them—they are already *sold*. Just ahead is the big demand for

"ENTERPRISE"

Meat and Food Choppers and "ENTERPRISE" Sausage Stuffers, Lard and Fruit Presses. They are being widely advertised now to the public. Write for our literature about them, including our new catalogue of all the "ENTERPRISE" specialties. Get ready for the biggest season you have ever seen on "ENTERPRISE" goods. We are ready. Get your share.

Increase your sale of "Enterprise" Meat and Food Choppers by using our new Booklet: "The Cook, Her Critic and—." We will send you a supply of these on request.

The Enterprise Manufacturing Co. of Pa.

New York Office, 10 Warren St.

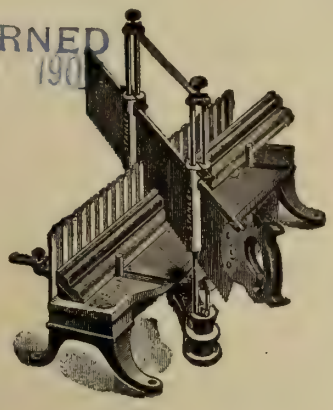
Philadelphia, U.S.A.

San Francisco Office 105 Front St.

STANLEY'S GOOD TOOLS

The "Stanley" Mitre Box

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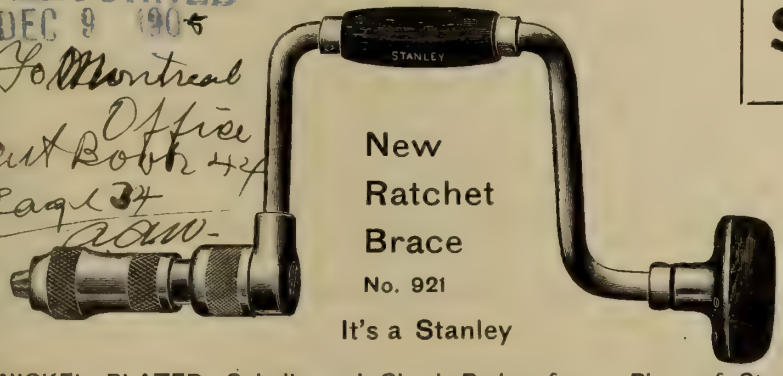
Can be set at any angle.

Specially adapted for sawing small work, as well as large.

All parts interchangeable.

Accurate, compact, strong and durable.

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To Montreal Office
Cut Book 44
Page 34



New Ratchet Brace

No. 921

It's a Stanley

NICKEL PLATED, Spindle and Chuck Body of one Piece of Steel, Hardened Steel Alligator Jaws, Concealed Ratchet.

Stanley's Eclipse Levels

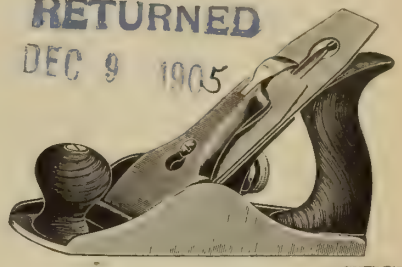
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No. 34. Sizes 4, 6, 8 and 10 inch

Bailey's High Grade Planes

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No. 4 Bailey

For All Purposes

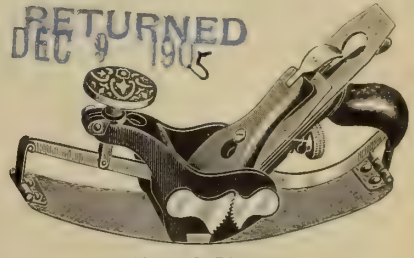
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No. 35 Bailey

No argument needed when selling Bailey Planes.

RETURNED DEC 9 1905



No. 113 Circular

They sell on their own reputation for quality.

RETURNED DEC 9 1905



No. 110

WHEN YOU NEED TOOLS REMEMBER

Stanley Tool Book No. 34 Free

Caverhill Learmont & Co

Canada's Great Tool Distributors

Montreal and Winnipeg

We manufacture Cordage and Binder Twine of every variety.
We solicit your 1906 business for the following brands:

Blue Ribbon,	650 ft.	per lb.
Red Cap,	600 "	"
Tiger,	550 "	"
Standard,	500 "	"
Golden Crown,	500 "	"

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX

BRANCHES:

W. A. C. HAMILTON, 11 Front Street East, Toronto, Ont.; F. H. ANDREWS & SON, Quebec, P.Q.;
MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.



Style "F"

The Very Newest

Combination, Bow Lever and Side Pedal drive; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



THE "SNOWBALL"

THESE ARE TRADE BRINGERS

W. L. HALDIMAND & SON,
MONTREAL,
Eastern Agents

Made solely by
THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, - ONTARIO

HOTEL DIRECTORY.

WINDSOR HOTEL, HAMILTON, BERMUDA

This House is pleasantly and conveniently located on the East Side of Queen Street. The rooms are bright and cheerful. Every attention paid to guests. Billiards and pool. Hot and cold water baths. A. McNICOL, Prop.

TOWER HOTEL, GEORGETOWN, DEMERARA, BRITISH GUIANA.

This first-class hotel is most conveniently situated in the coolest and healthiest part of the city. Five minutes from railway station and steamer stallings, and near to all principal public buildings. Cool and lofty bedrooms. Spacious Dining and Ladies' Rooms. Billiard Room. Electric light throughout.

VICTORIA LODGE

Mrs. J. F. SMITH, Proprietor. HAMILTON, BERMUDA

Opposite Victoria Park and Cedar Ave. Private board $12 to $14 per week.

BOARD AND ROOM

"THE ARGYLE,"

Mrs. FRASER Cedar Avenue, HAMILTON, BERMUDA

Terms moderate. Also furnished cottages.

THE AMERICAN HOUSE

A. PASCHAL (Prop.) HAMILTON, BERMUDA

Centrally located. Open all the year round.

WOODSIDE BOARDING HOUSE

(CORNER OF MAIN AND LAMAHA STREETS, GEORGETOWN, DEMERARA.)

Cool and airy Bedrooms, Excellent Cuisine, Attendance Qualified. Terms Moderate. Electric Car Loop at gate of premises. Patronage Solicited. Manageress, E. COTTAM.

WINTER RESORT—QUEEN'S PARK HOTEL.

PORT OF SPAIN, TRINIDAD, B.W.I.

JOHN MCEWEN, Manager. For Rates, etc., apply Trinidad Shipping & Trading Co 29 Broadway, New York.

THE GRAND UNION

The most popular hotel in

OTTAWA, ONTARIO. JAMES K. PAISLEY, Prop.

DOMINION HOUSE

W. H. DURHAM, PROPRIETOR. RENFREW, ONTARIO

The most popular Hotel in the Ottawa Valley.

THE TELEPHONE

Is a companion, friend and servant combined.
Invaluable for convenience in the household.

LONG DISTANCE TELEPHONE SERVICE

Has no equal for the facility it affords in business life.
Full particulars as to rates and service at the nearest office of

THE BELL TELEPHONE COMPANY OF CANADA

WE HAVE EVERY FACILITY TO TRANSACT
YOUR BANKING BUSINESS
AND INVITE YOUR ACCOUNT

THE METROPOLITAN BANK.

CAPITAL PAID UP, - - $1,000,000.
RESERVE FUND, - - 1,000,000.

SAVINGS DEPARTMENT at all branches.

Interest allowed on deposits of one dollar and upwards

WESTERN ASSURANCE COMPANY.

Incorporated 1851

FIRE AND MARINE

Head Office **Toronto, Ont.**

Capital	-	$1,500,000.00
Assets, over	- -	3,300,000.00
Annual Income	-	3,890,000.00

HON. GEO. A. COX, President.

J. J. KENNY, Vice-President and Man. Director.

C. C. FOSTER, Secretary.

Money

CAN BE SAVED BY MEANS OF AN ENDOWMENT POLICY.

YOU CAN ONLY SECURE SUCH A POLICY WHILE YOU ARE IN GOOD HEALTH.

Pamphlets and Full Particulars regarding the New Accumulation Endowment Policy sent on application.

Confederation Life ASSOCIATION

W. H. BEATTY, President.

W. C. MACDONALD, ACTUARY. J. K. MACDONALD, MANAGING DIRECTOR.

HEAD OFFICE, - TORONTO, CANADA.

BRITISH AMERICA ASSURANCE COMP'Y

FIRE AND MARINE.

Incorporated 1833

CASH CAPITAL, $850,000.00.
TOTAL ASSETS, $2,043,678.59.
LOSSES PAID SINCE ORGANIZATION, $25,868,544.80.

HEAD OFFICE, - BRITISH AMERICA BUILDING,
Cor. Front and Scott Sts., Toronto.

HON. GEO. A. COX, President. J. J KENNY, Vice-President and Managing Director
P. H. SIMS, Secretary.

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Leading Canadian Accountants and Auditors

adjusting and auditing accounts, arranging partnerships or organizing joint stock companies, devising special office systems, making collections and investigations, handling estates, making valuations, etc.

This space $30.00 per year.

This space $15.00 per year.

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Assignees, Chartered Accountants, Estate and Fire Insurance Agents.
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82 Canada Life Building, Montreal.
100 William Street, New York.

This list is for the purpose of placing manufacturers, wholesale and retail merchants and other readers throughout Canada, and firms abroad doing business in Canada, in touch with the legal profession throughout the Dominion, for the collection of accounts, legal representation,

LEGAL CARDS.

organization of companies, the arrangement or dissolution of partnerships, or assignments, as well as all other matters of a legal nature.

For advertising rates apply to MacLean Publishing Co., Limited, Montreal or Toronto.

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Barristers, Solicitors, Etc.
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Albert W. Atwater, K. C. Consulting Counsel for City of Montreal. Chas. A. Duclos. Henry N. Chauvin.

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Barristers, Solicitors, Notaries, Etc.
Offices, Bank of Toronto.
Tel. Main 3813. - - - - - Toronto, Ont.

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W. G. WILSON
Barrister, Solicitor, Notary, Conveyancer, etc.
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Hamilton, Ont.

WM. A. McLEAN
Barrister, Solicitor, Etc.
Head Office, Guelph, McLean's Block.
Branch Office, Acton, Town Hall.
Corporation Solicitor, Etc

ROBINSON & GREEN
Barristers, Solicitors, Etc.
John A. Robinson, John R. Green.
Solicitors for the Imperial Bank of Canada, the Southern Loan & Savings Co., St. Thomas, Ont.

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Solicitors for: Bank of Montreal, Canadian Bank of Commerce, Bank of Nova Scotia, Merchants' Bank of Canada.

This space $30 per year.

ALCOHOLISM

The best treatment for all persons affected with the disease of drunkenness, is known only to

DR. MacKAY, Address City Hall, Montreal, Que.

Absolutely private treatment.

The Belleville Business College, Limited

Business firms get the best results by applying to us 10 days before vacancies occur in their employ.

See Catalogue pages 21, 27, 33, 41.

J. A. Tousaw, Secretary. **BELLEVILLE, ONTARIO** J. Frith Jeffers, M.A., President.



THE UNDERWOOD

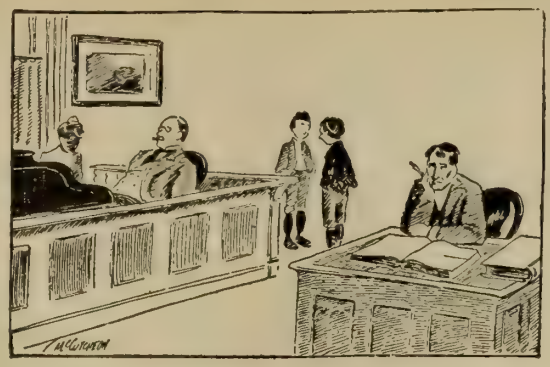
The Writing-In-Sight Typewriter

Will do your work 25% to 50% faster than any other writing machine. Highest award "Grand Prize," St. Louis Exposition, 1904.

UNITED TYPEWRITER CO., LIMITED

7 ADELAIDE STREET EAST, TRONOTO *and at* **99 ST. FRANCIS XAVIER STREET, MONTREAL**

HAMILTON LONDON OTTAWA QUEBEC ST. JOHN, N.B.



The NEW and the OLD WAY

DON'T WAIT 15 DAYS TO GET YOUR BILLS OUT

Have a stated time to render your bills, say the first of each month, and be prepared to do it. It cannot be done in the old way, but by the use of the

LOOSE LEAF SYSTEMS

it can be done. There is no worry in it either, for with it your accounts are always ready for rendering. Write us to-day.

The Rolla L. Crain Co., Limited
OTTAWA, CANADA

TORONTO—18 Toronto Street **MONTREAL—74 Alliance Building**

Trade With England

Every Canadian who wishes to trade successfully with the Old Country should read

"Commercial Intelligence"
(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)
Moreover, regular subscribers are allowed to advertise without charge in the paper.



Good Printing Cheap

THE KIND THAT BRINGS RESULTS

Just for instance:—1000 Statements, $1.50; 1000 Billheads, $1.50; 1000 Letterheads, $2.50; 1000 Envelopes, $1.25; The lot for $6.00.

G. A. WEESE & SON, Toronto, Ont.

Here Is A Seller!

You can sell a pair of **SCHUCHARDT & SHUTTE** Cogged Scissors to every one in your town who works with such materials as **leather, rubber, packing, linoleum** and **asbestos.**

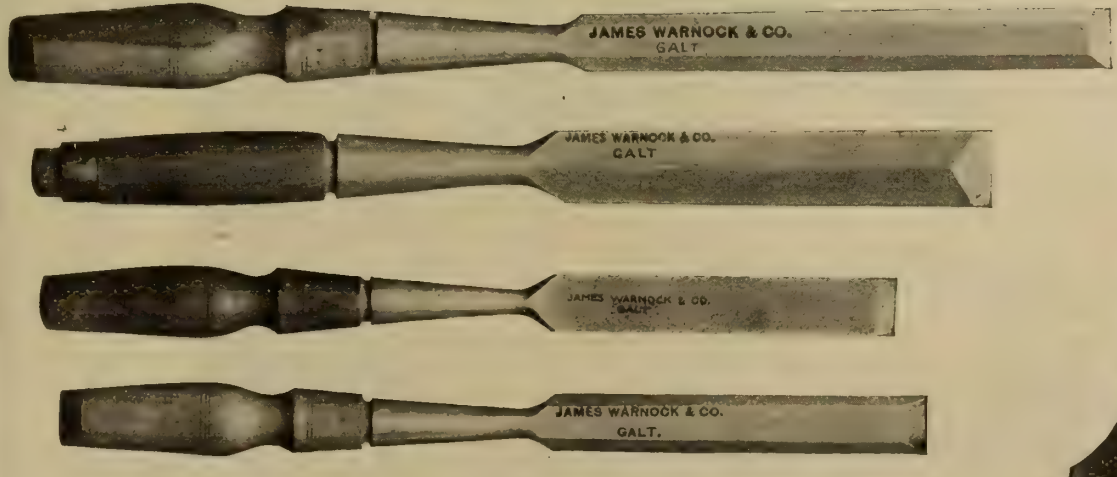
The lower blade is cogged, thus holding the material in place for the sharp upper blade to cut it.

Canadian Agents

McLEAN & SOPHUS, 301 St. James Street, MONTREAL

Warnock Tools

BEST IN THE WORLD





The Jas. Warnock Co., Limited. Galt, Ont.

TRADE MARK
This design a guarantee of quality.

WRAPPING PAPERS

ALL GRADES, AND BEST OF EACH
GREY, RED-BROWN, MANILLA, FIBRE, TEA, ETC.

SAMPLES AND PRICES FOR THE ASKING.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

SCHROEDER & STADELMANN
OBERLAHNSTEIN, A/M RHINE, GERMANY
ESTABLISHED 1862

MANUFACTURERS OF
TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc

SPECIALTY

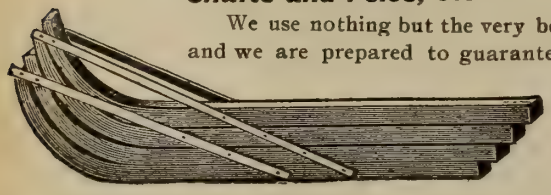
YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.

ESTABLISHED 1867

J. S. LOUGHEAD & SON, Sarnia, Ont.

Mfrs. of *Hubs, Spokes, Buggy and Waggon Rims, Sleigh Runners, Shafts and Poles, etc.*



We use nothing but the very best Hickory and Oak in our stock, and we are prepared to guarantee all of our goods. We carry an exceedingly large stock on hand and will ship promptly.

Your Order Solicited.

QUEBEC AGENT:—J. A. BERNARD, 21 St. Peter St., Quebec, P.Q.

Dealers should now order "CLABROUGH" SHOT GUNS for next Season's Trade

THEY SHOOT WELL!
THEY SELL WELL!
THE PROFITS ARE RIGHT!



Sole Manufacturers—
J. P. CLABROUGH & JOHNSTONE
WORKS—
Price Street, BIRMINGHAM, ENG.

...ESTABLISHED 1849...

BRADSTREET'S

Capital and Surplus, $1,500,000. **Offices Throughout the Civilized World.**
Executive Offices: Nos. 346 and 348 Broadway, New York City, U.S.A.

THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker o mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying and promulgating information no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

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THOS. C. IRVING, Gen. Man. Western Canada. Toronto.

If it's money you want, we can put you on the right road. Our



Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

JAMES & REID, Perth, Ont.
The Largest Manufacturers of Feed Boilers in Canada



Iron Roof Cresting
Finials
Iron Fencing

DENNIS WIRE AND IRON CO.
Send for Catalogue. LONDON, ONT



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.

H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

SELL THE LAMPS

That produce the most Light at the least cost.



SHELBY USEFUL LIGHT LAMPS

DOWNWARD LIGHT TIPLESS LAMPS

We quote special prices to the hardware trade.

ONTARIO LANTERN & LAMP COMPANY,
LIMITED
Hamilton, - Ontario

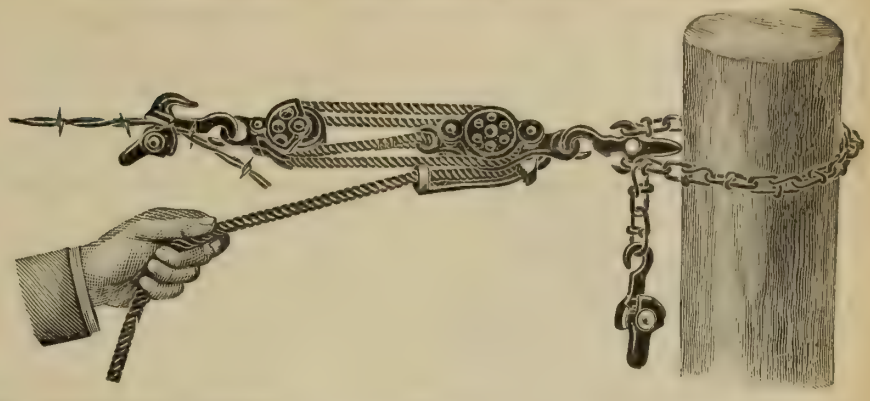
Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

THIS IS THE
OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

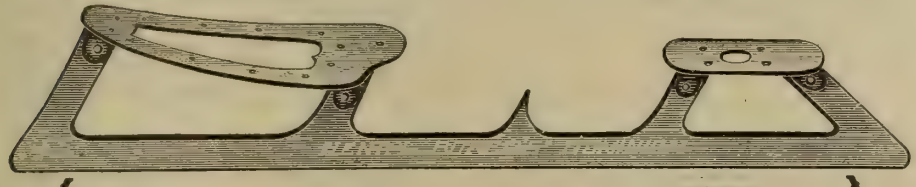
The Verdict



of the Trade is practically unanimous in ascribing incontestable superiority to the Atkins Celebrated High-Grade Hand and Cross-Cut Saws. Fifty years of experience, the finest of crucible steel, patent gas temper, improved methods of manufacture and expert workmanship, are cardinal points of excellence in the make-up of an Atkins Saw. Every Atkins Saw sold from your store goes out as a silent but effective salesman for your whole line of goods. Atkins saws are a profitable line to handle. Catalog and discount sheet on application.

E. C. ATKINS & CO., INCORPORATED Leading Saw and Tool Manufacturers Factories and Home Office . . . **Indianapolis, Ind., U.S.A.**

CANADIAN BRANCH: 56 King St. E., Toronto, Can. NORTHWESTERN BRANCH: Minneapolis, Minn.



HENRY BOKER'S SKATES

FOR SPEED, QUALITY AND FINISH



For sale by all the leading Wholesale Hardware Houses

The Fisher Tube Skate

HOCKEY PLEASURE



STRONG LIGHT NEAT

Dealers

DON'T MISS BUSINESS. You may not have stocked our skates.

We have provided for the rush season.

WE CARRY FULL LINE OF SHOES with our patent hook. We can give mail orders quick despatch.

Skates attached to shoes complete.

When ordering state size of shoe usually worn.

THE A. D. FISHER CO., Limited
34 Richmond Street East
TORONTO



The Divine Faucet Water Motor

Connects to any Faucet.
Attached or detached in ten seconds.
The handiest article ever produced.
Grinds, Polishes, Buffs anything.

FURNISHES POWER FOR

Sewing Machines — Small Lathes
Scroll Saws — Dental Lathes
and other small machines

⅛ Horse Power on 80 lbs. Pressure

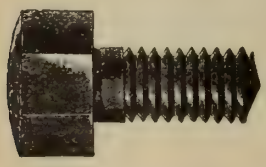
Full line of supplies furnished for any kind of work.

Price, COMPLETE, including emery, buffing and pulley wheels, faucet connection, polishing composition, etc., **$4.00.**

$3.50 and this ad. will get the motor.

LIBERAL DISCOUNT TO THE TRADE.

Divine Water Motor Co.
296 Broadway, New York



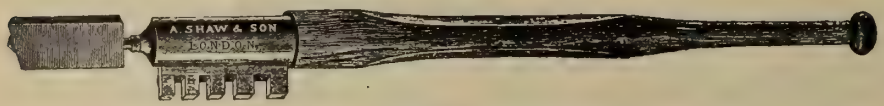
THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

GLAZIERS' DIAMONDS



Ahead of all others in **quality** and **workmanship**. If **sparks** of **fine quality**, set by **experts**, are what you require, buy Diamonds of **A. Shaw & Son's** make.

Canadian Agent

GODFREY S. PELTON
388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 188 Chambers St
NEWARK, N.J., U.S.A.

SEYMOUR SHEARS

HENRY T. SEYMOUR SHEAR CO. NEW YORK.
TRADE MARK

HAVE BEEN THE
Standard for over Half a Century.
"QUALITY UNQUESTIONED."
Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK.
TRADE MARK



Latest Catalogue will be sent in exchange for your business card.

Complete Line ***TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.***

Henry T. Seymour Shear Company
WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

Perfectly Flat Galvanized Sheets

Is a marked characteristic of

GILBERTSON'S

COMET

Brand

Sold by all jobbers who are up-to-date.
It sells readily. Is selected carefully; soft and smooth. Prices lower than other high grade brands.

MAKERS:

W. GILBERTSON & CO., Limited.
PONTARDAWE, SOUTH WALES.

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brand

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

WORK AND PRICES RIGHT
GALVANIZING
ONT WIND ENGINE & PUMP CO. LIMITED
TORONTO, ONT.

GALVANIZING AND TINNING

THE CANADA METAL CO.
TORONTO, ONTARIO.

MAPLE LEAF

STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.
HAMILTON CANADA

This Receipt Valuable to Cash Buyers

A 0.25

Claim our 5 per cent. discount on above amount in cash, or apply it on future purchases at any time at our store

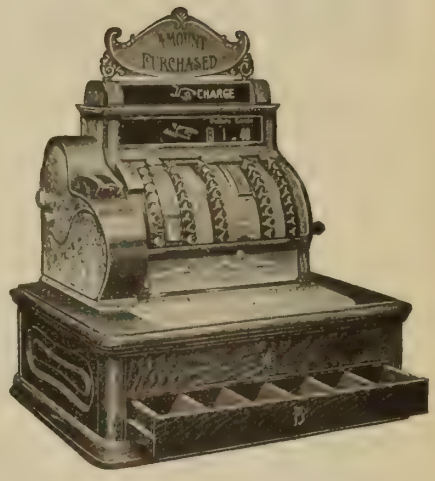
Main and First Streets

Above wording is permissible under new trading stamp law.

The new law

which went into effect November 1 does not prevent the use of our *discount checks.* Our method of increasing *cash sales* has coupled with it an accurate system for handling transactions between customers and clerks.

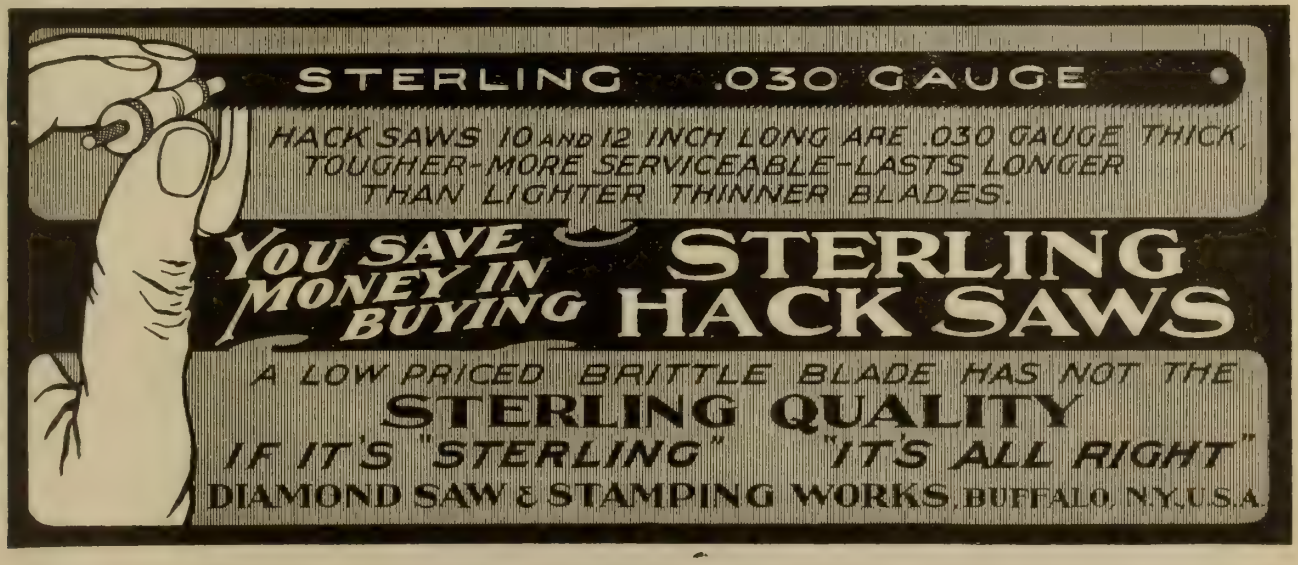
Let us tell you how you can use our *discount checks.* Drop us a line and our representative will call and explain our system.



National Cash Register Company

129 King St., West

Toronto Ontario



WANTED—A Bright Hardware Clerk

IN EVERY CITY, TOWN AND VILLAGE

To take subscriptions for . . .

The Busy Man's Magazine

(Formerly THE BUSINESS MAGAZINE)

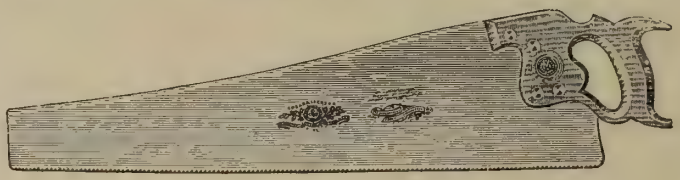
For particulars address— Sales are easily made and commissions are liberal.

The MacLean Publishing Company, Limited, - 10 Front St. E., Toronto

Established 1774 **Established 1774**

We are "old" in experience, "young" in method. We rivet our attention on "make" and "material," the combination that produces the unrivalled

SPEAR & JACKSON HANDSAWS



Our Circular Saws, too, are made in a "telling" way, in all sizes and for all purposes. We'll stand comparison on the price question. Look into our goods. Correspondence with this house will benefit **you—your** business.

SPEAR & JACKSON ÆTNA WORKS Sheffield, England

Telegraphic address: **"Spear, Sheffield"**

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

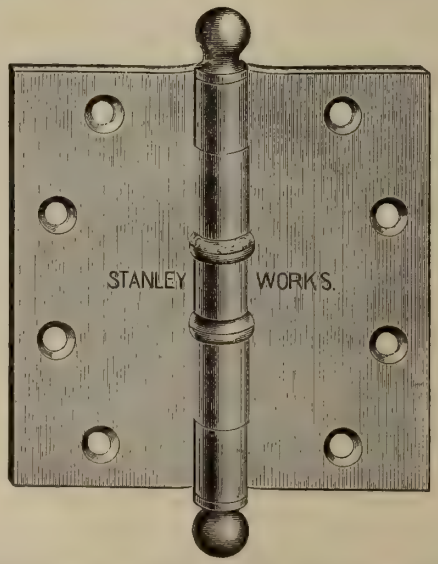
Stanley's Ball-Bearing Hinges

FOR ALL THEIR IMPORTANT WORK. *DEALERS SHOULD HAVE THEM IN STOCK.*



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.

IRONSIDE FOR IRON

OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

IRONSIDE'S PATENT WIRE CUTTERS, guaranteed to cut any wire

We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

IRONSIDE, SON & CO., 16 Water Lane Gt. Tower St., E. C **LONDON, ENG**

Sole Agent for Canada: MR. SYDNEY T. HACKETT, 233 St James St., Montreal.

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

WHAT IT IS

MAXIMUM LIGHT GLASS is not to be confused with ordinary corrugated or prismatic glass. It is a special combination of Lenses and Prisms and the only daylight-increasing system that is such.

MAXIMUM LIGHT GLASS

enhances the value of property by giving perfect interior lighting. One installation, at the cost of a few dollars, does away with the use of gas or electric lights in the daytime.

MAXIMUM LIGHT GLASS acts on forty per cent. more sky area than ordinary prismatic glass and increases the illumination to the extent of five to twenty-five times. It gives a complete diffusion, eliminating all shadows and streaky effects.

MAXIMUM LIGHT GLASS is made in twenty-one angles, and is especially constructed to prevent the accumulation of dirt. The product can be cut, glazed and mounted in lead, copper, or iron intersecting bars, from Architects' special designs.

You now KNOW what MAXIMUM LIGHT GLASS "IS." Watch these ads. and you will know what MAXIMUM LIGHT GLASS "DOES."

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.
Glass Importers and Manufacturers.



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.
LLANELLY, WALES

THE CANADIAN RUBBER CO OF MONTREAL LIMITED

THE MARK OF QUALITY.

SPIRAL PACKING

Hundreds of Hardware Men have learnt wisdom from experience, and are placing their stock orders for Spiral with us.

We've manufactured 90% of Spiral Packing sold in Canada during the past 20 years.

Under our own name and Brand we now offer **"CANADIAN" SPIRAL**,—the matured results of our exclusive experience in manufacturing this special kind of packing.

Place a trial order with us, and it won't require any advertising talk to make you a permanent buyer.

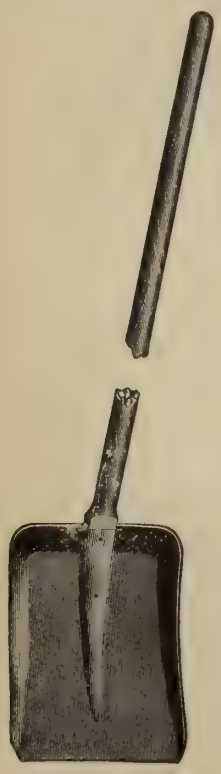
We would be glad to put our proposition fully before you.

Write our nearest Sales Branch to-day for samples and information.

172 Granville St., Halifax, N.S. | Imperial Bank Building, Montreal, Que. | Front and Yonge Sts., Toronto, Ont. | 89 Princess St., Winnipeg, Man. | 403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



Arctic Snow Shovels

are securely fastened to the handles by bolts, which pass through iron straps encircling the handles.

Are the shovels that you are selling made in this manner?

We stock them in two qualities—Japanned and Galvanized.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

KEMP MFG. AND METAL CO., Limited,
McDermot Ave. East, Winnipeg, Man.

A HARDWARE ASSOCIATION FOR ONTARIO

A RECENT visitor to the office of Hardware and Metal was enthusiastic regarding the suggestion made in these columns that the hardware merchants of Ontario get together into an association for the purpose of improving the condition of the trade and remedying many evils which now exist to the detriment, not only of the retail trade but of the jobbers as well, as the financial condition of the former is of vital interest to the latter. The visitor told of how builders induce hardware merchants to compete unfairly with each other. By threats of transferring his trade to another merchant in the same or another town, the builder worms a cut price on goods from one merchant and then carries the figures to a competitor in an endeavor to get closer quotations there. Jealousy is thus created, and the only one who profits is the builder. If the merchants would come together oftener through an association a better feeling would result and price cutting could be guarded against. The same merchant told of how the insurance companies had held him up. The company carrying his risk would only give him a policy for 50 per cent. of the value of his stock, and when another policy was taken out in a second company the first company raised its rates to a much higher figure.

* * *

Another merchant complains of the price cutting in a neighboring town, stating that he can go there and buy some classes of goods cheaper at retail than he can buy from the Toronto jobbers and pay freight. According to him the departmental store competition is not to be considered alongside of the price cutting of the merchants in his adjoining town. He also refers to the fact that the recent open market in lanterns has resulted in nearly every grocer in his town putting in a stock and sacrificing them at almost bare cost. It may take considerable time to break down the trade jealousy resulting from this unfair competition, but a retail hardware association would do much to dissipate this ill feeling, and by regulating prices in order to provide a fair profit the retailers could, by united action, prevent jobbers or wholesalers from encouraging such unfair competition as selling lanterns through grocery stores.

* * *

There are innumerable reasons why the retail hardwaremen of Ontario should get together next Good Friday, as suggested, and form a provincial organization. A letter from a subscriber this week refers to overcharges on freight bills. Acting alone he is practically powerless, but with a strong association in existence such matters could be acted upon and justice promptly secured. The Railway Commission would pay some attention to complaints endorsed by a strong body of retailers.

* * *

The complaint regarding fire insurance also suggests a strong argument for an association. In the United States a hardware merchant can carry $15,000 of his insurance in hardware mutuals, and save 25 to 35 per cent. of the old line rates. The Hardware Bulletin says: "Suppose your fire insurance rate is $1.50, and you have policies in the National, Minnesota, Wisconsin, and Iowa Mutuals for $3,000 each—$12,000 in all. Your premium is $180. You will get a check at the end of the year for at least 30 per cent., or $54. Suppose you have a loss, it will be quickly and honestly adjusted and paid."

Just as the insurance features of the fraternal societies provide an economic reason for the existence of these organizations, so would a mutual fire insurance system prove a bond to cement together the hardware merchants in a trade association.

* * *

Would it surprise many if an examination into the affairs of the old line fire insurance companies would disclose similar conditions as those found in the big life insurance companies in New York? In the hardware mutual companies the merchants not only get cheap and safe insurance, but they know where every cent of their money goes to. Here is a sample statement issued on Nov. 1 showing the business done by the Retail Hardware Dealers' Mutual Fire Insurance Co., of Minnesota, so far this year. The ratio of losses to premiums is only 29 per cent., and it is evident that if this ratio is maintained a very healthy dividend will be returned next year, as has always been the case since the company was organized:

RECEIPTS.

Jan. 1, cash on hand	$46,424 75
Premium receipts to Oct. 1	29,689 92
Premium receipts October	2,965.83
Interest received	2,021.64
	$81,102.14

DISBURSEMENTS.

Losses to October 1	$11,768.42
October 7, Knapp-Cramer Co., No. Tonawanda, N.Y.	1,040.57
October 9, Milnor Hardware Co., Milnor, North Dakota	792.00
Total losses to date	$13,600.00
Expense	6,187.15
Rebates and cancellations	880 58
Cash on hand	60,433.41
	$81,102 14

Policies written in October, 139; 49 new, 78 "foreign."

Gross premiums to October 1	$41,510 94
Gross premiums written in October	4,292.89
Gross premiums in 1905	$45,803.83

		PREMIUMS
Insurance in force Oct. 1	$2,327,273	$43,150.76
Written or renewed in Oct.	201,150	3,341.73
	$2,528,423	$46,492.49
Less terminations	134,000	2,015 06
Insurance in force	$2,394,423	$44,477.43

Cash on hand	$60,433 41
Premiums due	2,858 32
Total assets	$63,291.73
Total liabilities (re-insurance reserve)	22,238 72
Net surplus	$41,053 01
Increase in assets, 1905	$15,257.00
Increase in surplus, 1905	9,233.66

Ratio of losses to premiums 29 per cent.

Another interesting feature of the conventions of the retail hardware associations in the States is the "question box." This box is opened in executive session only. Every member has a privilege of placing in this box any question concerning or relating to the hardware business. The secretary usually sends out one month before the convention blanks for questions members wish to have discussed in the question box. The names are never read in connection with the question asked. These discussions have been most interesting and practicable. Ideas are given by practical men and new ideas received by the other fellow.

* * *

In addition to regulating retail prices, overcoming trade jealousies, providing cheap mutual insurance, encouraging educational discussions, etc., the associations in the United States have

WHO GETS THE RAKE-OFF?

Editor HARDWARE AND METAL:

In a recent issue of your Journal there appeared a letter from Purvis Bros., Sudbury, on the freight charge evil, and I am surprised that some able pen has not taken up the cudgel ere this, as I think there is a grievance to be aired re the above charges. Mr. Purvis speaks of the cartage charged at the shipping point, and the advance charges, that no one (unless the R. R. Company) seems to understand, but says nothing about the overweights. I have before me at present a freight bill brought in by the local drayman for collection, and being suspicious as to the weights on said bill and to satisfy my curiosity I weighed up the cases, and find on a shipment weighing 1290 lbs., there was an overweight and charge of 271 lbs. I would like to know who gets the rake-off, the R. R. Company or the shippers. If the former it is a matter for the Railway Commission to deal with, but if the latter I think we should act on the suggestion of Mr. Matthews of Cannington, and organize a retail association without delay.

Thanking you for your valuable space, and hoping to hear from some of the afflicted ones in our line of business.

Yours, etc.

ONE OF THE AFFLICTED.

New Ontario, Nov. 28.

done splendid work in opposing the encroachments of catalogue houses on retail business. The association paper, the Bulletin, monthly contains much valuable information of the work done along this line. The distribution of departmental store catalogues by railroad agents has been put a stop to by united action, and the United States Government has been forced to revise its postal regulations, which had been doctored to allow the catalogue houses to send out their books to the numbers of the various rural mail deliveries without giving any name address whatever. All the departmental stores had to do was to learn the number of boxes on each rural delivery and send out their books without knowing a single name. But united action killed that game and the farmers will not be numbered like criminals for a while yet. Warned by the trade papers, the secretaries of the state associations soon had their members working on senators and congressmen, and the objectionable postal regulations were promptly suspended.

* * *

But the catalogue houses are resourceful and they are now agitating for a parcels post, one plan being to offer publishers of country papers a free supplement containing a lot of very interesting reading matter—and some adroitly worded articles favoring the parcels post scheme of the departmental stores.

* * *

The success of the retail hardware associations in Manitoba and the Northwest should inspire Ontario hardwaremen to form a similar organization. The evils of the credit system can be combatted through organization in Ontario as they have been in Western Canada. Other matters requiring attention can also be acted upon. The question before the trade in Ontario is: "How much longer are we, as retailers, to remain unorganized?" As organization is the keynote to success in modern industry that query should be answered by every merchant.

Retail hardwaremen desirous of seeing an association formed in Ontario or the Eastern Provinces are invited to send their names to Hardware and Metal, so that they can be notified of any action to be taken in the matter by a provisional committee to be formed to take up the work of organization.

AN ENTERPRISING WESTERN STORE.

Williams Bros, hardware merchants, of Gladstone, Man., have supplied the photographs from which the two illustrations accompanying were made. The firm consists of Messrs. A. G. and William Williams, and it has been doing business in Gladstone upwards of seven-



Interior View of Williams Bros'. Store, Gladstone, Man.

teen years, their store being a very large and attractive one. Fifteen years ago the firm had the misfortune of having their store burned down. Three years ago they again moved into new premises, their new store being a solid brick one, and a credit to the town. It has a frontage of 109 feet, all of the windows being of plate glass. The interior is 80 feet by 72 feet, and is finished in hardwood with metallic ceilings. In addition to their hardware business they have furniture and implement departments, a tin shop being also carried on in connection with the hardware store.

One photo reproduced shows one of the store fronts, the windows showing the handy work of an expert window trimmer, mechanics' tools being displayed therein and kitchen ware and lamps in the other. On the outside the farmers' attention is attracted by wire fencing, farm tools, etc., while the townspeople are catered to with a display of hammocks, lawn mowers, sprinklers, etc. On the inside the very large stock carried is neatly arranged, in addition to silent salesmen showcases, tables being used for the display of samples, racks to show guns, oil cans and other goods, in addition to these there being a large amount of shelving for the display of various lines of shelf goods. That the store is thoroughly up-to-date is illustrated by the presence of a modern cash register with handsome, jolly looking and businesslike young ladies to look after the business end of the store.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

No. 1144. A London company possessing quarries, saw mills and studios in Italy for the production of marble and monuments wishes to do business in these goods and also in granite in Canada, and is prepared to appoint suitable Canadian resident agent for that purpose.

No. 1145. A Lincolnshire company manufacturing engines and boilers would like to obtain a share of Canadian orders.

No. 1146. A Liverpool firm are buyers of basswood shovel handles 72-inch by $\frac{5}{8}$-inch; also basswood broom handles 50-inch by $1\frac{1}{8}$-inch in 108-inch by $1\frac{1}{8}$-inch; 72-inch by $1\frac{1}{8}$-inch; 72-inch by $1\frac{1}{4}$-inch; 60-inch by $1\frac{1}{4}$-inch; and 84-inch by $1\frac{1}{8}$-inch; and also in ash quality 50-inch by $1\frac{1}{8}$-inch; 45-inch by 1 11-16-inch; 45-inch by $1\frac{3}{4}$-inch, and 45-inch by $1\frac{5}{8}$-inch.

No. 148. A firm of Sheffield manufacturers invite samples and prices of wooden pick and shovel handles.

No. 1149. A large real estate agent and contractor in Glasgow is desirous of obtaining price of doors 7 ft. x 2 ft. 10 in., made of British Columbian cedar with cottonwood panels, finished complete, ready for hanging, but without hardware, in lots of 4,000 c.i.f. at Glasgow.

No. 1154. A London firm is open to purchase supplies of wood rims for bicycle tires of the single tube and wired-on types.

No. 1155. A Midlands manufacturing firm of implements and tools invites quotations for pick and shovel handles as per specification, which can be furnished with the address upon application to this department.

No. 1157. One of the largest importers in Australia of Oregon pine, spruce, carriage, woodware and builders' hardware, desires Canadian lumbermen and manufacturers to forward lowest export prices for large quantities of his requirements per specifications, obtainable from the Department of Trade and Commerce.

A South Dakota merchant sells general merchandise, drugs, furniture, does undertaking and practices medicine on the side when he has time, having began his career as a doctor, but branched off into business. He gets them going and coming.

SHOW WINDOW TALK

SUGGESTIONS REGARDING CONSTRUCTION AND DISPLAY FROM THE HARDWARE TRADE.

FREQUENTLY much of the advantage that might be gained from a good show window is lost by faulty construction. This is particularly true in the smaller stores. In building them the window is only an incident. No particular plans are made for it. The opening may be small and the glass put in two or three panes when a large single one is the only kind that should be used. This is a fault that can only be overcome after the store is built by rebuilding the front, but there are cases where it will pay.

In a town of about 1,500 recently were seen several examples of this poor style of window building. In one instance the window was too far above the sidewalk. The bottom of the glass was at least three feet from the pavement level. This is a waste of good space. It brings the trim too high also. Think of a stove in such a window. Its top would be about seven feet above the walk—so high that a very poor view is obtained by the passerby. Then with such a high window there is not so much chance of making an extended display of small articles, for the reason that the goods in the front obscure those that are behind. Being almost on a level with the eye of the spectator he cannot see over the articles in front. Thus the depth of the window is in part lost.

As has been noted before, the tendency is toward lowering the windows. Some of the newest ones are built down to within six or eight inches of the pavement. This is particularly true with stores that have large articles to show, such as furniture, stoves, etc. This plan of having a low window is especially good when the things to be shown are large. The spectator can then get the right view of them—the view that he should have—from above. With smaller articles this is not so important, but the low window has other advantages. It allows more light to enter in over the top. The window can be of good height and still allow of plenty of space for the transom lights above. This is important in a store that gets most of its light from the front.

Of course it is not expected that a window, say eight feet wide, would be built down close to the walk. This would not be the proper shape, for with a narrow window it is impossible to show large things much anyway, and for the smaller ones such a low window is not necessary.

But twelve to eighteen inches from the walk is not too low for any window. Possibly fifteen to eighteen would be a good level for the windows in a narrow store—a store that was, say, twenty-five feet wide with two windows. The windows would then be probably eight or nine feet in width and the vestibule would take up the remainder of the space. So a height of fifteen inches from the walk would be a good level.

But where the store has a large frontage and the windows are fifteen to twenty feet wide, there is little danger of getting them down too close to the street level, no matter what line of goods is to be shown.

Then if the window is low and is not boxed in the view into the store is not obstructed, even if there is a fair size trim in the window.

These are some of the advantages in having the window down close to the pavement. There is possibly a little more chance of breakage with a low window, but that is hardly worth considering.

Of course the height of the window should not be sacrificed to make it low. With the ordinary window having it closer to the walk will simply mean enlarging the glass surface, as to lower the whole window would bring it too low at the top.



Front of one of Williams Bros'. Stores, Gladstone, Man.

Another fault noted in the town spoken of was that several of the windows were cut up into two or even four small panes of glass when one large one should have been used. The only reason for this is the additional cost of the large pane. It would naturally have to be of heavier weight that the smaller ones and would cost considerably more than the two or four small panes. But there is no comparison between the two small panes and the one large one when it comes to appearance. By all means the glass in the show windows should afford an unobstructed view. A sash down the middle of a window is a bad feature in every respect, unless, of course, the window is very large. Two small panes are very likely to be common glass, while the larger one will have to be plate, so it is easy to see that the larger pane will have advantages besides its size.

Then if it is necessary to run a sash down the middle of the window it should be as small as possible. There is no need of a six-inch crossbar. An iron or one three inches or even less in width will do the business just as well.

Another fault noted was a rather unusual one. The floor of the window was below the bottom of the glass. It seemed to be at least six inches lower than it should be. This made a bad effect. It made it impossible to place any small object near the glass, and obscured the bottom of any large one. It simply wasted that much space. The floor of the window should by all means be on a level with the bottom of the glass.

Lack of attention to the upper part of the window—the extreme top — is another fault often met with. The trimmer makes a beautiful display on the floor of the window and up along the sides and the back, but if the eye follows high enough it meets with cobwebs and a vacant space. This is only true of windows that are not boxed and ceiled in, of course. The store ceiling is often the window ceiling and the part above the window is often neglected.

If the window is not enclosed the ceiling should at least be given some attention. A good coat of paint with a neat border will do for the ceiling. Or the space above the average height of the trim may be filled in with a lattice work of ribbons or strips of crepe paper. Or wooden scroll work covered with some light tint may be used.

This is a good way to shut off the window that is too high. The effect of a trim is often killed by the large vacant space above it.

THE RAZOR'S TEMPER.

Mrs. Jayhawk.—Just like a man! The idea of losing your temper and swearing at your razor because it's dull!

Mr. Javhawk.—Well, I've got a right to. Didn't the razor lose its temper first?

HARDWARE AND METAL

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"MELANCHOLY DAYS ARE COME."

THE end of the year is at hand, and with it comes that bugbear of all business houses—the period of stock-taking. With how much trepidation this tedious job is looked forward to by every one in the trade from proprietor to chore boy—only those who have been identified with the hardware business can understand. But it is absolutely necessary that this should be carried out thoroughly and without mistake, and, therefore, an approved system must be adopted, to secure the best results.

Difficulties to be most carefully guarded against are generally the result of the dealer's optimism. He is anxious to show a good profit for the year's turnover, and, consequently, is rather apt to make mistakes in pricing his goods on hand, unless he strictly adheres to some rule in the matter.

But, if properly carried out, this annual taking of inventory can be made of great advantage to the dealer. For instance, unless he has shown remarkable sagacity in buying, there is sure to be some unsalable stock on his shelves, and that a certain amount will have been damaged is a matter of course. The inventory will enable this class of goods to be spotted, and they should be marked down and put on a table or counter by themselves. A vigorous advertising campaign will make this stock-taking sale a popular feature.

Many retailers make the curious mistake, in taking stock, of pricing all their goods at the figure originally paid for them, adding freight and all other incidental expenses in connection with handling them. The writer of this article has in mind the oldest hardware store in one of Canada's oldest cities. The head of this firm recently died and the executor of his estate decided to dispose of the business. And what a motley array of old-fashioned ware was displayed in that dingy little store! Relics of a by-gone age were eagerly snatched up as souvenirs, rather than from any idea of their utility. And the simple reason for this state of affairs is found in the fact that the late proprietor, clinging doggedly to the notion that goods could not deteriorate in value, persisted in marking prices from year to year, based on the original cost.

The gentleman referred to above had made a neat fortune in the country's early days and the bread-and-butter problem did not seriously enter into his latter days. But there are many hardwaremen throughout the country who cannot afford to ape his policy. See, then, that you show no misleading profits or losses in your inventory, and prepare to enliven the usually quiet post-Christmas days by a mammoth sale of marked-down goods.

GROW WITH YOUR BUSINESS.

THERE is a whole lot to the hardware business these days. It isn't what it used to be by any means. It means more than nails, iron, garden tools and the like. It has many ramifications and reaches in various directions. It embraces silverware, bric-a-brac, imported and domestic wares for household and table use, to say nothing of the constantly increasing products of genius relating to cutlery, tools, etc. It means a whole lot to say a man is a good all-around hardwareman, thoroughly conversant with all goods handled by a modern store. It is sufficient to keep a man constantly studying to hold his own abreast of the procession, and to do this it certainly is necessary to give one's undivided attention to the work. There are merchants who, having won a measure of success, and accumulated a little money, are apt to dip into other things, to invest in enterprises foreign to their business, to take stock in all kinds of companies and to have a good many irons in the fire. Such a course causes a good many failures, where often a big success would have been scored if the spare capital had been used in building up and extending the business from which it was realized.

KEEPING OF CLERKS' TIME.

AN important question has been raised by Mr. W. H. Wiggs, the head of the large hardware and plumbing establishment in Quebec City. He asks other wholesale merchants to give their views regarding the recording of clerks' time, the payment of overtime, and the granting of leave of absence with pay. We trust that the questions asked will be replied to by both jobbers and retailers, and space will be given to any correspondence sent Hardware and Metal on this subject.

In an increasing number of large establishments the time clock is being installed, the time of all employes being recorded, and faithful service and overtime being rewarded by the granting of vacations with payment of employes' wages when on their holidays. In discussing this subject recently Mr. Adam Taylor, of the Taylor-Forbes Company, stated that at their works at Guelph every employe, from the president down to the office boy, punches his time in the clock, and a record is kept of all lost time.

Mr. Wiggs' letter should draw out an interesting discussion. It follows:

"Editor Hardware and Metal,—As a great number of your readers are interested in the matter of their clerks and employes keeping a faithful observance of their 'time,' I would like to have their views and ideas in regard to same. Perhaps some of the large supply and hardware houses would be willing to give your readers the benefit of knowing how they handle the recording of clerks' time, if fines or rewards are imposed, if extra time made after hours is paid for and on what basis, if absence for sickness, funerals, etc., is granted, and on what basis.

"An impartial and fair adjustment of these questions is necessary for the welfare of any business on both sides, i.e., that of employer and employe, and with this object in view I am taking the liberty to write you, Mr. Editor, to get your valuable assistance to form a right and unbiased judgment.

"Yours truly,
"W. H. WIGGS."

Quebec, Nov. 29, 1905.

COMPETITION IN LANTERNS.

IN an interview with one of the manufacturers of tubular lanterns, Hardware and Metal learned that these goods have been sold during the past year at cost or under, due largely to there being too many producers of this line of goods in the Dominion. For some years there was an understanding existing between the four manufacturers which enabled them, as well as dealers generally, to get a fair profit, the result being a first-class lantern in every respect was supplied the consumer, and while more lanterns have been made this year than ever before, (a large portion of which have gone across the line into the U. S. on account of the price in that country being very much higher than in Canada) neither the manufacturer nor the dealer have made a living profit, and the quality of the goods has steadily deteriorated. Consequently, the lantern which is being supplied to-day is much inferior in quality, and instead of giving good service for three or four years, the consumer will find that while they are now purchasing cold blast lanterns at a much lower price than heretofore, the lantern will only give them about half the life as compared with what they have been purchasing for some years past. Consequently, in the long run they will prove to be more expensive.

It is claimed that it is impossible to make a good cold blast lantern, considering the present price of tin plates, solder, brass and other metals entering into the manufacture of these goods, to cost the retail merchant less than $6.00 per dozen, and unless the manufacturers bury their grievances, get together and secure a fair price for a good article, it is likely that the quality of the lanterns that will be made in the future will be very inferior to what has been supplied in the past.

American manufacturers get $6.40 per dozen for their product from the wholesale trade, who sell to the retail merchants at $8.00 per dozen, and they are selling to the consumer at from 90c. to $1.00 each. This price enables the manufacturer to supply a first-class, durable article.

We are hearing a great deal these days about combines and monopolies, but if the result of an arrangement or an understanding will give the maker and dealer of this line a fair profit and the consumer a good article at a reasonable price, then in the interest of all parties, associations and so-called combinations had better be continued in all lines of goods manufactured in the Dominion.

Low priced goods made from inferior material are not desirable and are not cheap under any circumstances.

RECIPROCITY AT HOME.

HOW many retail dealers encourage the idea of patronizing home institutions, even to patronizing their own newspapers, to the extent of buying goods outside of their own lines from their home merchants? An exchange rightfully says:

It is a fact that in most small towns the dry goods, clothing and furniture stores do not carry a very large assortment of goods and, in many cases, carry the same cheap lines that were in demand when the country was new and when the people were able to buy only cheap goods.

A great change has taken place in the last quarter of a century and the people, as a whole, are well-to-do, but the average country store has not kept pace with the increase of wealth of the community. With the exception of those who never go away from home, or the miserly, who live only to work and save money or invest every dollar in more land, the tendency of the people is to buy better goods of all kinds as they are able to do so.

The man who can afford it likes a good house with modern conveniences, whether he lives on a farm, in a country town or in the city. When he has a good house he wants it nicely furnished. The writer has in mind a young druggist in a small town. He was ambitious and kept his stock up-to-date, had a modern establishment worthy of a much larger town; he advertised heavily and consequently had a good business and made money. He married, built a good home and wanted to furnish it in keeping with the house and his ability to do so. His town boasted of one little furniture store whose assortment of goods consisted of the cheap variety of furniture and carpets; there was nothing in it he wanted. The druggist, however, was a strong advocate of the idea of patronizing home institutions, so he told the furniture dealer that he wanted to furnish his home with better goods than he had in stock and said: "You give me a letter to your jobber in Winnipeg and I will go there and select the goods and have them shipped to you and allow you a per cent. of profit" (which they agreed on). This was the proper thing to do. The druggist probably got his furniture as cheaply as if he had gone to Winnipeg and bought it at retail. He kept the good will of his home dealer and gave him an opportunity to make a nice profit on the bill.

If the dry goods merchant, the furniture dealer, the banker and the liveryman would do the same thing with their vehicle dealer when they want a carriage, it would be much better than it usually is. Reciprocity should be practiced among retail dealers; they should buy from each other, and in the end they would all be as well off and there would certainly be less feeling of jealousy between merchants.

Every merchant in a town should take a pride in his own town and do everything he can to build it up. For that reason he should try to assist his competitor in making a sale, when he cannot make it himself, instead of encouraging the business to go to some other town or to a catalogue house.

METALS STILL SOARING.

NOT long ago we called attention in our editorial columns to the remarkable strength of the metal market. Since then, however, practically every metal on our list, except antimony, has been substantially advanced, so that in the week just past the price changes were very general and almost bewildering.

Perhaps the most astonishing element in this "bullish" market has been pig lead, a metal which was expected to decline after the peace had been signed. In view of this, the wise ones have been absolutely at a loss to explain its rapid advance, to make a record first for the year 1905, and now to reach the highest price for three or four years. What makes this situation most abnormal is the fact that it should come at this season, when there are, apparently, but few uses to which lead can be put. But we have, nevertheless, the assurance of a most trustworthy foreign authority that these rising prices are simply the natural outcome of a market condition in which the supply is scarcely able to keep pace with the demand.

Copper, also, is occupying an important place in the thoughts of every metal merchant. During the past week it has not advanced in price, though its tone has strengthened. But last week dealers were astounded at a series of rapid jumps which brought the price up to two cents above that current seven days previously. And it was in this feverish period that an amusing deal was made. A Montreal jobbing firm who had a car of ingot copper in transit from New York, were made a favorable offer on it by another firm of the same city, and the car, which had not yet arrived, was turned over to them. In the meantime copper was soaring merrily, and the demand was such that a third Montreal jobbing house, running short of stock, approached the holders

of the car in transit, and another deal was fixed up, in which it passed into new hands again, while the middle firm pocketed a profit of over two hundred dollars on the transaction. And still copper went upward. Now it happened that the firm who had originally bought the copper in New York, being pressed to fill orders, decided that they must have that car back, and on its arrival they made an offer to the holders, which the latter accepted, making thereby a profit of almost one cent per pound. Two firms had profited handsomely on this carload, owing to rapid advances, which, inside of a week, totalled nearly two cents. And even the original firm were enabled to retrieve their loss on the car when still another rally occurred. This incident is probably unique in the history of Canadian commerce.

And what caused these advances, which made handsome profits for so many owners of the same carload? Only a clique who are "in the know" can tell. For it is almost inconceivable that a merely natural demand could produce such a result without assistance from a corner, or an attempted one, on the exchange. Some time ago we noted a rumor that a large quantity of American copper had been assigned to China, to await higher prices on this continent. Nothing has been heard of its return, but unless the story was a pure canard, the owners could realize a nice margin by landing it at any American port just now.

Copper and pig lead have furnished the most sensational features of the past few weeks. But an interesting situation has also developed in pig iron. This metal came to the front of the stage some few weeks ago, when prices began to ascend very rapidly, as a result of heavy American buying in Scotland. Prices got so high for some grades of iron that a number of Old Country rail mills were compelled to suspend operations, as they could not find buyers to pay the price for their products necessary to ensure the cost of running their plants. It is easy to understand how sweeping would have been the result upon the industrial world had this boom continued. But it now appears that it was the result of an artificial condition created by speculators, and it is already subsiding.

The activity in the primary markets was, naturally enough, reflected in sheet metals, which have been forced up to keep pace. Even this week we are reporting higher prices in Canada plates, black sheets, tin plates, terne plates, and sheet zinc. Heavy goods are, indeed, the feature of the hardware markets.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 9

FIRST a retail clerk, then a warehouseman and finally a hardware traveler, is the experience in a nutshell of Mr. L. N. Vanstone, traveling salesman representing H. S. Howland Sons & Co., Toronto, in Eastern and Northern Ontario for the past ten or twelve years. Commencing as a retail clerk in the store of Messrs. Lee & Edsall, Bowmanville, Mr. Vanstone, after about three years experience with this firm, came to Toronto and engaged as a clerk with the Aikenhead Hardware Co., remaining with that firm for a couple of years. Later he entered the Howland warehouse and after a few months on the inside was chosen as one of the traveling representatives of the firm, his retail experience proving of great advantage to him in his wholesale engagements.



L. N. Vanstone,
Representing H. S. Howland, Sons & Co., Toronto, in Eastern and Northern Ontario.

Mr. Vanstone took his first wholesale order at Oshawa and with several minor changes his territory has continued to be the main line points between Toronto and Kingston and Toronto and North Bay. His quiet demeanor and sterling character has made him a favorite with the trade, he having found the best method of securing business for his house to be in studying the interests of his customers. "A pleased customer is most likely to be a permanent customer" has been his motto and the marked increase in business done in his territory since he took up the road, is sufficient evidence of the success of this system.

Mr. Vanstone was one of the party of Canadian manufacturers which visited Great Britain last Summer, representing the Graham Nail Works, an industry controlled by H. S. Howland, Sons & Co., on the trip. The educational value of the visit to Great Britain and France is fully realized by Mr. Vanstone and his value to his employers is much greater as a result of the experience gained and knowledge secured by visiting many of the plants of the manufacturing concerns which have helped to make Great Britain the leading nation in the commerce of the world.

THE EXPENSE ACCOUNT.

A MAN with a taste for figures has studied out the cost of running a business and as a result of his investigation he says: It is surprising that many good business men deceive themselves in regard to the cost of doing business—that is, the total cost as compared with the total sales. If they are making a good profit such a mistake may do little harm, but if the profit is small the error may be disastrous. We occasionally hear of a retail business being done at about a cost of 10 per cent. says an exchange, but if the matter was investigated it would probably be found that several items of expense had been omitted and that the actual cost was nearer 25 per cent.

Interest on the capital should be charged at a fair rate, say 5 per cent. The salary of each partner should be figured as part of the expense. All clerk hire, commissions, rent, taxes, insurance, heating, advertising, traveling, postage and office expense, breakage and repairs, freight and cartage, as well as all material used in the store, such as paper, twine, etc., should be included; in fact, the expense of doing business covers every cent paid out except the invoice cost of the goods, and no concern can live unless they add to the invoice enough profit to cover all expenses of every description. It should be remembered that 33 1-3 per cent. should be added to the cost to cover the expense of 25 per cent. on the sales.

Mr. Henri Godin, of Joseph Godin & Fils, wholesale and retail hardware merchants of Three Rivers, called on some of the Montreal jobbers last Monday.

PERSONAL MENTION

Ontario.

Harry Mahony, Guelph, made a trip to Toronto during the past week.

Charles Bull, plumber, St. Thomas, visited Toronto during the past week.

D. Bonathan, Newcastle, called on Toronto hardware jobbers on Tuesday.

W. W. Carter, Fesserton, was a caller on Toronto hardware jobbers this week.

James Boxall, plumber, Lindsay, called on Toronto supply houses a few days ago.

Mr. Graham, of Graham & Son, Inglewood, was a visitor in Toronto on Thursday.

Mr. Jones, manager of the Pease Foundry Co., Toronto, visited Ottawa this week.

Mr. and Mrs. Thomas Oliver, Copper Cliff, have returned from a business trip to Montreal.

M. R. Summerfeldt, Mt. Albert, spent a couple of days in Toronto this week on a buying trip.

Walter Grose, manufacturers' agent, Montreal, spent a few days in Toronto and Hamilton this week.

W. M. McInerney, plumber, Chicago, has returned home after a visit paid to his old home in Toronto.

Mr. Peaker, Sr., of Peaker & Son, Brantford, called on plumbing supply houses in Toronto this week.

Mr. Harry Johnston, hardware merchant of Millbrook, is said by travellers to own one of the finest trotters in Ontario.

Mr. A. J. Oliver, representing the R. McDougall Co., manufacturers of pumps, Galt, was a visitor in Toronto on Wednesday.

R. A. Mulholland, the well known and popular hardware merchant of Port Hope, still sings the airs of the Trent Valley Canal.

W. B. McArthur, hardware merchant, Perth, died suddenly of apoplexy on Tuesday of last week. The deceased was 56 years of age.

Mr. Ben. Day, favorably known amongst commercial travellers, is again in charge of Messrs. Madole & Wilson's store at Napanee.

Wm. Murdie, late of the firm of Sills & Murdie, Seaforth, has bought out the hardware business of D. C. Taylor, Lucknow, taking possession on Dec. 1st.

Joseph Akitt, hardware merchant, Creemore, who recently moved into new store building, is doing some fine window dressing, according to travelers who visit that town.

Mr. Thomas Wright, representing H. S. Howland, Sons & Co. in Manitoba and the Territories, is spending a fortnight in Toronto. Mr. Wright reports things in the west to be in splendid shape and everyone prospering.

Benjamin Warren, hardware merchant, Perth, has been confined to his home for the past two or three weeks owing to illness. His many friends hope to hear of his early recovery.

Mr. Peleg Howland, of H. S. Howland, Sons & Co., Toronto, returned last Saturday from a two months' trip through Western Canada, visiting Pacific Coast points while on the tour.

Mr. F. A. Hoar has bought the hardware business of J. C. McFarlane, of Barrie, and took possession on Dec. 1st. He would be pleased to receive any new catalogues that the wholesales have issued.

Mr. R. F. McKenzie, Manitoba representative of Rice Lewis & Son, is in Toronto on a trip which will keep him here over the holidays. Mr. McKenzie is an enthusiastic westerner and speaks enthusiastically of things there.

Hardware, tobacco, jewelry, etc., are the varied lines carried by Mr. J. T. Locke, Corunna, Ont., according to the announcement on his letter head. What merchant can show a wider selection? Mr. Locke in sending his renewal of subscription for Hardware and Metal says: "I am well pleased with your paper and consider that it covers the ground very well."

Quebec.

Joseph Ray, of L'Epiphanie, visited Montreal supply houses this week.

W. Gaulin, tinsmith and plumber, of St, Cesaire, was in Montreal this week.

Mr. Paquette, of Paquette & Frere, Berthierville, was in Montreal during the week.

John H. Bell, hardware merchant, of Mattawa, Ont., visited Montreal on Wednesday.

Mr. Hebert, of Hebert & Guertin, St. Charles, was an out-of-town buyer in Montreal this week.

F. Gaulin, of F. Gaulin & Co., tinsmiths and plumbers, of Granby, visited Montreal a few days ago.

Mr. Haskill, jr., of the Haskill Lumber Co., Fassette, Que., visited Montreal a few days ago to purchase supplies.

J. H. Morin, of Henriville, was in Montreal on Wednesday, making some purchases for his hardware department.

Ludger Gravel, the prominent manufacturers' agent of Montreal, has been proposed for aldermanic honors in that city.

Mr. Gervais, of C. O. Gervais & Frere, general merchants, St. Johns, came to Montreal during the week on a purchasing expedition.

John Walker, representing Caverhill, Learmont & Co., in the city of Montreal, is quite ill, suffering from blood poisoning in the hand. He underwent an operation a couple of days ago, which brought considerable relief.

The twelfth annual convention of the Canada Paint Company's travellers and superintendents has been called for Monday, the 11th inst., at the company's headquarters in Montreal. The gathering will continue during the week, and subjects of various interest will be discussed.

Herbert E. Brooks, managing director of the Association of Portland Cement Manufacturers, London, Eng., visited B. & S. H. Thompson & Co., of Montreal, this week. Mr. Brooks' firm manufacture the famous White Bros.' English cement, for which B. & S. H. Thompson are Canadian sales agents.

The Canadian Rubber Company have been entertaining the jobbers of the country who handle their goods, at the Windsor Hotel in Montreal, for the past week. A feature of the proceedings was an enjoyable banquet. That the visitors will carry home a favorable impression of C. R. goods is assured.

The hockey club of Caverhill, Learmont & Co., Montreal, met last Saturday and reorganized for the season of 1905-06, with the following officers:— Hon. patrons, Geo. Caverhill, J. B. Learmont, T. H. Newman; president, James Reid; vice-presidents, Geo. Goulthorpe, J. W. Dowling, Geo. H. Cornell; secretary-treasurer, Geo. McGowan; committee, A. W. Adams, Geo. A. Jordan, C. T. Chipchase, A. S. Bain, J. W. Richardson.

John Purvis, of Purvis Bros., hardware merchants, Sudbury, Ont., was a guest at the Queen's Hotel, Montreal, this week, and visited many of the firms with whom he does business. Mr. Purvis is one of the pioneer hardware men of Algoma, and is the manager of the Sudbury branch of Purvis Bros., who also have stores at North Bay and Webwood. The North Bay store is managed by Mr. Purvis' brother, while his nephew is in charge of the Webwood branch.

Western Canada.

Messrs. Wiebe & Epp, hardware merchants, Rosthern, Man., have dissolved partnership. The business will in future be carried on by Mr. Epp.

The stock of F. E. Hebden, plumber, Nelson, B.C., valued at $4,500, has been bought out by the plumbing firm of Strachan & Hebden, who will move into new quarters shortly.

R. B. Weeks, of Weeks & Son, plumbers, Vancouver, has been on a business trip to New York. At present the firm has the $11,500 contract for the plumbing in the Chinese and Japanese Detention Building of the Canadian Pacific Railroad.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 74.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Canada Plates have gone up in price.

Pig Lead has advanced to $4.40 to $4.45.

Carron and Clarence Pig Irons are at higher figures.

Merchant Steel has advanced.

Black Sheets are higher this week.

Tin Plates have been advanced.

Terne Plates are quoted at $6.85 base sizes.

Ingot and **Sheet Zinc** have each advanced ¼c.

Turpentine has declined to 93c. and 92c.

Linseed Oil is stronger, being quoted 1 cent higher than last week.

TORONTO.

Galvanized Range Boilers—Prices have fallen slightly.

Iron Pipe—Higher figures are being quoted.

Paris Green—Prices for Spring delivery are now listed.

Mixed Paints—S. W. Paints have been advanced 5c. per gallon.

Pig Iron—Hamilton No. 1 and 2 has advanced 50c.

Ingot Tin—An advance of 1c. per pound has been made.

Ingot Copper is now quoted at $19.

Sheet Copper—Present quotations are $23.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, December 8, 1905.

COUNTRY trade is still rather quiet and the year's business is now about on its last legs. The city departments of local hardware houses, however, are still quite brisk and will no doubt continue so right up to Christmas.

Dealers here report a shortage on cheaper grades of skates, while the smaller sizes of better grades are decidedly scarce. Snowshovels are another line most difficult to obtain at the present time. In fact, this shortage is considered rather serious in some quarters.

The features of this week's changes in prices are all in heavy goods and will be found in our metal market reports.

Axes—This is one of the most active lines at present. The following prices are well maintained. Chopping axes, unhandled, $6.00 to $9.50 per dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—There is a good movement in nearly all grades. Our quotations are as follows: No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Trade is lively with prices still at the following figures: Hand-sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—The market in these goods is recovering somewhat from the price war of some months ago. Our prices remain as follows, however. Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—The usual good turnover is still manifest, and, like all hardware staples, they are, even at this season, enjoying a good sale. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 40 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—We still give the following prices. Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Orders for these goods are numerous and fairly heavy. We are quoting the following prices: 3-8 and smaller, 60 to 10; 7-16 and larger 55 to 5.

Horse Nails—Being very seasonable goods, horse nails are selling well in all parts of the country. Our prices are: C brand, 40, 10 and 7 1-2 per cent.: M.R.M. Co., 55 per cent.: P.B. brand, 55 per cent

Wire Nails—The holding off of genuine wintry weather and consequent continuance of building operations, has kept demand very steady. We quote from $2.10 to $2.20 per keg, f.o.b., Montreal.

Cut Nails—Trade is rather dead. Prices remain at $2.20 per keg, f.o.b., Montreal.

Horseshoes—These goods are being sold in good quantities. Prices remain as last quoted. P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M Co. latest improved pattern iron shoes, light and medium pattern No. 2 and larger, $3.65: No. 1 and smaller, $3.90; snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4, No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60 Toeweight, all sizes, No. 1 to 4, $6.85 Packing, up to three sizes in a keg, 10c. per 100 pounds. More than three sizes, 25c.

Sporting Goods—Local jobbers are still sending out good quantities of rifles and ammunition of all kinds. We give prices: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.. American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred pounds; chilled, $7.00 per hundred pounds; buck and steel, $7.50 per hundred pounds; ball, $8.00 per hundred pounds. We quote discounts 10 per cent. on shot, f.o.b., Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—A quiet trade is reported by local dealers and no exceptional flurry is to be expected until building operations are resumed in the Spring. Prices are as before quoted.

Cement and Firebrick—This is another line which is somewhat inactive at present. We are still quoting: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch, $17.00 to $21.00: American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags, $2.05 in barrels in round lots.

Coil Chain—A good demand is moving these goods in a most satisfactory manner. We are quoting prices as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Skates—A shortage is reported in the cheaper grades, and in the smaller sizes of better goods. This season's orders have been very large. We quote from 25c. to $2.50, according to quality.

Sleigh Bells—We are still quoting the following prices: Back straps, 30c. to $2.50; body straps, 70c. to $3.50: York Eye bells, common, 70c. to $1.50, pear shape, $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Our prices are: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—Jobbers are unable to supply the demand for this most popular line. Prices range from $15.00 to $35.00 per dozen pairs, according to quality.

Ontario Hardware Markets

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, December 8, 1905.

JOBBERS report business to be lively, as while most dealers have their holiday stocks in, some general merchants are only now getting their supplies. Holiday goods have the greatest call, of course, but winter lines are

also in fair demand. Some lines of sleds and skates are short and snowshoes are also very scarce.

The steady advances of metals are making all heavy hardware firmer in price, but no changes have been made in our quotations. With metals soaring at this time there is every likelihood of higher prices ruling on all heavy goods next season.

Axes and Handles—Dealers are still buying in fair quantities.

Cutlery and Silverware—Some sorting orders are being filled.

Sporting Goods—Shotguns and ammunition are having a fair sale.

Lawn Mowers—Orders are not being placed so much at present as a month ago, most Fall orders being booked.

Washing Machines—Trade is very active and dealers report increasing sales.

Chain—Cow chain is being included in most orders being placed. Our quotations are: 1-4 inch, $6.50; 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Manufacturers are busy and prices firm. Our quotations are as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Prices are steady and business fair. We still quote: $2.42 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire—The average business for this season is being done.

Wire Nails—Prices are quite firm, some dealers quoting $2.10 and some $2.15.

Cut Nails—A very satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Blacksmiths' orders are very satisfactory and shipments are large.

Horseshoes—Trade continues brisk prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—Sleigh bells and skates are being ordered in large quantities, some lines of skates being scarce.

Screws—The market is very firm with prices unchanged.

Rivets and Burrs—Trade is active with prices very firm.

Bolts and Nuts—Quotations are very strong and business lively.

Cordage—Sorting orders are plentiful. We still quote: Manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are unchanged and trade is seasonable. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick— Business is more active. Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Shipments are heavy and prices continue unchanged.

Hides—The local market has shown a slight inclination to weaken in price. Farmers are hurrying in all available hides, and seeing that quality is only running on usual winter basis, prices have in consequence weakened slightly. Arrivals are coming to hand fairly plentifully, and whilst in some lines there is a little excess supply, in most lines it is found difficult to satisfy demand.

The United States markets continue to develop the weakness mentioned in our last, with but slight influence on Canadian prices.

Wool has opened up firm on European markets. London latest reports denote fair demand and prices unchanged, firm at last closing prices.

We quote :

Hides, inspected, steers, No. 1	....	0 11½
" " " No. 2	....	0 10½
" " cows, No. 1	....	0 11
" " " No. 2	....	0 10
Country hides, flat, per lb.	0 09½	0 10
Calf skins, No. 1, selected	....	0 13
" " No. 2	....	0 11
Lamb skins, best city slaughter	....	1 20
Deer skins, green	....	0 13
" dry	....	0 22
Moose hides, green	....	0 08
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Pulled wools, super, per lb.	0 22	C 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 8, 1905.

PHENOMENAL activity has been displayed in almost every branch of the metal trade during the week just closing. As will be seen by consulting our "Week's Markets in Brief" nearly every metal in the list has been soaring again, with an impression existing in the trade that all of them are billed for still further flights.

Sheet metals have been particularly active and we are showing advanced prices in Canada plates, sheet copper, terne plates, tin plates, black sheets and sheet zinc, while galvanized sheets are considered much firmer.

Pig lead is the feature of the week's happenings, a further advance of 10c. per hundred pounds leaving it still very strong. Local jobbers who have been trying to discover logical reasons for the wonderful upward progress of prices in this metal, confess their inability to solve the problem. The present situation is quite contrary to what was expected, as the metal has steadily risen ever since the close of the Jap-Russian war, whereas dealers most closely in touch with the trade expected a slump. Producers whose information has hitherto been quite reliable, state that the present situation is simply the result of a demand which is rapidly exhausting the visible supply.

Although we have not advanced tin and copper, the prevailing impression is that existing prices will soon have to be raised. Indeed, importers state that they could not to-day sell jobbers at prices which would admit of a profit, with the figures we quote. Copper is selling very briskly as it appears that people have been running themselves bare, thinking that prices were inflated and would soon come down. That they failed to gauge the market correctly is shown by the large orders now in the hands of Montreal importers. It is now almost impossible to procure copper in New York for shipment earlier than the middle of January.

Most of the Canadian consumers are now well stocked with pig iron for the Winter's trade, but odd orders are coming in pretty regularly. Quotations are now entirely ex yard, and the advances quoted this week will likely check the upward tendency until inquiries for Spring delivery begin to come in. This is not to be expected for a month or so yet.

Cables from the old country intimate that Scotch boiler tubes are in exceptional demand. Importers here are unable to get anything like prompt deliveries, with the result that they are finding themselves behind in their orders.

Considering everything, the extreme buoyancy of this week's market stamps it as the most active in months and prospects for the near future point to the fact that merchants who have been holding off for closer prices will be badly pinched.

Canada Plates—Advances all around have been made during the past week We are now quoting: 52's, $2.60; 60's, $2.65; 75's, $2.75; full polished, $3.75; galvanized, 52's, $4.10; 60's, $4.35.

Copper—Though no further advances have occurred, the market is decidedly strong. Advices from New York state that copper is very scarce there and dealers are demanding high prices. We quote: Ingot copper, 19 3-4c. to 20c. Sheet copper, base sizes, 25c.

Ingot Tin—There is no sign of a drop in this metal but, on the other hand, local authorities are inclined to the belief that it will go higher. At any rate, the new schedule of prices is being held very firm. Ruling price for ingot tin is 37c. to 37 1-2c. per lb.

Pig Lead—The lead situation is beyond the comprehension of local dealers. At a season when a comparatively small quantity of lead is being used, the price is being boosted up almost daily. We now quote from $4.40 to $4.45 per hundred pounds.

Boiler Tubes—Trade continues normal at unchanged prices. Our quotations are as follows: British and

American tubes, 1 1-2 inch. 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—We quote:

"Dom.," No. 1.	$19.50 to $20.00	delivered	Montreal.
Usual difference in price for lower grades.			
Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19 00	"	"
" No. 3	18 50	"	"
" No. 4	18.00	"	"
Londonderry	20.00 to 20.50	"	"
Carron No. 1	23.00	"	"
" (special)	22.00	"	"
Summerlee No. 1	22.50	"	"
Clarence No. 1	20.00	"	"
" No. 3	19.50	"	"

Tool Steel—Our prices are unchanged, being still quoted as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's. 13c.; Jonas & Colver's, 10c. to 20c.; "Air Haradening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel—Further advances have been made during the past week. and we now give the following prices: Sleigh shoes, $2.17 1-2; tire, $2.27 1-2; spring, $2.75; toecalk, $2.82 1-2; machinery iron finish, $2.22 1-2; ruled machinery steel, $2.75; mild, $2.17 1-2 and upwards; square harrow tooth, $2.27 1-2. Net cash 30 days. Rivet steel quoted on application.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch. $3.50 per 100 lbs.

Galvanized Iron—Conditions remain the same as formerly. Added strength is given to our prices by the advances recently made by producers. We quote following prices: Queen's Head, 28 gauge, $4.10; 26 gauge, $3.85; 22 to 24 gauge, $3.60; 16 to 20 gauge, $3.35: Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge. $3.40; Fleur-de-Lis, 28 gauge, $3.85; 26 gauge, $3.60; 22 to 24 gauge, $3.35; 16 to 20 gauge, $3.10; Comet, 28 gauge. $3.85; 26 gauge, $3.60; 22 and 24 gauge. $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—As was predicted in our last issue, local prices have gone up and we now give the following figures: 28 guage, $2.40; 26 guage, $2.35; 22-24 guage, $2.30; 19-20 guage, $2.30; 8-10 guage, $2.45.

Antimony—There is little or no demand for this metal, which is still quoted at a price which will be shaded for quantities. Our price is 14c. to 14 1-2c. for Cookson's.

Tin Plates—Owing to the numerous advances recently made in ingot, prices have been advanced 25c. all around. We quote. Cokes, base size, IC, 14 x 20, $4.00; charcoal, base size, IC, 14 x 20, $4.25.

Terne Plates—To keep pace with the advances in other metals, terne plates have gone up to $6.85.

Ingot Zinc—We are this week quoting higher prices again. This metal is one of the strongest on the market. Our figures are 7c. to 7 1-4c.

Sheet Zinc— Following the lead of spelter, sheets have been commanding higher figures during the past week. Our quotations are: In casks, 8c.; less than casks, 8 1-4c.

Bar Iron—A fine trade is being carried on, and the market is firmly held at $1.97 1-2 f.o.b. Montreal.

Old Material—This has been a quiet week. Demand for scrap metal is unchanged, and stocks continue very scarce. Prices ruling are just about as quoted last week. The market is certainly no weaker and the tendency is decidedly an upward one. We quote: Copper wire, 14 3-4c.; light copper, 13 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 3c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $10; mixed rags, 75c. to 90c. per 100 lbs. old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Decmeber 8, 1905.

HIGH prices in metal markets instead of stopping business are having an opposite effect, the volume of trade being very satisfactory. Ingots are particularly active.

Further advances are made this week on pig lead, ingot tin, ingot and sheet copper and some lines of pig iron. The iron mills are loaded up with orders and the strong condition of the market has encouraged mine owners and coke manufacturers to advance prices. This accounts partially for the increased quotations. Reports from outside markets give some idea of the reasons why other metals continue balloon-chasing. The Toronto markets are governed, of course, by conditions elsewhere.

Pig Iron—Hamilton shows another advance this week, prices of both native and foreign iron being very firm. We quote:

Middlesboro, f.o.b., Toronto		$22 50
Hamilton, No. 1, at furnace		20 00
" No. 2, "		19 50
Midland, No. 1, "		20 00
" No. 2, "		19 50
Radnor, at furnace		31 50
Londonderry, f.o.b. Toronto		21 50

Bar Iron—Business continues lively with prices increasingly firm. We quote as follows: $2.00 base, f.o.b. Toronto. with discount of 2 per cent. net cash.

Ingot Tin—The market is very active and an advance of 1 cent is reported. We are now quoting 38c.

Tin Plates— Demand is active with prices very firm.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Still another advance in pig lead has been made, this time the rise being 15c. We now quote the following prices. Pig lead, $4.50 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market continues active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Both ingot and sheet copper has been advanced owing to outside increases. We quote as follows: Ingot copper, $19.00 per 100 lbs., and sheet copper, $23.00 per 100 lbs.

Antimony—Demand continues fair, with stocks in hand light.

Old Material—The high price for new metals is creating a better demand for old material and prices are strengthening. Dealers' buying prices as follows: Heavy copper and wire , 13c. per lb.; light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.75 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $8 to $8.50, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—No change is reported, prices being steady. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N.P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, December 7, 1905.

WHILE there is less excitement in the iron and steel trades, the volume of work coming out continues extremely heavy. No better indication of this could be furnished than by the fact that the bookings of the United States Steel Corporation during November were slightly above 51,000 tons per day, as compared with a little more than 50,000 tons in October. When it is considered that an even much larger tonnage was booked in September, the record month, and that the daily capacity of the works of the corporation is 34,000 tons, the volume of current consumption will be appreciated.

Rail makers again report heavy orders. The St. Paul road has called for the first installment for its Pacific coast extension, the quantity involved being 60,000 tons, which will be rolled in the central west in the Winter, to be forwarded by sea to the coast. The first installment of the Baltimore & Ohio order, involving 25,000 tons out of an estimated total of 75,000, has been given to the mills.

The leading interest has just closed for 25,000 tons for South America and 6,000 tons for Australia.

Prices of light rails have been again

advanced $1 per ton and are thus getting more in line with the standard sections.

Some heavy work is coming to the structural mills. The Pennsylvania Railroad is calling for bids for 22,000 tons for that part of the New York depot which will be above the street level, although the material may not be actually used in 18 months. The company is now storing in New Jersey at the rate of 2,500 tons a month the material ordered some time since for the work below the street level. It is expected, too, that the New York Central road will at an early date come forward with requirements of somewhere between 15,000 and 20,000 tons for the new terminal station. A good deal of bridge work and of material for large buildings is in sight in different parts of the country.

It is estimated that there have been contracted for thus far about 50,000 tons of foreign structural material, which includes some sales of Belgian mills. The bulk, as already announced, has been taken by the German Steel Syndicate. Reports of a concerted movement abroad to advance prices in beams are not confirmed here.

There have been some further large contracts for rolling stock and the report is current that one of the large systems has been forced to turn to foreign makers for equipment in order to get reasonable delivery.

Comparatively few large sales of pig iron are reported. The Steel Corporation has purchased 15,000 tons more for the Pencoyd works, and in the Chicago market a sale of 12,500 tons of malleable bessemer pig was effected. The market for all grades of pig iron is hardening.

Furnacemen have bought heavily of lake ores for the next season and some large purchases of foreign ores have been effected.

In the wire trade the feeling is growing that there may be an advance before the close of the year.

LONDON METAL MARKETS.

From Metal Market Report, December 6, 1905.

Pig Iron— Cleveland warrants are quoted at 53s., and Glasgow Standard warrants at 52s., making prices as compared with last week 4 1-2d higher for Cleveland warrants and 5d higher for Standard warrants.

Tin—Spot tin opened firm at £160 10s., futures at £157 10s., and after sales of 140 tons of spot and 120 tons of futures closed firm at £160 15s. for spot and £157 17s. for futures, making price as compared with last week, £4 12s. 6d higher on spot and £2 5s. higher on futures.

Copper—Spot copper opened firm at £77 5s., futures £76 15s., and after sales of 300 tons of spot and 600 tons of futures closed firm at £77 17s. 6d for spot and £77 2s. 6d for futures, making prices as compared with last week 2s. 6d higher on spot and unchanged on futures.

Lead—The market closed at £17 making price as compared with last week £1 higher.

Spelter—The market closed at £28 12s. 6d, making price as compared with last week unchanged.

Nova Scotia Trade News.

Halifax, N.S., Dec. 6.

THE Fall hardware trade is reported to be exceptionally good. The recent cold snap has caused a boom in some lines, particularly in skates. Several large orders have been received for skates, and the dealers are kept pretty busy.

* * *

The high tendency in the price of all metals continues. Quotations here for iron pipe are: ½-inch, per hundred pounds, $3; ¾-inch, $3.50; 1-inch, $5.05; 1¼-inch, $6.85; 1½-inch, $8.25; 2-inch, $11.

Sheet zinc by the cask is quoted at 8 cents, and 8½ cents for lesser quantities. Black sheet iron is quoted at $2.25, and galvanized at $3.75 to $4.

Lead pipe is $5.25 per hundred pounds.

Bar iron is quoted from $2.10 to $2.20 base.

Glass is very scarce on this market, and the price is high. It is quoted at $2 per box of 50s first break, and $3.50 for 100s first break.

Lumbermen's supplies continue in good demand, and there have been quite a few sales of roofing materials, etc.

Collections are fully up to the average, and the jobbers are much impressed with the present trade outlook.

* * *

The Coxheath copper areas in Cape Breton will probably be developed on a large scale. Major G. M. Irvine and J. S. Morris, two American experts, are now in Cape Breton in consultation with Colonel Granger about the property. If satisfactory arrangements can be made it is the intention to sink the present shaft to a further depth of one hundred feet. In an interview with Premier Murray these gentlemen suggested that the same consideration should be given copper mining in Nova Scotia that is given to gold mining. The premier assured them that any requests in this direction would receive careful consideration of the Government of Nova Scotia.

* * *

Owing to the increase of business and growing importance of Montreal as a centre for distribution of their products the Robb Engineering Company, of Amherst, have decided to change their agency at Montreal into a branch office. Mr. Watson Jack has been appointed manager, and Mr. Alister Maclean will continue in the capacity of engineer for the Montreal district. The Robb Engineering Company will have their quarters in the handsome suite of offices occupied by Watson Jack & Company in the Bell Telephone building, corner of Notre Dame and St. John streets.

New Brunswick Trade News

St. John, N.B., Dec. 4, 1905.

"NEW industries" has been the cry in certain quarters in St. John of late. The agitation for new industrial establishments here is, of course, deserving of support and it would seem as if already there is excellent possibility of another important establishment making its appearance here before long. When the Hartford capitalists secured the controlling interest in the Maritime Nail Works it was rumored that the manager of the works would sever his connection with the concern. Mr. Eben Perkins, the gentleman referred to, is still in the position of manager, but the report is gaining ground that he will shortly leave the Maritime and become associated with gentlemen who are to form a company to build and operate nail works. Mr. Perkins is uncommunicative in reference to the matter, but the report will probably be found to have some basis. There is the possibility that the works if built will not be located here but that possibility is thought to be decidedly remote. Mr. Perkins, though a native of the United States, has been connected with the Maritime Company since its organization in 1896.

* * *

The striking feature of the local hardware market of late has been the firmness in metal prices. Without exception metals of all sorts have been decidedly firm in price. Pig lead is still tending upward, the last advance having been one of fifteen cents. Copper is also still firm in its quotations; pig iron is firm; bar iron is advancing. Steel is showing an upward trend. Many dealers are looking for further advances in metal prices to come into effect ere long. The demand continues good in the case of nearly all, if not all, the metals offered.

* * *

As previously noted the outlook for wire nails in this part of the Dominion is for higher prices. The manufacturers are making their advances and jobbers must necessarily follow suit. The advances made by jobbers so far, however, have been somewhat irregular. In some cases the increase in price has been about five cents, in other cases an increase of about double that figure has been the order.

* * *

The supply of glass on the market is reported to be none too large. Neither is there much of this article being brought into the province at present, so the situation is not of the best.

* * *

Builders' materials continue in good demand. The prices asked are about of the average variety. In some provincial towns there has been something of a building boom this year and the demand for builders' materials has been quickened in that way.

* * *

Lubricating oils are selling well. The market is firm. Linseed is unchanged in quotation. Turpentine has been dropping somewhat but some dealers are looking for advances.

SAMUEL, BENJAMIN CO. MOVE.

Messrs. M. & L. Samuel, Benjamin & Co., Toronto, have removed their offices from the Temple Building to the new Gage building on Front street west near the Queen's Hotel. The new quarters are very convenient and suitable for trade in heavy goods and the company will have ample room on the first floor and in the basement. Since the fire in April, 1904, their offices and warehouses have been separated, but the new move will allow of their being reunited.

While some merchants are thinking out the details of an elaborate design, other dealers are fixing up a display that makes no pretensions, but draws attention and sells goods.

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada.

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Dec. 8, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

BUSINESS in nearly all lines of general hardware continues very brisk, the cold weather having given a marked impetus to trade. Values are steady this week and there are no quotable changes of importance.

Game Traps—Still in some demand at following unchanged quotations.

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—As noted last week, while there is an "open" market in lanterns, the general run of prices has been advancing and the prices quoted are about as follows:

Cold blast lanterns	$5 25 per doz.
Coppered cold blast lanterns	7 25 "
Cold blast dash "	7 75 "
Lift Lanterns	4 25 "

Bluestone—Price for 1906 delivery is $5.75 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized, 6 to 8	3 39
" 9 2 50	2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices have been steady since the recent advance in steel shoes. Quotations are as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—Prices are quoted as follows since the recent advance:

Pressed spikes, ¼ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅜ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9.00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits— Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T's and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz.....$8.75
Grass " per doz..... 1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Selling at following prices:

Royal Canadian, per doz..... $30.05
R. B., per doz..... 34.07

Files—Discounts are quoted as follows:

" Arcade " ..... 75 p.c.
" Black Diamond " ..... 60 p.c.
" Nicholson's " ..... 62½ p.c.

Building Paper—There is a steady demand for all lines at firm prices. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned..... 70 and 10 p.c.
" " plain..... 75 and 2½ p.c.
" pieced..... 30 p.c.
Japanned ware.....37½ p.c.
Enamelled ware, white..... 45 p.c.
" Famous..... 50 p.c.
" Imperial.....50 and 10 p.c.

Cordage—The price is steady since the recent advance. We quote as follows.

Rope, sisal, 7-10 and larger, basis..... 11 25
Manila, 7-16 and larger, basis..... 15 75
Lathyarn..... 11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red 3 10

Vises—Prices are quoted as follows:

" Peter Wright," 30 to 34 .....14½c. per lb.
" " 35 to 39 .....14c. "
" " 40 and larger .....13½c. "

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6. The "1904" sheep shearing machines are sold at $13.60.

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited

WINNIPEG, MAN. NEW GLASGOW, N.S.

ARTISTS' MATERIALS
AND ARCHITECTS' SUPPLIES, ETC.

We carry a complete line of WINSOR & NEWTON'S and other leading manufacturers' goods in stock. Ask for our new catalogue.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.
WINNIPEG, - MAN.

Ammunition, Etc.— Prices and discounts are quoted unchanged as follows:

Ammunition, cartridges, Dominion R.F. 50 and 5 p.c.
Dominion, C.F., pistol..... 30 p.c.
" military..... 20 p.c.
Ammunition, cartridges, American R.F. 33⅓ p.c.
C.F. pistol..... 5 p.c.
C.F. military.....10 p.c. advance.

Loaded shells:
Dominion Eley's and Kynoch's soft, 12 gauge.

black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 50
Chilled	7 00
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—The price has advanced 25c. per box. We quote:

Canada plate, 18 x 21, 18 x 24	3 50
Canada plate, 20 x 28	3 75
Canada plate, full polished	25

Sheet Zinc—The price is now $8.50 for cask lots, and $9.00 for broken lots.

Pig Lead—The price has been advanced to $4.75 per 100 lbs.

Iron Pipe—Prices are steady at the recent advance. We quote:

Black iron pipe, ⅛ inch	
" ¼ "	2 55

Black iron pipe, ¼ inch		2 85
" ⅜ "		3 15
" ½ "		4 00
" 1 "		5 75
" 1¼ "		7 85
" 1½ "		9 40
" 2 "		12 90

Petroleum and Gasoline— Prices are quoted now as follows:

Silver Star, per gal	21c. ½
Sunlight "	22½c.
Eocene "	24½c.
Pennoline "	25½c.
Crystal Spray "	24½c.
Silver Light	22½c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints and Turpentine—Business is brisk in general lines. We quote as follows:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.05
26 to 40 "	2.20

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

British Columbia Trade News

ANOTHER new industry that will give employment to a large number of hands is now being established in Vancouver, and will be in full running order in a few weeks. At an expenditure of nearly $50,000 a new can factory and sheet metal works is being installed by the A. M. Forbes Hardware Company in a large new factory on Seymour street, which is now receiving its finishing touches. The factory is a commodious four-storey frame building, located on the west side of Seymour street.

An extensive equipment of machinery for the manufacture of all kinds of cans has been purchased. The machinery, which will cost over $10,000, is all of the most modern type, and is being manufactured entirely by British Columbia machinery firms. Everything is being arranged on the gravity principle, and when all the machinery is installed and the factory working at its full capacity about twenty-five thousand cans a day will be turned out if needed.

The ground floor of the new factory will be devoted to one of the largest tin and sheet metal works in the province, giving steady employment to about twenty-five hands. The second floor will be devoted to a cornice and roofing establishment, also employing a considerable number of hands, while the can factory, when in full swing on the large orders which the firm has already booked, will give employment to about fifty skilled canmakers. Altogether nearly a hundred men will be engaged in this new industry. This factory is an entirely separate institution from the firm's business on Hastings street.

The president of the company is Mr. A. M. Forbes. The vice-president, Mr. H. Morrison, will have charge of the cornice, roofing and sheet metal departments. Mr. C. J. Marshall, formerly foreman for the Automatic Can Company of New Westminster, has accepted the position of manager of the can factory, while Mr. F. W. Crawford will be mechanical superintendent. The industry is expected to reach important proportions in a short time, as there is a growing demand for suitable cans for goods to be sent to China, Japan, Hawaii and Australian points.

DEATH OF F. W. MORSE.

THE sudden death of Mr. F. W. Morse, vice-president of the Miller-Morse Hardware Co., came as a great shock to the business public of Winnipeg on Wednesday, November 29. So utterly unexpected was the news that it was almost impossible for business men in Winnipeg to realize the truth of the sad news that spread so rapidly through the city. On the day before, Mr. Morse had been apparently as strong and well as usual and he was actively engaged in his office. A man in the prime of life, the embodiment apparently of health and manly vigor, his death came as a bolt from the sky to his business colleagues.



The late Fred W. Morse, Winnipeg.

Mr. Morse was a man of quiet, retiring disposition, but very popular throughout the city of Winnipeg for his many sterling qualities. Genial, kindly and companionable, he had in a marked degree the respect and affection of the entire staff of the Miller-Morse Hardware Company, with whom he had the most intimate relations, and with the hardware trade of the west, among whom his name stood for courtesy and fair dealing.

In many respects Mr. Morse's career in the west is an inspiration to the ambitious young man who hopes to make for himself a business career of importance in the newer Canada. Coming to Winnipeg in 1882 in the boom days, he soon became engaged in the retail hardware business. He and Mr. Hyman Miller entered into partnership, establishing the retail hardware firm of Miller, Morse & Co. The young firm survived the collapse of the boom and as both partners were possessed of striking executive ability the business grew and the retail firm developed into one of the leading wholesale hardware firms of the west.

Both Mr. Miller and Mr. Morse were connected with the firm of M. L. Samuel Company, Toronto, before going west, the former as traveler and the latter as a clerk. Mr. Morse made friends with all who did business or associated with him and these qualities went a long way towards his success as a business man. In Toronto his old time friends watched his progress in the west with keen interest and satisfaction, while in the west there were few in the hardware trade who did not know him and appreciate him as a friend. After giving up the road he devoted his time almost exclusively to the development of the Winnipeg business, always making it a point, however, to make things pleasant for out of town visitors. His close attention to business undoubtedly hurried his early death.

In January last the Miller-Morse Hardware Company was incorporated, Mr. Morse being vice-president. At the same time the firm moved into their magnificent new warehouse, one of the largest of its kind in Canada. Mr. Morse was only 45 years of age and a brilliant business career seemed to be before him. His loss is sincerely mourned by all his business associates and his wide circle of social friends. Hardware and Metal begs to extend sincere sympathy to Mrs. Morse and to Mr. Miller, who for so many years has been in partnership with the deceased.

BUSINESS CHANGES.

Ontario.

J. A. Dupuis, tinsmith, Chrysler, has assigned to G. I. Gogo, Cornwall.

Bragg & O'Neil, agricultural implements, Chatham, have dissolved. Bragg will continue the business.

Hunt Bros., plumbers, London, have been succeeded by F. C. Hunt Plumbing Company.

The assets of O'Connor & Wilson, hardware merchants, Ottawa, are to be sold at auction on the 12th.

Quebec.

A demand of assignment has been made on Galarneau, plumbers and roofers, Montreal.

New Brunswick.

P. Campbell & Co., plumbers, St. John, have lost by fire to the extent of $300. They were insured.

MacKenzie & Mann are said to contemplate the purchase of a fleet of ice-breaking car ferries to keep navigation open on Lake Superior during the Winter months from Port Arthur to the Soo. By taking over the Manitoulin & North Shore Railway, one of the Clergue enterprises, the Canadian Northern would then have an almost direct line from Edmonton to Ottawa.

CANADA'S METAL INDUSTRIES.

THE Dominion Iron & Steel Co. has chartered the big Swedish steamer Drottning Sophia to engage in next season's iron ore trade from Wabana, Newfoundland.

The White Bear Mine at Rossland is installing 400 horse-power electrical motor.

Machinery worth $15,000 is being installed at the Mackenzie & Mann iron mines at Atikokan.

Cambrian Mineral Co. is being organized for the purpose of erecting a smelter at Sudbury. The capital stock will be $100,000.

The open hearth steel furnace of the Dominion Iron & Steel Co. created a record one day last week, when the batter turned out 902 tons in twnety-four hours.

Canadian manufacturers are said to be inquiring in the English markets for supplies of steel strips for tube making, claiming that they are not able to obtain sufficient supplies of this material in America.

The Canadian Smelting Works at Trail has blown in its fourth copper furnace, this giving the plant a capacity of 1,000 tons of copper per day. The lead refinery is turning out 50 tons of pig lead daily.

The rail mill of the Dominion Iron & Steel Company is again in operation, having undergone temporary repairs. A new engine head, which has been ordered from Cleveland, Ohio, will be in Sydney in a few days.

Fire did considerable damage to the Granby Mining Company's crusher building at Phoenix, B.C., last Friday night. Arrangements have been made to ship from the old bins at Ironside until the crusher plant and buildings are reconstructed.

A company to be capitalized at $4,500,000 is to be organized with headquarters at Dawson City, to install a gigantic hydraulic system for operating on the creeks tributary to Dawson. This is the largest mining proposition yet in the Klondike.

A copper smelter is to be established at Bruce Mines to treat the ores from the property recently purchased by the English syndicate. It is said that the syndicate will employ 500 men and endeavor to develop the Bruce Mines so that an output of 500 tons of copper per day will be possible.

There are now fifteen members on the Granby board of directors, those newly elected being George Crawford Clark, Sanford H. Steel, and Edwin Thorne. Application has been made to the Legislative Assembly of British Columbia to change the par value of the stock from $10 to $100 a share, thus reducing the number of shares. A dividend of 3 per cent. has been declared on the capital stock out of the net earnings.

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
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Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

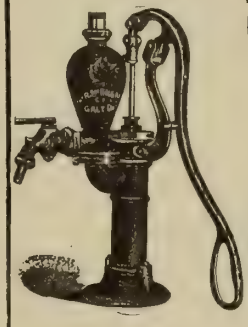
C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc., etc

INGOT METALS

Tin—"Straits" and "L & F"
Lead—Best English
Copper—Lake and Casting
Spelter—"V M" and Ordinary
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From Stock or for Import to wholesale buyers only.

A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen handle our
ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited
GALT, ONTARIO.

B. K. MORTON & CO.'S
B.C. BRAND DRILL STEEL

has stood the most severe tests and in competition with other brands more than held its own. Pretty good proof this, isn't it? You can secure the necessary particulars by writing to any of the following:

E. G. PRIOR & CO., Victoria, B.C., Agents,
BAINES & PECKOVER, Toronto, Can., Agents,
D. W. CLARK, P.O. Box 521, Toronto, Can.
Canadian Representative.

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

PROGRESSIVE RETAILING

THE COUNTRY STOREKEEPER AND COLLECTIONS.

A WHOLESALE merchant was heard to say recently "It is surprising the number of failures among the country traders, and the excuse they each have is that they have so much trusted out that they cannot go along and do business. The trouble is, they do not manage things in the right way. Why, when I kept a country store I trusted everybody I knew. My motto was, 'Trust anybody and everybody, but be sure and look after them,' and when I sold out after a career of fifteen years in that store, I collected in all but about $750, an average loss of only $50, by reason of bad debts."

The Advantage of System.

With the competition among traveling salesmen now-a-days it is an easy matter for a merchant to buy goods as low as his competitors without giving time to study the market reports as he should; and clerks capable of waiting on customers can be engaged in almost any locality at reasonable wages. A merchant, therefore, carrying on business in the country should have his business so systemized that he can devote a part of each day to examining accounts.

The Accounts Should be Watched.

He should learn who, if any, are living beyond their means, if such a condition exists, call a halt on that customer. If such a man has got through working for Mr. Jones learn why he has not been around with part of his wages to pay on his account.

If Mr. Johnson has sold a beef critter find out when he will make a payment on his bill.

If there are any accounts that have been standing longer than it seems necessary, he should make a list of them, take his team, go out around them, and in a courteous way encourage them to call and pay something. The merchant should make the affairs of his customers his affairs, and by keeping in close touch with them he will better be prepared to keep pace with them in the matter of doing business with them.

A Serious Problem.

The success of a merchant is not reckoned by the amount of goods he sells, but by the amount of money he receives for them. And that all depends upon the manner in which he looks after his collections.

Many country merchants fret and worry about how they are going to meet their obligations. They are in debt. Their creditors have been patient, but have now become restless, and the outlok of the future seems gloomy. They have no ready funds with which to satisfy accumulating demands, and yet they have a vast amount of money due them from delinquents and careless debtors. A melancholy spirit has asserted itself, and these merchants are in a sense blind to the situation, and the possibilities of their circumstances.

The Remedy.

What is the remedy for such a condition Assign for the benefit of creditors and settle on a percentage basis? No.

Go out of business and call it a commercial failure? No.

What then should be done? Simply give some persistent effort to ascertain the name and residence of each debtor, and make an active collection campaign

About a Horse Nail.

"A little neglect may breed great mischief; for want of a Nail the shoe was lost; for want of a shoe the Rider was lost—being overtaken and slain by the Enemy—all for want of care about a Horse-Shoe Nail."
—Benjamin Franklin, 1758

A few words about ourselves and our "C" brand horse nails.

This Company was established in 1865, and we have therefore been manufacturing horse-shoe nails for 39 years. We make nothing else, and are the largest producers of horse nails in Canada.

Our "C" brand horse nails are of one quality only—the best that our long experience can produce. We use for their manufacture exclusively a special quality of material, made for our purpose in Sweden, which is the best procurable in the world, or used by any maker of horse nails.

We use the old and well-tried hot forged process, by which the nails are thoroughly forged by special machines from the nail rods at a white heat, and finished and pointed by a mechanical process used only by us in Canada.

Every nail is hand sorted and examined, to prevent any imperfect nails from entering a box bearing our "C" brand. Every box is therefore warranted perfect and ready for immediate use.

Our nails are of the best designs and proportions for Canadian use. They will drive easiest, and stand more hard usage than any other horse nail made or sold elsewhere.

We solicit your kind preference for the "C" brand horse nails when ordering.

We shall be glad to furnish free samples of our various patterns to farriers or dealers.

CANADA HORSE NAIL COMPANY, MONTREAL

and the result will be, no matter how poor a lot of accounts they may have, that in a very short time an amount will be secured that will, when divided among the creditors, keep them quiet until a second collection campaign is made, and in that way relief will come.

The trouble with the average merchant is that he lays down without realizing that it is possible for him to settle his own affairs without the assistance of an assignee.

He should make a hustle himself, and when he cannot succeed in getting good results, he then should employ the services of a reliable, active and aggressive collection agency.

Make a new beginning and in future give accounts and collections as much attention as is devoted to the sale of goods. Allow no more stale accounts to accumulate.

The Future.

When a merchant has met with bitter experience by trusting out his goods until his available resources were apparently exhausted, and has had to make an extra effort to collect in his accounts in order to hold himself together, shall he then shut down, and say that he is not going to trust any more? No, if he should do that he could not carry on business.

The trouble has been the merchant gave his attention to the sale of goods and attending to the wants of his patrons, and neglected the collection end of his business.

Almost every country storekeeper is really compelled to trust his patrons. Farmers get trusted from Spring until the crop is gathered. The lumberman gets trusted for his supplies until his logs are landed. And the laborer gets trusted until "pay day."

All are honest and intend to pay. But the merchants get careless, and the customer uses his money to pay instalments on pianos, machinery and fancy and needless rigs.

The Storekeeper's Independence.

The country merchant is the most independent business man in the list, if he gives proper attention to the right branch of his business. He usually has farmers for patrons, and while their accounts usually run from crop to crop, there is no time in the year but what they have produce—butter, beef, wood, honey, wool, fruit or something to carry in on account. Sometimes it becomes necessary, even with the farmers, for the merchant to offer a suggestion about a check on running up large accounts, to caution him about getting in debt for farm machinery, and to place him on his guard about giving too many notes to instalment men that infest every rural community. Then it is the successful country merchant who is interested in the welfare of each one of his customers, who drives out among them frequently, who keeps tab on each man's affairs, and who does not leave the collections all to the overworked bookkeeper.

Yes, the merchant that adopts a systematic way of governing the collection branch of his business, and makes himself the main character of the system usually wins out and has money to loan "on farm mortgages."

KOPAL

Sherwin-Williams Kopal is the leader in a long line of varnishes approved and used constantly by master decorators and wood finishers all over the Dominion. As a general varnish for outside and inside work it is unexcelled at anywhere near the price. In profit to the dealer and satisfaction to the painter Kopal has not an equal. It is handled by Sherwin-Williams Agents only.

Into Kopal we put only the purest selected materials; our processes are the most careful, and our workmen intelligent men who have made good varnish all their lives.

Our facilities enable us to save much in the cost of manufacture and make our agency a good paying proposition in every locality.

Write our nearest office today for complete details, prices, etc.

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg.

1815

ENGLISH TRADESMEN AWAKE.

Several phases of social revolution are noticeable in England. The latest is the revolt of the tradesmen, or the wealthy middle class, against the demands of the nobility for extended credit.

The recent introduction of American methods by several Oxford and Bond street dealers has shown, by a contrast in prices, the evils of the arbitrary credit methods. The result is that an anti-credit league is forming, and the Countesses and Duchesses who have been accustomed to order what they pleased and pay when they got ready are getting the cold shoulder in the largest shops of the British metropolis.

In recent bankruptcy proceedings the failure was shown to be due wholly to abuse of the credit system which the proprietors had not been able to check. Some accounts were 14 years overdue, but, strangely, were regarded as "good." Lately the London tradesmen have awakened to the fact that they are practically financing the establishments of many of the richest families among the nobility. They are borrowing money to carry on business, while their noble debtors are receiving interest upon money in bank that really belongs to the shopkeepers.

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Fairbanks' 1906 Catalogue.

THE Canadian Fairbanks Co., Montreal, are about to issue a large calendar suitable for hanging on the office or mill wall. They will mail a copy free to any reader who mentions this paper in a letter of inquiry addressed to the advertising department of the above company, 444 St. John street, Montreal.

Engine Products.

The Cooley General Development Co., 620 Atlantic avenue, Boston, have issued a neat little catalogue giving general information relative to their engine products. The catalogue is printed on pink paper, the illustrations being very clear and the reading matter terse and to the point. Readers who desire to secure a copy can do so by mentioning this paper in a letter of inquiry.

Metal Tubing.

James Booth & Co., Birmingham, Eng., have forwarded Hardware and Metal a copy of their illustrated catalogue showing a selection of shaped and ornamental brass and copper tubes, as well as angles, moulding, beadings and rods of various sections in brass and copper. The catalogue contains several hundred illustrations printed in gold and other colors, and is designed to give interested parties a practical idea of the different shapes and ornamentations produced by the Booth Co. There is a growing demand for these products in Canada and the company offers to forward their catalogue and list to any brass founder or other manufacturer who mentions Hardware and Metal in their letter inquiring for the articles mentioned.

A Striking Calendar.

Calendars for 1906 will be numerous and it is only those which are to be found useful and artistic are likely to receive attention, it being the old story of "the survival of the fittest." The Canada Paint Co., Limited, are issuing a very handsome one, which, from an artistic point of view, is a gem and will be admired by all lovers of genuine merit. The sketch is original and by one of the foremost Canadian artists. It shows a sailor painting the side of an Atlantic liner. Hardware and Metal thanks the Canada Paint Co. for an advance copy. Dealers desiring a copy should mention this paper.

Rivets and Eyelets.

Edwin B. Stinson & Son, 31 Spruce street, New York, have forwarded Hardware and Metal several cards and folders illustrating and describing their rivets, eyelets and machines for attaching these articles on canvas and other materials. Cuts showing the Duplex and Star punching machines, automatic eyeletters and perforating guides, give users of these goods a practical idea of the workings of the machines made. Any person mentioning Hardware and Metal can secure copies of cards and folders.



THE HEALTH FAD.

"TRADE'S been sort of slack the past few weeks," said the hardware merchant as the "regular sitter" made his appearance, "and I've been amusing myself by figuring up what I ought to do to reduce my flesh, straighten my back and be perfectly well physically and sound mentally and happy generally. In the morning I drink no water. I eat fruit and a light cereal, and move my arms briskly. I also drink two quarts of water to cleanse the system, eat a hearty breakfast and let my arms hang limp at my sides. At noon, luncheon consists of a clear soup, rare meat without fat, no vegetables and a wineglass of wine and water, and it likewise consists of any kind of meat, as many vegetables as I fancy and two bottles of beer. For dinner I take a walk, one vegetable and one small portion of meat with no liquid, according to one doctor, and according to another authority I cut out the walk and take six courses. Going to bed I sleep with my head low on a single pillow, and I sleep with it high, propped up with several pillows to relax the muscles and take the strain off the neck. I close the windows to keep out the night air, and after that I open them and remove the side of the house to let it in. This giving advice with a view to building up and preserving the constitution has got to be a fad in most of the newspapers and all the magazines, and I know it must be fool advice because it is contradictory. Now I couldn't do all those things; and if I could do them and did do them I couldn't keep store because I wouldn't have time. Seeing that I have been tolerably comfortable for a good spell of sixty-two years, I've no notion of doing any of them."

IMPORTANT TO BABBITT USERS.

Babbitt users will be interested in the announcement in this issue of the Canada Smelting Works, Montreal, who state that they will manufacture babbitt according to the formula of any of the large users. That is, so far as the Canadian trade is concerned, an innovation, and no doubt will meet with due appreciation. Mr. McClure, the managing director, has had many years' experience in the actual manufacture of metal and he is getting after the trade all over Canada with a celerity that has made successes for other firms and should operate similarly for himself.

Beware of the statement, "Selling below cost." The vital question to the customer is what it costs him, not what you lose. He knows you are not in the business for fun, and if you are continually admitting that you are selling below cost, he is likely to conclude that either you do not know your business well enough to buy right, or that you are deceiving him. In either case his confidence in you is shaken. Better say, "We bought them right, you get the benefit."

H. S. HOWLAND, SONS & CO. LIMITED

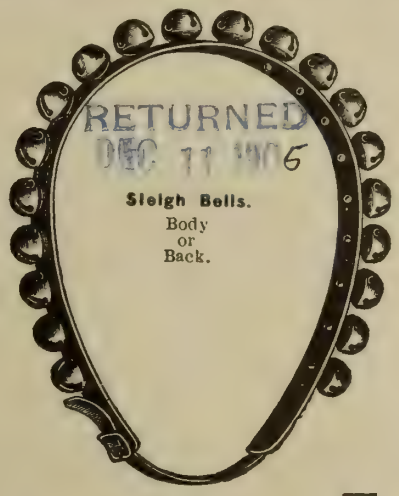
HARDWARE MERCHANTS

Only Wholesale — 138-140 WEST FRONT STREET, TORONTO — Wholesale Only

SLEIGH BELLS ON LEATHER STRAPS



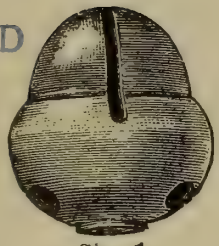
Dexter Bells



Sleigh Bells.
Body
or
Back.



Centennial Bells



Size 1

Dome Bells



Yoke-Eye Bells



Size 1

C. O. C. Bells



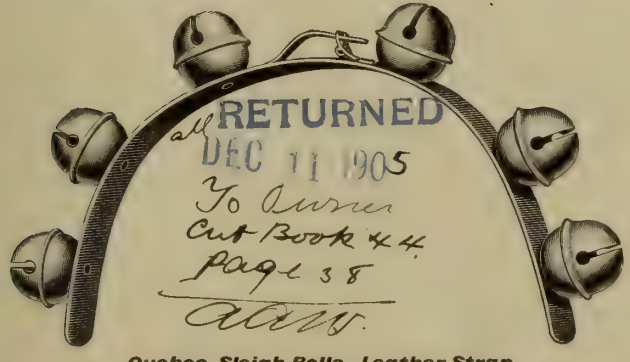
2 Bells—Iron Strap



3 Bells—Iron Strap



4 Bells—Iron Strap



Quebec Sleigh Bells—Leather Strap



Swedish Sleigh Bells—Leather Strap



B. Standard Carriage Heater

5 CARBON BRICKS for CARRIAGE HEATER



Clark's Carriage Heater

FOR A FULLER LINE OF SLEIGH BELLS SEE OUR CATALOGUE

H. S. HOWLAND, SONS & CO., LIMITED Toronto

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto.

We ship promptly — Our prices are right

POINTERS FOR THE INDUSTRIOUS

GENIUS WASTED IN IDLENESS.

THIS is a story of a young man who had real ability and never exerted himself to put it to good use. There can be no doubt, writes Norman Morris, that Adair was a genius. He could write. He began as a reporter on a country newspaper. He wanted to get to a city. The fact that Adair did make a decided impression, and that within a year after his advent as a metropolitan newspaper man, proves that he was a real genius. He was no flash in the pan, a man who could do one or two good stories and then lie down. He "had it in him" to do good work and to do it right along. He had a whole lot of good work in him, and with men of this kind it is only a question of getting it out, and then success written in big letters and interspersed at frequent intervals with the desirable dollar sign is theirs to have and to hold. Adair had it in him. If he had only got it out there is no telling where he might be at this day. But as he never did get it out, he is still working for a reporter's wages on a small paper down south.

When Adair made his first hit the world opened up brightly for him. It was only a common newspaper "story" that first attracted attention, but it was the kind of a story that would have attracted attention if it had been printed on yellow wrapping paper and put around a bar of soap. Other men had taken the same subject, for it was an old one, and worked at it hard without doing anything startling with it. But under the sway of the young genius it became a thing for men to sit up and gasp at when they read it. The fashion in which Adair wrote made it an epic. It had everything in it that the well written story should have in it, and besides it had that which men may sit down and try to define, the touch of genius. It was a sensation in the profession for a full day after it was printed, and this is a novelty in a profession where yesterday's paper is as a thing of ancient history. It got Adair offers from two papers and it got him also an advance of salary.

A year later Adair began to attract attention with his feature stories. He was then just 24. He wrote stories that men who had grown gray at the trade would have given a hand to have written. He had a style about his work that made it popular without cheapening it in quality, and his prospects grew brighter day by day. He sold one or two stories to the magazines, and a female magazine reviewer swelled his head almost shamefully by comparing his work with the early efforts of Kipling.

His friends discussed him, and waited and hoped for the day when "Old Adair" should come before the public with a book. "He'll show 'em what real writing is when he gets started," they said. After awhile they began to say: "Don't you think Old Adair loafs a little too much?" A year later they were telling each other what a fool Adair was for wasting his chances. He had everything before him, he had the goods, all that was necessary was for him to put them on the market. And his friends waited and waited, and the goods came not.

The fact of the matter was that Adair had never adopted the habit of being industrious. He didn't want to work any more than he had to. In the early days, when he was only a reporter, he never tried to do any work outside of the mere routine of his assignments. When he had any spare time he got away some place with the rest of the fellows and devoted the time to talk and drink. The rest of the fellows, not having any particular ability, were not to be particularly blamed for wasting their time, but with Adair it was different. He had not merely ability, but genius, and a genius shouldn't throw himself away.

After awhile his friends began to talk to him. They told him that they were surprised to see no new work under his name. They advised him to buckle down and turn out something. Adair, being young, took this in the light of patronage and grew angry. When he wanted any fatherly advice he knew where to go for it, and he wasn't in need of any just now, thank you. His friends, also becoming angry, told him to go where the ice man cometh not, for all they cared, and left the young genius strictly to himself. A few editors wrote to him at intermittent periods asking for some of his stuff and Adair drifted along, doing work of a poor quality, and doing only enough of that to make a living. When he did decide to buck up and work hard, he found that he had the habit of not working so well rooted in his system that getting down to a desk for a protracted session of work was torture. As he did not love to be tortured by his own hand he didn't work much.

People who didn't know the inside facts of the case wondered why the brilliant Adair wasn't breaking into print more often than he did, but his friends knew, and called him a fool for throwing away his chances. So he drifted from one paper to another, never holding a position for any length of time, never turning out anything but mediocre work. He is still doing this. Even now he could do work that would soon make him well known, if he would apply himself to the task, but the "manana spirit" developed in his younger days has him in its grasp and he ambles along carelessly, filling positions that men with but half of his capacity laugh at, and no nearer success than he was in the beginning. Other men come and make a hit and go on upward. Adair stands still. He can do the work, but he doesn't. Other men do it. And that is the difference between the successful man and the failure.

EARLY SUCCESSES OF GREAT MEN

NO one will deny to Samuel Johnson the title of great, if only because he was so consummately human. That most of his reputation, high as it is, rests upon his biographer, Boswell, cannot be gainsaid, but the portrait would have amounted to little had it not been for the fine qualities to be discovered by it.

Johnson's maturity was slow, and his earliest successes came late in life, compared with those of other men of equal force. He was born in Lichfield on September 18, 1709, the son of a man of note locally, but one destined to lose his property through too great a love for books. This taste, indeed, was all he left his son when he died in 1732. Samuel was to labor without ceasing for full thirty years in order to provide himself with a bare living.

Johnson tried to earn his daily bread in various ways, with little success. He married a woman with children older than himself, and cherished her tenderly until she died. After she had departed he set out for London, being 27 years old, and as obscure a person as ever entered the city's gates.

He worked from hand to mouth, a bookseller's hack, says an exchange, and yet he found time to write his "London," an imitation of Juvenal, as Pope's successful satires and epistles, just then agitating the metropolis, were imitations of Horace. Johnson's work appeared in May, 1738, without his name. He was not yet 29, and yet it was to be years before he came into anything resembling secure fame after his first success with "London."

For the "Dictionary of the English Language," Johnson's greatest work, did not come out until 1755, seventeen years later, "The Rambler," "The Idler," "Rasselas," these preceding it by a little, but the "Journal to the Hebrides" was printed in 1775, while his "Lives of the Poets" did not complete itself until 1781, the author being then 72 years old.

Samuel Johnson died December 13, 1784. He occupied a remarkable place in the literary history of his century, rather through his personality, it must be admitted, than through his performances, though these have a place among the little read classics of our language.

Why this should be true every reader of Boswell can tell. Samuel Johnson was a man, every inch of him—not an ideal man, but a good one, in spite of everything.

NEW COAL COMPANY.

A new coal mining company, operating in Cape Breton, is exciting some interest in the east. Mr. Horace Mayhew, who is connected with this company, was in Montreal the other day and in an interview declared that there were 150,000,000 tons in the one seam of coal the company are now working. He looks forward to an early output of 1,000 tons per day, while in a few years the total yearly production should amount to 3,000,000 tons. Before the commencement of shipments the company have been anxious to have their screening plant ready. They contemplate building railways to Sydney and Louisburg, but if property owners show a disposition to hold them up they will go elsewhere.

AMERICAN SIZES CANADA UP.

THE November 27 issue of United States Daily Consular and Trade Reports of the Bureau of Manufacturers, Department of Commerce and Labor, is largely devoted to a report on "Canadian Industries," by Charles M. Pepper, the well-known writer on economic questions. Emphasis is put upon the field offered by the new Canadian Northwest for the development of fresh markets for the products of the United States. The report concludes that for years "the dominating influence in the Canadian Northwest as relates to markets and possibly public affairs will be that of settlers from the United States." From January 1 to October 1, 1905, 24,842 Americans crossed the boundary line to settle in Manitoba, Saskatchewan or Alberta. Of this number Minnesota contributed 5,816, North Dakota 4,613, and Montana, Iowa, Wisconsin, South Dakota and Illinois together contributed 7,176. Mr. Pepper urges American manufacturers to pay special attention to the Canadian Northwest "if they expect to hold the trade that belongs to them."

Dependence on American Products.

Points particularly dwelt on in the report are that the chief contributing cause of the building up of Canadian industries has been United States capital; that no industrial works of any kind are built in the Dominion in which the installation is not very largely from the United States, this country having almost a monopoly in mining machinery; that "while the United States has no reason to look forward to fiscal legislation by Canada that will give the United Kingdom a monopoly of the Dominion's market for manufactured products it may be expected that further exertions will be made to discriminate in favor of British products that do not come into direct competition with Canadian products. The delicate task to be attempted in the coming revision of the tariff will be so to regulate the schedules that both Canadian manufacturer and British manufacturer shall be benefited at the expense of the mills and factories of the United States."

The iron and steel situation is discussed at some length, and the establishment of the two mills now rolling rails is described in detail. As to the prospects for the iron industry Mr. Pepper says:

"The future of the iron and steel industry in Canada is involved in a number of problems not yet fully solved. It may be presumed that the Newfoundland Government will put no difficulties in the way of exporting iron ore from Belle Isle, and the ownership of the Wabana Ranges assures a supply of a certain character to the Dominion and the Nova Scotia companies. That too much dependence cannot be placed on the Nova Scotia or Cape Breton deposits of iron ore may be inferred from the fact that though the bounty on pig iron produced from native ore is 50 per cent. greater than on that from foreign ore, neither of the above companies makes extensive use of the native ore. In Ontario the total production of iron ore in 1903 was 209,634 tons, of which 153,500 were exported. In 1904 the output was 273,000 tons, of which 169,000 were exported.

——zinc ornaments

Pressed Zinc Ornaments often make the beginning of a profitable trade in "Metallic" building materials. Their beauty suggests many other metal things.

Dealers catering to the Sheet Metal Trade find the quality, workmanship and variety of the "Metallic" line more satisfactory than any other.

Being of solid zinc or copper they last forever, and their outlines are clearer-cut and sharper than any similar die stuck work.

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We also manufacture:
"Eastlake" Metallic Shingles
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"Metallic" Corrugated Iron
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"It is generally agreed that the industries already established must continue to depend largely on Government support, and the continuance of the duty on steel rails may be regarded as certain. Whether the bounties on pig iron and structural steel will be kept up is yet to be determined.

No Cheap Steel in Canada.

"The building of blast furnaces and steel works, which made the present steel rail industry of Canada possible, was attended by a scale of expenditure most distressing to the stockholders. Rail manufacture in the Dominion is yet far from reaching the perfection in organization and economy in production which have been attained by the plants in the United States. For many years this must be considered as a handicap in the effort to develop an exclusively Canadian iron and steel industry to supply the Canadian market or to compete with the United States. It is also the belief of many expert authorities that the lower grade ores and poor coal, with the difficulty of access to it for most sections, constitute a permanent drawback to Canadian iron industries, so that their cost will be considerably above those in the United States, and that a high tariff will always be necessary in order to keep out steel from this side. No Canadian steel works can produce cheaply in comparison with any of the leading steel making countries of the world.

"The possibility of cheapened production through new processes has not been demonstrated. The Government granted an appropriation for Dr. Heroult's electric steel making experiments at the Soo. These may result in something of value to the Canadian steel industry, but up to this time his process has been employed abroad in the manufacture of limited quantities of tool steel and steel for uses which do not involve any large tonnage. There is as yet no basis for the expectation that the electric process will afford any measurable compensation to Canada for the absence of desirable metallurgical fuel. It should be stated, however, that Dr. Heroult, in newspaper interviews, has expressed himself very confidently, stating that under favorable conditions pig iron can be made for $10 per ton, while steel will cost only about $4 per ton more to produce."

The report says that while estimates of the steel rails that will be needed for the next five years are widely apart, the majority of railway managers seem to agree on 150,000 tons as certain to be required annually, with a possibility of exceeding 200,000 tons once or twice.

"PUT YOURSELF IN HIS PLACE."

You like square dealing. You appreciate courteous treatment. When a man tells you a thing is so and you find it to be so, your faith in him begins to grow. If he tells you time after time that things are so and you always find the measure of his promises filled right up to the rim, in time you take his word for its face value—100 cents on the dollar without a question. Now, then, that's the secret of advertising that makes business. Exaggeration and deception in advertising is just as bad for a business as the same mistakes practised behind the counters

PAINT, OIL AND BRUSH TRADES

BUILDING ACTIVITY OF 1905.

PAINT is a commodity that is used most extensively in the country districts, where brick and stone construction has not yet superseded frame. Accordingly, the barometer of the paint trade is the general building activity, the country over, and not single instances of cities in which the construction of large buildings happens to be in excess of previous years. In fact, it is a serious question whether the era of brick and concrete construction that has come in of late will not be detrimental to the paint business, due to the fact that such structures do not require exterior painting. The hope is that the number of new frame buildings will increase, in spite of the popularity of other forms of construction, and that the growth of the paint demand for new and old work will continue at the same rate as in the past. The sale of all kinds of supplies that enter into frame construction has been enormous this year. Paints, roofing, nails, glass, lumber, etc., have gone into consumers' hands in greater quantities than ever before, indicating phenomenal activity along this line.

TO REMOVE PAINT.

"THERE is a great system in New Orleans in the way of clothes cleaning," said a paint traveler the other day. "A friend of mine noticed a little grease spot on his trousers the other day and naturally it annoyed him greatly. At the first opportunity he took them off and sent them to a cleaner with careful instructions to the boy as to how they should be cleaned and pressed. The boy simply told the cleaner to take out the grease spot. A few hours afterward the trousers were returned; the tailor had neatly cut out the grease spot from the garment and just as neatly patched in another piece. It wasn't exactly what Percy expected or wanted, but seems to be an ingenious method of taking out grease spots. I am going to try the experiment of getting grease all over my trousers and then sending them to the cleaner. If he is consistent he ought to send me back a new pair. Do you remember the old Texas Siftings joke? The best way to remove paint—'Sit on it before it is dry.'"

NEW PRICES ON PAINTS.

FOR some time it has been recognized that higher prices on mixed paints would rule after the new year and the present season's stocks had been disposed of.

The Sherwin-Williams Company have been the first to move in this direction, however, they having recently advanced their quotations 5 cents per gallon, the new figures now being: Quarts, $1.40; half gallons, $1.35, and gallons, $1.30, these prices all being per gallon. For the past three or four years the Sherwin-Williams Company have been selling their goods at graded prices, the same as all United States manufacturers do.

Other companies will probably revise their figures when their annual meetings are held.

PREPARATION OF ZINC WHITE.

The latest method for making zinc white is to volatilize the metal in the electric arc, and then burn it. The two carbons are placed in a crucible, which is kept full of zinc, and are placed in a closed vessel through which a current of air passes. The electricity volatilizes the zinc very rapidly, and the vapor rises into the current of air, which not only supplies the oxygen necessary for the combustion which immediately takes place, but carries the zinc oxide smoke into a large chamber through a flue. In this chamber the oxide settles to the ground, and is cleared out at intervals with shovels. The air exit from this chamber is provided with a muslin filter, to prevent the escape of any of the zinc oxide. The zinc is best fed into the crucible in the granulated form, and the crucible should be so mounted that, when necessary, the carbons can be withdrawn and the slag run out by tilting the crucible.—Le Mercure Scientifique.

BRUSH PRICES REDUCED.

The United Factories, Limited, announce that many lines of Boeckh's and Bryan's paint brushes will be lower in price for the coming season. This reduction is brought about principally, we understand, owing to their securing some very large stocks of bristles and other raw materials at exceptionally favorable prices, and this should be especially interesting to the dealer as the general tendency on brushes has been for a gradual increase, owing to the fluctuating market price of bristles, which are becoming scarcer and dearer and which will in all probability lead to higher levels in the Spring of the year when the great demand for and consumption of bristles is on.

The show window reflects more than the set of the passing woman's skirt and hat. It is the mirror that reflects the general character of the store. A nice window display is indicative of thought and care in the selection of goods, and customers are pretty sure of considerate treatment from such a dealer. And the advertising value to the merchant of an attractive window display is worth very many times its cost.

For 1906 consider what distinctive lines you will have control of by securing the agency in your town for

HOLYWOOD PAINT
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OROLITE OIL FINISH
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and other Imperial Specialties. Standard quality for years.

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BEAUTIFUL, DURABLE, ECONOMICAL

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NEW ERA PREPARED HOUSE PAINT

Made from Pure White Lead, Oxide of Zinc, Pure Linseed Oil, Turpentine and Turpentine Japan Dryers. Covers more surface, lasts longer, holds its color better, stands more variations of weather and gives a greater brilliancy of finish than any other paint obtainable. Be sure to get prices.

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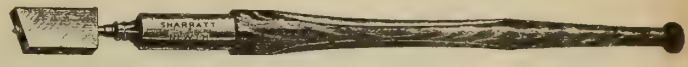
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Paints and Varnishes score a point for the dealer who carries them. They are not purchased on any haphazard plan, but are sought time and again because they bear "Island City" stamp, which spells ***Excellence.*** "Island City" Brand Paints and Varnishes are the most profitable goods ***you*** can carry.

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"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

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we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers, and the world's best white lead—BRANDRAM'S B. B. GENUINE

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HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 8, 1905.

BUSINESS this week has been very quiet. Local manufacturers have called practically all their travelers in, and are now busy taking stock There is nothing moving of any account and trade is well over for the season

So far as prices are concerned, the feature of the week has been a sharp decline in turpentine, the price now quoted being 93 cents for single barrels and 92 cents for two barrels or over

Linseed oil is a little stronger this week, and our prices are one cent in advance of last. Otherwise, there is nothing important to notice.

Turpentine—A still further decline has been shown this week. Our prices are now quoted as follows: Single barrel, 96c. per gallon. Two barrels or over, 95c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Prices are somewhat firmer than at our last report, and we are now quoting as follows: Raw, one to four barrels, 46c.; five to nine barrels, 45c.; boiled, one to four barrels, 49c.; five to nine barrels, 48c., f.o.b. Montreal. Net 30 days.

Ground White Lead—Owing to repeated jumps in the primary markets, it is felt that prices will have to be higher when stocks now in the hands of jobbers run out. We quote: Best brand Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—Prices are steadily held at the following figures: Barrels, $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—The strength of spelter is such as to give great firmness to our prices, which are as follows: Pure dry in casks, 7 1-2c.: in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.: in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We quote: 25-lb. irons, 8c. to 10 1-2c.; No. 1, 6 3-4c.; No. 2, 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Our prices are as follows: Casks, 7 1-4c.; 100 lb. kegs, 7 1-2c.: smaller quantities, 8 1-2c.

Red Lead—Prices in European markets have again been advanced, and as Canadian stocks are thought to be generally light, there is every expectation of a higher tone being given to this market. We quote as follows: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75; and smaller quantities, $5.50.

Gum Shellac — We still quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish — Our prices are: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—The turnover is rather small, at present, as is to be expected. Prices are from $1.20 to $1.40 per gallon

Castor Oil—Conditions this week are firmer than ever. Our prices range from 7 1-2c. to 8 1-2c., according to lots.

Refined Petroleum—The demand locally continues very good and prices are unchanged. We quote as follows: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—There are a lot of inquiries and some buying for Spring deliveries. The makers are looking forward to a very busy year during 1906, as they find that the demand will be very heavy from all parts of the world. The local jobbers are still receiving odd shipments of glass via Boston and they will probably be able to get it in this way throughout the Winter. The increased freight charges will tend to keep very firm the following prices: First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80: third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75: second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

ONTARIO.

Office of HARDWARE AND METAL
10 Front street east,
Toronto, December 8, 1905.

LINSEED oil and turpenutine are still being quoted at last week's figures. Turpentine weakened badly in the southern markets a week ago, but a reaction has prevented a change of figures locally. English oil has advanced again, but with the exception of stiffening matters on the Toronto market the advance has not been felt here.

Paris green is being quoted for Spring delivery by the jobbers and large bookings are expected for both the English and Canadian goods.

The largest December business yet known is reported, the open weather being partially responsible, but a greater reason is the anticipated advance in paints and paint materials next season.

Rosin has fallen to about half its former figure, but it is said that the high priced stocks are chiefly in the hands of manufacturers, jobbers carrying light supplies.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75; ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V.. M., in casks, $6.50: in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gal'on lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 47c. to 48c.; boiled, 50c. to 51c.; 5 to 9 barrels, raw, 46c. to 47c.; boiled, 49c. to 50c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, 95c. to 98c., f.o.b., point of shipment, net 30 days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Trade is falling off We quote as follows: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

RUSSIAN TURPENTINE.

FREQUENT references to Russian turpentine trade journals, give one the impression that it is an inferior product. However, that appears to be a matter of the perfection of manufacture or otherwise, and according to the Farben Zeitung the processes of making Russian turpentine are being greatly improved. The material used for the production of tar and turpentine in Russia is tree stumps and waste timber, charcoal being also obtained as a by-product. Great advances have been made in the manufacturing process since the introduction of tar ovens made of steel plate, as these enable the tar oils and pyroligneous acid to be recovered, instead of charring the wood in heaps. At the same time the operation can now be carried on all the year round, and it is not restricted to the Summer, as was formerly the case. A usual way of working these ovens is in pairs, with a single still common to both, this method giving the best results with the smallest expenditure of labor. Each oven is charged with about 3,400 cubic feet of tree stumps, weighing 12,000 pounds, the oven door being bricked up, the lid put on, luted with clay, and covered with a layer of about 6 inches of sand. The fire is then started, and at the end of about 17 1-2 hours the first runnings of spirit begin to come over. The operation is complete in 105 hours, and the maximum temperature does not exceed 26 deg. C. When ten hours have elapsed after the heating has terminated, the oven is opened, and the products weighed. The yield is, turpentine spirits, 450 pounds; tar, 1,300 pounds; charcoal, 2,560 pounds; pyroligneous acid, 3,700 pounds; tar oil, 28 pounds.

PURIFICATION OF LINSEED OIL.

A very simple method, if effectual, for purifying linseed oil from the mucilaginous bodies which cause all preparations of new oil to become turbid has recently been patented in Germany. The patentee having observed that linseed oil becomes turbid on cooling by the deposition of these impurities, subjects the fresh-pressed oil to artificial cold, say, 20 deg. C., and when the impurities have all separated out in the solid form puts it through a filter press.



PARIS GREEN

The Canada Paint Company are out already with their Paris Green prices for 1906. Hardware men should write for quotations as their brand has become extremely popular and the demand last season was very large.

With their new color-making facilities the Canada Paint Company will materially increase their output for the coming season.



The Castings in THE EMPIRE QUEEN RANGE

are very even, smooth and well-proportioned. The Reservoir and Reservoir Flues are constructed to obtain the very best results in heating water. Water can be heated in The Empire Queen more quickly than in other ranges. The Ash-Pit is deep and provided with a large ash-pan, to receive and remove ashes, which has effective ash chutes to prevent ashes from falling other than into the pan.

Send for Booklet and learn more about

THE EMPIRE QUEEN RANGE

The Canadian Heating & Ventilating Co.

OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

ARK-EL-ITE TRADE MARK

INVALUABLE

ARK-EL-ITE ASBESTOS STOVE LINING is invaluable as a fire mortar for laying fire-brick in boiler furnaces, as it is more lasting than fire-brick and clinkers will not adhere to it.

It is an improvement over fire-brick for lining and repairing cooking and heating stoves, ranges, etc., because it is more durable and more economical.

Any person can fit it in any stove.

Packed in heavy cardboard cases.
10-six-lb. pkges. in case, price $1.50

MANUFACTURED BY

THE FRANCIS-FROST CO. LIMITED

TORONTO

Makers of the Celebrated "Ark" Brand Paints.

McClary Self-Basting Roast Pan



No Basting, No Waste, and Nothing to Watch But the Clock.



Do you realize what this means to you ?

It means that no matter what you roast—meat or fowl—all you need do is to put in the roast, with a little water in the bottom of the pan, and take it out when done—crisp, juicy, and roasted to a turn.

The reason why this Roaster roasts so much better, and bastes itself, is that all the steam which arises and bastes the bottom of the roast is made to drop down again on the top of the roast, because of the special construction of the top. (See picture.)

But that is not all.

The ordinary Roasting Pan not only requires a lot of basting and watching, but it also wastes a lot of the roast itself, as most women know from experience. Actual test shows that a 10 pound piece of roast beef will only weigh 8 pounds, or less, when roasted in the ordinary pan—a clear loss of 2 pounds, or one-fifth of the weight ; at this rate you do not need to have "roasts" very often before this waste amounts to $3 or $4 a month !

This big item of waste, as well as the necessity of basting and watching, are all entirely eliminated in the **McCLARY SELF-BASTING ROAST PAN.**

It takes up no more room, and it can be used on the top of the stove as well as in the oven.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Kitchen."

STOVES AND TINWARE

A FIRELESS COOKER.

SOME time ago Hardware and Metal described a new method for completing the process of cooking without the use of artificial fuel. A non-conducting material was used for retaining the heat within the product to be cooked and the rest of the process was left to nature.

A new method for cooking by retained heat has recently been invented by Felix Kahn, of New York City. The patents on this invention have been assigned to James S. McCoy, 1122 Broadway, New York. In the process of cooking as heretofore practiced there is necessarily a great waste of heat, care and attention. There is also a loss of food material and also an unnecessary amount of wear and tear on the cooking utensils. It is said that the new fireless cooker invented by Mr. Kahn will save from seventy to eighty per cent. of the heat now considered necessary for the cooking of food. There is also said to be a great saving in the cooking utensils which at present are subjected to a longer period of heating than necessary.

This invention is said to be an improvement over the one previously mentioned, wherein the food was merely kept in a hot condition. Mr. Kahn discovered after further experiment that after having first permeated food with heat at a cooking temperature, it was possible to stew or boil the food to perfection by the heat as conserved against loss by radiation. He found that it was physically impossible, however, to steam or dry cook by retained heat without placing in the cooker a body of water.

In the improved device a body of water is placed in the bottom of the cooking receptacle and a perforated rest is provided over the water. This rest supports the pan or secondary cooking receptacle containing the food. The apparatus consists of an outer casing of metal and an inner casing of heavy steel; between these are non-conductors. A tight-fitting lid is provided. The whole outer shell is so constructed as to admit of a minimum amount of radiation from the interior.

The food is prepared in the usual manner, and it is allowed to remain on the fire until it is thoroughly permeated with heat. It is then set into the heat-retaining part of the fireless cooker. It is said that this cooker has been thoroughly tested in a number of instances and has always worked very satisfactorily.

A NEW FURNACE LINING.

FOR several years the material known as carborundum has been known as one of the best abrasives used in industrial processes. It possesses hardness in excess of native emery, and relatively higher lasting properties. It is a carbide of silicon, and its manufacture is possible only under the enormous heat of the electric arc furnace. One of the few seats of manufacture is at Niagara Falls, and the temperature of 3,500 deg. centigrade is developed in the process. A material which will fuse only at or near such a degree of heat is, of course, eminently suitable for the lining of furnace walls, and only its high cost has hitherto prevented its adoption for this purpose. To France belongs the credit of applying carborundum to this purpose without incurring the prohibitive expense formerly deemed essential to any attempt to this end. Ordinary refractory bricks have been given a thin coating of carborundum upon the sides which are to be exposed to the furnace heat. This method is the most desirable when a new furnace is to be erected, but it is stated that where it is not expedient to rebuild the whole chamber a preparation of carborundum, known as carborundum cement, may be applied to the walls of existing furnaces, and impart to a great extent the extra refractory properties of the material. Immunity from the necessity for frequent repair is the immediate result. In addition to a fusing point far above that ever developed in a coal, coke, or gas furnace, carborundum resists the action of the most potent chemical agents. Chlorine, bromine, sulphur, and oxygen have no effect upon it, even at a temperature of 1,200 deg. centigrade. Thus there are a variety of industrial processes in which the lining of furnace walls with carborundum may be profitably introduced.

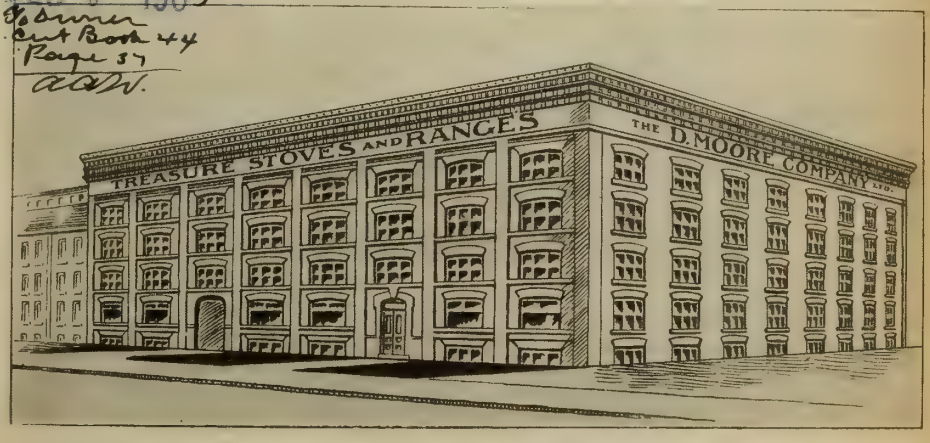
The usual way of preparing this carborundum cement is by mixing three parts of carborundum with one part of water-glass, i.e., silicate of soda. Before application the brickwork must be thoroughly brushed to remove all dust and extraneous matter, and the cement applied like a paint. It is found that furnaces that have been already fired require a good deal more brushing down than newly set furnace walls to secure proper adhesion of the carborundum cement. Twenty-four hours is sufficient time to allow the composition to become comparatively hard, and after this lapse of time the fire should be started. The furnace will be found to have an interior lining of refractory carborundum with all the resulting advantages.

D. MOORE CO. EXPANDING.

THE accompanying illustration is of a large warehouse now being erected by the D. Moore Co. in connection with their already extensive stove works.

The remarkable progress this company has made is manifest from the fact that they have been building extensively and adding large additions to their plant regularly each year for the past five years. The new warehouse which is now being constructed is to make room for an increase of their manufacture and improve their facilities for turning out high grade stoves and ranges. The former warehouses and additions are being equipped with the latest improved machinery and will be used entirely for manufacturing, which will assure prompt shipments to all their customers.

RETURNED
DEC 9 1905
Adams
Cut Book 44
Page 37
ADV.



New Warehouse being erected by D. Moore Company, Hamilton.

The demand for Treasure stoves and ranges manufactured by this company and the way they have been received by the trade is such that this company has experienced difficulty in keeping up with the demand, having had to keep their plant running overtime all Fall making increased facilities and a larger output necessary. The present condition is undoubtedly due to the superior construction and high finish of their up-to-date lines, which command large stove trade in nearly every section of this country.

Why don't you demonstrate the heating stove as well as the cook? By having one to heat your store and keeping account of the fuel it burns you can have a continuous demonstration without extra cost.

SYSTEMATIC ARRANGEMENT OF STOCK.

IT is doubtful if there are any similar stores in Canada of so small a size as the one illustrated in the accompanying photo, which has such a neat and attractive display of such a large quantity of goods. The store is that of Mr. B. E. Boniface, 58 S. John street, Hamilton, and Mr. Boniface states that on account of the smallness of the store it has been necessary for him to fill up every inch of available space. Readers of Hardware and Metal will agree that he has done this to very good advantage and that the order and system shown indicates Mr. Boniface to be a man of considerable ingenuity. The rows of pails, tanks, coal scuttles, lanterns, etc., on the ceiling and of other tin and enamelled ware on the shelves, as well as the box work in which kitchen brushes, etc., are stored, and the cleanly appearance of the counters, show



Systematic Display of Tinware in B. E. Boniface's Store, Hamilton, Ont.

cases and floors, is very commendable. The presence of food-choppers, sad irons and other such goods also indicates that the merchant is thorough in his effort to make his store the headquarters for women buyers, who desire cooking utensils and other kitchen needs. Whether you turn the photo upside down, or look at it in the proper way, the neatness of the arrangement of the goods attracts attention. Can any other reader of Hardware and Metal supply us with a photograph showing an equally attractive display of tin and enamelled ware.

IMPROVEMENT IN LANTERNS.

New patents secured by Messrs. E. T. Wright & Co., Hamilton, make their latest Cold Blast Lantern one of the strongest and best on the market. In addition to doing away with the perforations on the side of the globe holder and perforating a ring constructed around the base of the hood, a series of perforations have been made on the upper part of the globe holder, thus feeding more air to the tubes and decreasing the volume of oil consumed. Another improvement is the forming of a solid hood to the lantern with openings on the side. The new lantern cannot be extinguished by ordinary usage.

THE SECOND-HAND TRADE.

HOW is the second-hand stove business? This is a department that is capable of making money to the dealer if he will run it right, says the Hardware Trade. Everyone knows that there is money in second-hand goods of all kinds—at least everyone that has had dealings with the second-hand man. He buys for almost nothing and sells for a fair price. Result: One to two hundred per cent. profit, or even more. The same procedure can be followed with stoves, although they are usually taken in exchange for new ones. But an old stove that is at all good can be easily fixed up to bring a handsome profit. Perhaps it needs only another grate or a fireback, or simply cleaning and polishing. A little work and polish applied to an old stove may bring you two hundred per cent. profit. And that is not to be sneezed at. Some dealers are afraid that the second-hand department will draw trade away from the new stoves. It will not, if handled properly. The old stoves should be offered the customers only as a last resort. As long as there is any chance of his buying a new stove, do not try him with an old one, but if he is about to slip through your fingers, then you can often get him to take a second-hand heater or cook. Keep the old stoves neatly polished and set up in the back room, or at the rear of the store. One city store that makes a specialty of selling stoves on the installment plan has a standing offer to take "your old stove as first payment." As the first payment is somewhere in the vicinity of five dollars, usually they are perfectly safe.

AN ODORLESS GAS STOVE.

THE principal objections advanced against gas stoves of the usual type are that they give a very dry heat, and that they almost invariably yield a disagreeable odor. In addition to this the amount of gas consumed is quite large, so that they do not afford very economical heat. A new type of gas stove, in which these objectionable features are overcome has been put on the market. It is claimed for this stove that the cost of running it does not exceed that of the ordinary oil stove, that it keeps the air of the room moist, and that it is absolutely odorless. An important feature of the stove is a novel burner which insures a perfect distribution of the mixed gas and air to the burner tips, and which is arranged to be easily taken apart for cleaning purposes. The burner consists of two plates, the lower one of which is coupled to a gas supply pipe projecting through a galvanized iron pan in the base of the stove. This pan is filled with water which, as will be shown presently, serves to keep the air in the room moist. At the bottom of the supply pipe is the valve which controls the amount of air mixed with the gas. The lower plate of the burner is formed with an annular flanged rim which serves to space the two plates apart and with a series of conical tubes which are adapted to project through openings in the upper plate. These openings are larger than the tubes, and thus form annular passages through which the gas mixture flows to the blue flame jets.

To insure a more perfect distribution of the mixture to the jets, a boss is formed on the under side of the upper plate in which there are a number of spiral grooves leading to the different burner tips. One of the conical tubes is shorter than the others and over it in the upper plate is a closed thimble. The gas flows through a passage between the top of this pipe and the thimble and is then directed downward in a jet which plays upon the water in the pan. This insures a rapid evaporation of the water, which intensifies and moistens the heat and removes all odors from the gas stoves. If desired, antiseptics and disinfectants may be added to the water to purify the air of the room. An interior cone-shaped drum is so arranged as to produce a strong draft. A plate at the top of the drum deflects the heated air, causing it to flow against an outer cone, thence it passes through an opening in the top of the latter cone and out through the perforations in the stove casing. The outer and inner cones are connected by a third cone, forming a reservoir for heated air which keeps the outer cone hot, thus heating, as well, the air which pours up between the outer cone and the stove casing. In use the deflector at the top

PROUD OF HIS COUNTRY

AND ITS INSTITUTIONS is the dealer who can with confidence, in selling an article, say to his customers: "This is made in Canada, and neither the Yankees nor any other people can produce anything better."

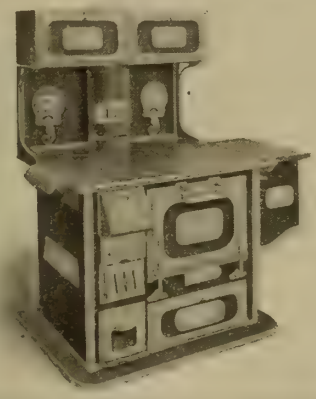
Conditions have changed in recent years, and are changing. "This is imported" is not cutting much figure now-a-days. The **Made-in-Canada** article is what is wanted by both trade and people. Especially is this true of **Church's Cold Water**

ALABASTINE

as is evidenced by the rapidly increasing demand from year to year.

ABSOLUTELY NECESSARY now to stock very early in the season this Permanent and Sanitary Wall Coating, that **HARDENS WITH AGE**, to insure having it in store when the early spring rush of house renovating comes on. The logical conclusion is **Order Now** from jobber or direct. Spring dating. It is **BUSINESS** to do this, and not have to say: "Just out of that shade." All tints and white in stock, together with a good supply of advertising matter if necessary.

THE ALABASTINE CO., Limited, - - Paris, Ont.



A person may get along fairly well with a watch that has a poor, cheap case, providing the works are good, but not so with a RANGE.

The "insides" or works of a range, no matter how good, will prove worthless, unless encased in a good body. The body of

The Joy Malleable and Steel Range

is made of 16 gauge **Patent Polished Steel.** No paint or Japan to burn or peel off. Wiped occasionally with a cloth dampened in Kerosene Oil, it retains its primal brilliant lustre always.

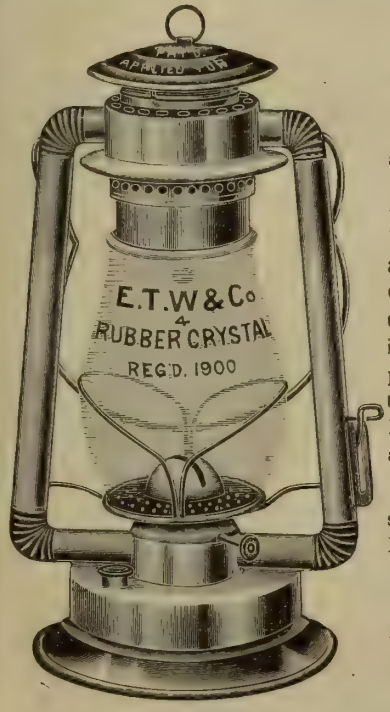
Sold only through the Hardware Trade
Have you secured the Agency yet?

The Joy Manufacturing Co.

32 William Ave., - - TORONTO

New Style Cold Blast Lantern

(Patented)



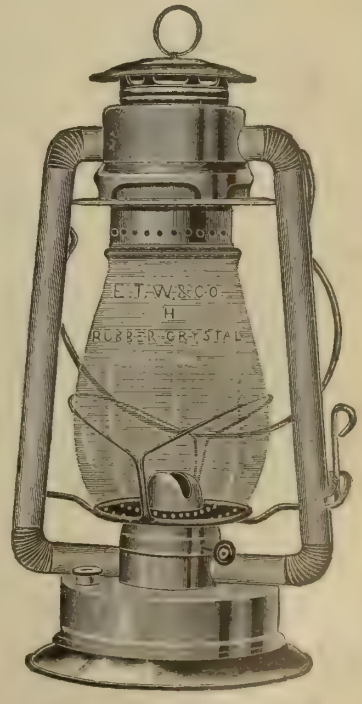
We beg to draw your attention to the cut herewith, which is an improvement of great value. You will notice by the annexed cut of the old style Cold Blast, and by this cut that the difference is in the top. This improvement makes it utterly impossible for the Lantern to be blown out by any ordinary means.

Made with Side Lift as shown in cut, or Bottom Lift.

Plain or Japanned.

Old Style Cold Blast Lantern

This cut shows our old style Cold Blast Lantern, which was and even is now the best Lantern of the Cold Blast. However, we have discontinued the manufacture of this style owing to our latest improved Patent—see cut annexed.



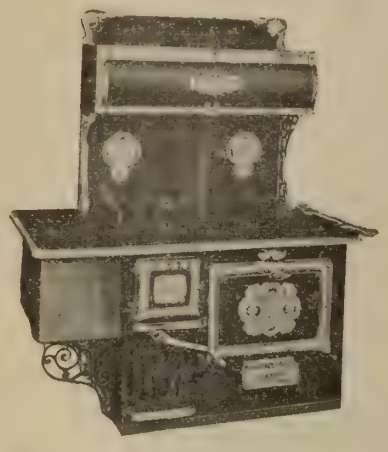
E. T. WRIGHT & CO., - Hamilton, Canada

APPARENT FACTS

Modern competition is so keen that help along the up-grade road of prosperity cannot be despised.

Can you afford to ignore the enormous demand which quality and systematic advertising has created for the Oxford lines?

As practical men you know that the prompt and sustained success of the



Our guarantee bond goes with every Range.

Oxford Chancellor Range

was inevitable. Quality placed it in the first rank. Quality keeps it there.

The Oxford Chancellor's tasteful adornments of nickel trimmings attracts—its exclusive features sell it.

The oven capacity of this range meets the requirements of all families. Our patented spring drop door makes a convenient shelf for basting.

This range burns soft or hard coal or wood.

Each fire-box is mathematically proportioned.

Our celebrated Duplex Grates are provided for hard coal burning.

The fire-box for wood is very roomy with air space between it and the oven front. The Chancellor is furnished with fire-box linings for either purpose as desired.

The Reservoir of planished copper can be easily detached or attached by any-one in a few moments.

The Oxford Chancellor Range should certainly have a prominent place on your floor.

Write for Catalogue 61.

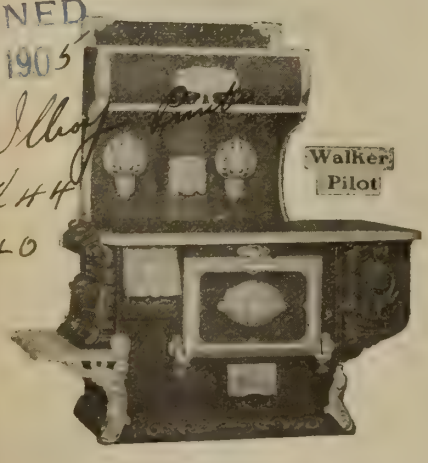
WE also manufacture Cast Iron Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER** 78

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

If you are in business to make money and are desirous of selling an article that will make satisfied customers for you and attract their trade in other lines, get the agency for



Walker Stoves and Ranges

"SUCCESSFUL EVERYWHERE"

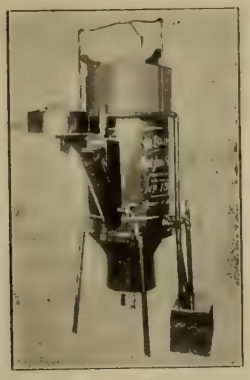
About our Walker Pilot Range. An enamelledware tank in a solid cast casing—duplex grates for coal or wood, removable without disturbing the linings—oven thermometer—Seymour Patent slide draft along the entire length of the grate—cast iron flue back—and a large square oven, are a few features that make

Easy Sales and Satisfied Customers.

GET OUR CATALOGUE AND PRICES ON MONDAY.

The Walker Steel Range Company, Limited

Grimsby, Ont.



The Eclipse

The Light That Lights!

ACETYLENE

It you want the best light for the least trouble and expense, use acetylene. Unequalled for store, factory or house.

The Continental Heat and Light Co.

Montreal



A DOLLAR'S VALUE
every time in

Sterne's Asbestos Stove and Furnace Cement

Full quantity at low price—that is the "Sterne's" way. We will send you one barrel on approval.

You don't risk a cent. Shall we send ***you*** some?

Prices to be had from

G. F. STERNE & SON, MANUFACTURERS, ***BRANTFORD, ONT.***

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

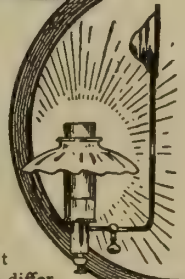
Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.

THE AUER GAS LAMP





Delightful to read by.

Gives the light of 100 Candles and Costs Less Than Coal Oil.

No smoke or smell. The whitest, clearest, softest light for reading or sewing. The different styles are suitable for store, church or home. SATISFACTION GUARANTEED. Catalog on Request.

AUER LIGHT CO., MONTREAL

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

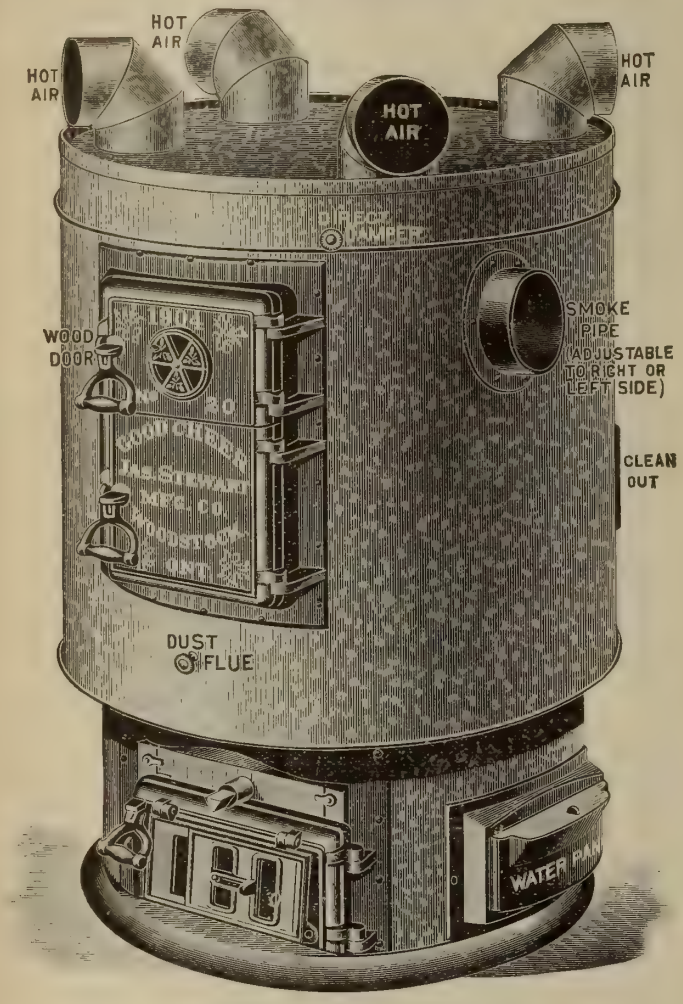
THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

THE "GOOD CHEER" FURNACE

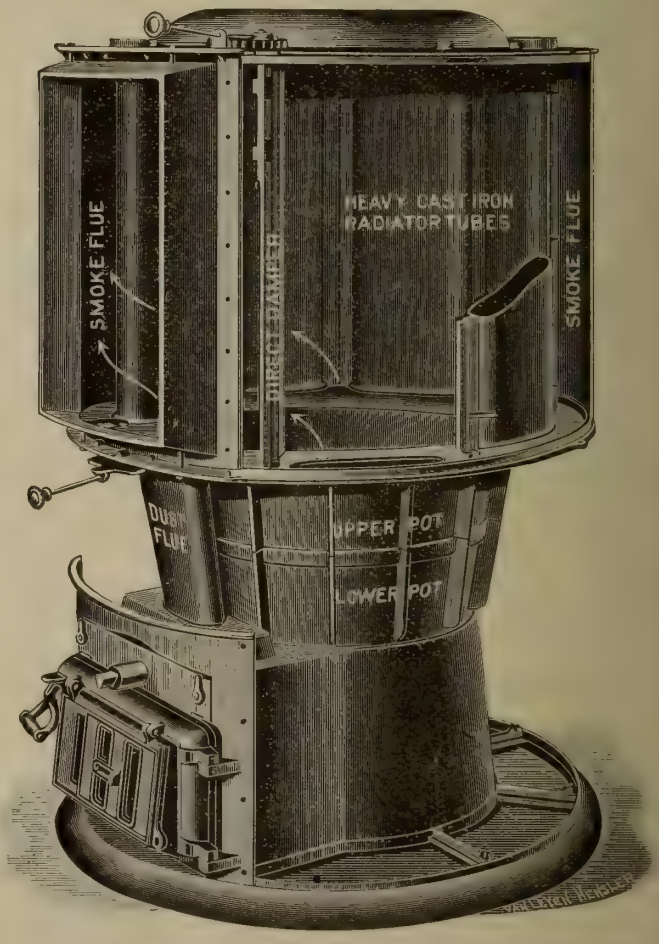
PATENTED



A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.



Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.
Contractions count as one word, but five figures (as $1,000) are allowed as one word.
Cash remittances to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.
Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED—A partner to take half interest in old established hardware business in central Eastern Ontario and manage it; must invest at least $3,000; full particulars on application. Box 297, HARDWARE AND METAL, Toronto. [49]

WANTED—A representative stove or other manufacturing company, to manufacture and sell under our Canadian patent, our wonderful Cosby Patent Air Tight Bakers and Heaters. These stoves are the most novel, useful and salable stoves ever built; will make an excellent line for any hustling company, and are easily and quickly introduced; sell well the entire year, and bring in a good steady profit; full information on request. In writing, please give full information regarding your plant and facilities for pushing a good thing. Address Wm. H. Hefner, P.O. Box 542, Richmond, Va., U.S.A. [50]

SITUATION WANTED.

WANTED—Position as salesman by hardware man; five years' experience; strictly temperate; A1 references. Address Drawer E, St. Marys, Ont.

WANTED—Position as salesman by hardware man with twelve years' experience; would like connection with manufacturers selling to the Canadian wholesale hardware trade; best references. Address K, 607 Ave. Hotel de Ville, Montreal. [49]

FOR SALE.

SET of good tinsmith's tools. Wallace, 135 Dalhousie St., Toronto. [49]

HARDWARE and Stoves in good manufacturing town; population 3,900; one opposition; stock $5,000. Box 298, HARDWARE AND METAL, Toronto. [52]

AGENCIES WANTED.

A FIRM of general hardware dealers in Kingston, Jamaica, is prepared to accept agencies for every description of hardware, cutlery, glassware, enameled ware, household furniture, leather goods, coach-builders' materials, etc. All enquiries should be addressed to HARDWARE AND METAL, Toronto, and full particulars will be given. [49]

SITUATIONS VACANT.

WANTED—Two first-class tinners for furnace work; $3.25 per day, eight hours; steady employment. Apply The Wm. Ralph Co., Vancouver, B.C. [51]

WANTED—A young man, some experience hot water heating, to have a salesmanship. Gurney Foundry Co., Limited, Toronto. [49]

SHEET METAL WORKERS WANTED—Men accustomed to heavy galvanized iron; permanent job for good men, as our machine is undoubtedly the best and is rapidly growing in public favor all over Canada, West Indies and South Africa; good mechanics seeking investment may take preferred stock if desired. St. Thomas Acetylene Manufacturing Company, Limited, St. Thomas, Ont. [49]

of the interior cone becomes red hot and insures perfect combustion of any partly burned matter which may be carried up by the strong draft. The patents on this novel stove are owned by the Odorless Gas Heater Co., 86 and 88 Worth street, New York, N.Y.

PRODUCTION OF TIN.

CONSUL WILLIAMS, of Cardiff, Wales, furnishes the following statistics relating to the production of tin, but the following table, showing the output in tons by countries for the last three years, is approximately correct:

	1902.	1903.	1904.
Malay States	53,756	54,797	58,657
Banca & Billiton	18,765	20,000	14,638
Bolivia	10,150	9,500	9,200
England	3,950	4,150	4,282
Australia	3,206	4,991	5,082
Miscellaneous	350	395	384
Total	90,177	93,893	92,243

According to these figures the production of tin is almost at a standstill, and there was an actual falling off in the output during 1904. On the other hand, the consumption is on the increase, and the accepted estimate for 1904 is as follows:

	Tons.
United States	38,000
Great Britain	15,898
Germany	14,832
All other countries	25,525
Total	94,755

Thus the consumption for the year was 2,512 tons in excess of the output. Ordinarily, the tin consumed is lost forever, but the increasing demand and the threatened diminution of the available stock has given rise to a new industry, the detinning of tin scrap. The statistics show that the United States consumes over 40 per cent. of all the tin produced, and it should lead in this recovery of tin from scrap.

HARDWARE TRADE ITEMS.

Get a profit on the stoves you sell. It is foolishness to let them go at a margin above cost that will really not pay for the handling.

The stove demonstrations are bringing the women to the store. They are a big thing for the store whether any sales are made on the spot or not. In another year the well-run hardware store will not omit the stove demonstration. It is becoming a necessity.

The lamp and lantern department should be pushed to the front. Lamps and lanterns on tables will do more business than where the stock is piled on high shelves or slung from the ceiling. Chimneys, globes, burners and wicks are not to be forgotten. Little items—but they count.

Be sure that every stove you sell is set up properly. Poor setting up is responsible for many of the faults found in stoves. If you can not place the stove up yourself, be sure to tell the purchaser just the condition necessary to the best results, the size flue, its condition, the length of pipe, etc. All these things count.

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

Wanted

A strong, steady, preferably experienced, advertising writer to look after the publicity end of wholesale and retail concern. Good salary. Apply by letter only: Advertiser, care of Manager MacLean Publishing Company, Toronto.

Important to Babbitt Users

Why pay for a name? Be up-to-date and have your babbitt made according to your own Formula, or if you have no formula send a sample of what you are using and we will quote you price on same quality. All formulas made to order.

Long Distance Telephone Main 4315

CANADA SMELTING CO.
Limited

STANDARD *Babbitt Metal, Phosphor Tin, Needle Metal, Type Metal, Etc.*

Cor. Brennan and Ann Sts., MONTREAL

Buy the Best.



HERCULES
Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.

BEST ELBOWS

— FOR —

CONDUCTOR PURPOSES

BEAR

TRADE MARK

F. Dieckmann

CANNOT BURST

— from —

ICE PRESSURE

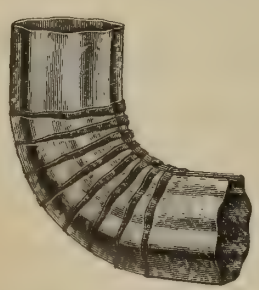
Made in . . .

6 Materials.

5 Angles.

14 Sizes.

1,225 Varieties.



For Sale by the TRADE in Canada. Write for catalogue and samples to

FERDINAND DIECKMANN

1180-82-84 HARRISON AVE.

CINCINNATI, O., U.S.A.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

CANADA'S imports reach the total of $251,603,000, or twenty-five per cent. of the United States' total imports. Canada, with one-fourteenth of the population of the United States, is only quadrupled by that country in the value and volume of her imports. For every $2.50 worth of imported goods consumed in Canada, 70 cents' worth of imported goods are consumed in the United States. The meaning of this difference is that Canada should manufacture more and import less. Canada is not superior to the United States as a consumer of goods, domestic or manufactured. The United States is superior to Canada in manufacturing to supply her own needs instead of having to import. Canada should increase her manufactures and decrease her importations, especially at the expense of the United States, which supplied $152,431,626 of our importations, or 60.58 of the total.

A soap factory is likely to be established at Berlin.

An extension is to be built to James Bros' foundry at Perth.

The Sommerville Paper Box Factory at Stratford is to be enlarged.

W. S. Dwinnell, Minneapolis, is to establish a saw mill at Strathcona, Alta.

The British North American Peat Fuel Company is to establish a factory at Winnipeg.

Work on the new Michigan Central Railway tunnel at Windsor has been commenced.

Machine works are to be established at Dauphin, Man., by a company capitalized at $25,000.

The Stark Electric Co. are endeavoring to purchase the electric light plant owned by the town of Paris.

A new machine shop and other buildings are to be erected by the Dominion Coal Co. at Reserve Junction, C.B.

Moose Jaw's new waterworks system was opened a week ago. The town celebrated the event by a large banquet.

The Goodison Threshing Machine Works at Sarnia were damaged to the extent of $10,000 by fire a few days ago.

Two large turbines are the result of this year's experiment by the Allan line. The plans for these new vessels are now being prepared.

The Prepayment Meter Company, Peterboro, are to place orders immediately for machinery to manufacture their patented meters.

A wireless telegraph station is being erected at Toronto Junction by the De Forest Co., and it is expected to be in working order early next year.

The B. C. Bedding and Upholstery Company, Vancouver, is to spend $50,000 on machinery and plant for the manufacture of iron and brass beds.

The Davis Tanning Co. propose to expend $50,000 in extending their plant if the city of Kingston will grant an exemption from taxation for twenty years.

Fire destroyed the car shop and blacksmith shop of the Prince Edward Island Railway at Charlottetown last Saturday, the damage amounting to $60,000.

The International Railway, Niagara Falls, has placed an order for 100 new cars to cost $600,000. The J. G. Brill Co., of Philadelphia, have secured the order.

The Halifax Board of Trade is making vigorous efforts to secure Government assistance for the establishment of a steel ship building industry in Nova Scotia.

The Manitoba Iron Works, Limited, Winnipeg, have secured the contract for the new well caisson for that city. Heretofore these contracts have gone to eastern manufacturers.

London and Stratford capitalists propose to erect an abattoir near the city of London, providing certain privileges are given the company, which will be capitalized at $125,000.

The Huron & Ontario Electric Railway, which has expended $100,000 in construction work is said to intend to open up a line next Summer from Walkerton to Meaford and Owen Sound.

Operations have commenced on the new factory of the Ingersoll Nut Co. Some of the machinery has not yet been installed, but the manufacture of cold punched nuts will be carried on from this time.

The New York Central Railway has purchased the proposed new North Lanark Railway, which will have its starting point from Ottawa and the terminus at Madawaska, with branches to Arnprior and Fitzroy Harbor.

The Winnipeg Electric Power Company have constructed towers every 500 feet for the 62 miles between their power plant and Winnipeg. Another power company is installing a power plant on the Winnipeg River at Silver Falls.

The Delaware & Hudson Railway Co. have purchased the Quebec Southern & South Shore Railway. The new company will spend a large sum in improvements and will compete actively in Southern Quebec with the Grand Trunk and Canadian Pacific.

Stratford ratepayers will vote on a by-law on January 1st to grant certain inducements to a company to be organized by David Gilchrist of Toronto. The company propose to manufacture wooden boxes, and will invest $40,000 in building and machinery.

A new company is being organized to establish a carbide industry in Canada. Plants are to be erected at Fernie, B. C., and at certain points in Ontario and Quebec. The company will have a capital of $250,000, and it is expected the price of carbide will be reduced from $70 to $50 per ton.

The Canada Cordage Flax Co., which has decided to locate at Glencoe, will expend $75,000 on building and machinery and will employ 90 men the first year. The town will submit a by-law

guaranteeing the bonds of the company to the amount of $40,000, provide a free site and give other advantages.

—

Companies Incorporated.

The surrender of the charter of the W. G. Nott Bicycle Co., of Brantford, has been accepted.

The Borland Carriage Co. have been granted the privilege of increasing their capital from $25,000 to $250,000.

The Eastern Coal Co. have been further incorporated to carry out and transact all matters and things comprised within the powers of the company. A. Alfred Laurie, Toronto, has been appointed attorney for the company.

The Perry Lubricator & Machine Co., Ottawa, share capital $250,000, purpose to manufacture, buy, sell or deal in machinery or mechanical devices. The incorporators are J. Walker, A. Wilson and A. Berry of Montreal, and E. A. Bleakney, W. Gamble and F. A. Heney, of Ottawa.

The Twin City Brick & Supply Co., Port Arthur, share capital $40,000, purpose to manufacture, sell and dispose of cement and all kinds of bricks and building material. The directors are to be J. A. Stewart, H. Finger, E. McEwen, T. H. McCauley and J. McCutcheon, all of Port Arthur.

The Ontario Car Ferry Co., Montreal, share capital $500,000, purpose to carry on a general business in steamships, tugs, barges, ferry boats, etc. The incorporators are C. M. Hayes, F. H. Fitzhugh and J. W. Loud, of Montreal, and A. G. Yates, W. T. Nooman and R. W. Davis, of Rochester, N.Y.

Parker Foundry Co., Montreal, share capital $25,000, purpose to carry on the business of founders and manufacturers of castings, plumbers' supplies, machinery, etc. The incorporators are J. Ballantyne, H. W. Glassford, of Montreal, and M. C. Rosenfield, Cleveland, Ohio, W. J. White and A. W. P. Buchanan, of Montreal.

The George Tucker Co., of Canada, Montreal, share capital $40,000, purpose to manufacture and deal in all kinds of stationery supplies and hardware sundries. The incorporators are J. H. Hough, W. H. Butters, F. R. Lanigan and H. Pillow, all of Montreal.

The Canadian De-Tinning & Chemical Co., Montreal, share capital $100,000, purpose to manufacture and deal in all kinds of chemicals and chemical products. The incorporators are H. H. Wolff, J. Wolff, A. Pollack, A. Bover, and H. J. Hague, all of Montreal.

The Northumberland-Durham Power Co., Cobourg, share capital $250,000, purpose to construct, maintain, complete and operate works for the production of electricity for the purpose of light, heat and power. The directors are W. J. Crossen, W. J. Maher, F. M. Field, D. Ewing, T. C. Lapp, J. Henderson, A. R. Dundas, and E. C. S. Huycke, all of Cobourg, J. A. Culverwell, W. McLean, R. A. Mulholland, J. F. Clark and F. W. Galbraith, all of Port Hope, Charles Donnelly of Pittsburg, Pa., S. Nesbitt of Brighton, E. T. Adams, of Toronto, and R. A. Elliot, of Roseneath.



No. 32. OSHAWA, ONT. Dec. 9, 1905

FIREPROOFING.

It doesn't matter what part of the building requires fire protection. We are now making :

Metal Lath, Hollow and Solid Partition Studs, Furring Strips, Column Covering, Plasterers' Metal Corners, Lathers' Staples, Lathing Wire, etc.

No other concern is manufacturing such a variety of **Fireproofing**, so no other concern can compete with us in building essentials.

There is scarcely a building being erected at the present time without **Fireproofing** being used. Now, you perhaps think that the orders for such **Fireproofing** are given to "big concerns" solely. Such is not the case. If a large quantity of **Fireproofing** is needed, and your stock is not large, you have merely to forward the order to us. The goods are then sent direct, **and you get the discount.** So you see, any hardwareman can get a share of this trade—size of store or stock doesn't count. Of course, it is well to always have a supply of the **Fireproofing** on hand, for then trade is influenced without an effort on your part.

And you might just as well get the orders for

Steel Roofing, Corrugated Iron, Steel Shingles, Conductor Pipe, Metal Shutters, Sky Lights, Finials, Steel Siding, Steel Ceilings, Eavetroughs, Metal Doors, Prepared Roofing, Ventilators, Statuary—in fact, **anything** in this line.

We have a descriptive booklet. Besides, any of our offices will be pleased to forward you specific information.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

METHOD

makes a big difference in rifle construction. Certain methods stand for just so much, and certain other methods stand for just so much more. The best methods result in the best rifles.

THE HAMILTON RIFLE

MODEL No. 23

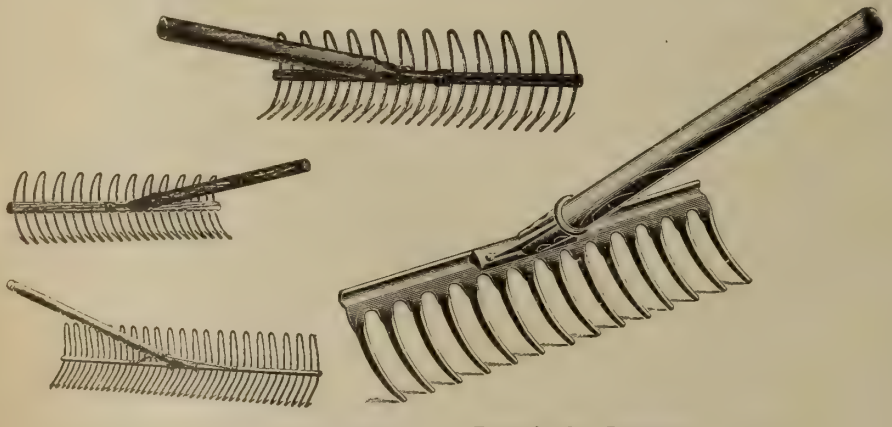
is what might be called a "method" rifle. It is made by a process which is superior to other processes—ensures more efficiency, more accuracy, more general satisfaction. The whole plan of construction is a thoroughly tried and proven one. And there is even method in the price—**Model No. 23** sells at $3.50—a rifle for every man in the land.

Prepare at once for **Hamilton Rifle** business. Your jobber will supply you.

THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**

Our **LAWN RAKES** are the **Best on Earth.** Your stock is not complete without them. Also Garden and Weed Hoes, Corn Planters, etc.



We are the largest manufacturers of **Posthole Diggers** on earth.

If interested please write for our Catalogue.

F. E. KOHLER & CO., Canton, Ohio, U.S.A.

GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, **LONDON, ONT.**

PLUMBERS' TRIAL NEARING END.

THE evidence in the conspiracy case against the master plumbers and the supply associations was concluded on Thursday before Mr. Justice Clute. No evidence was offered in contravention of the Crown's case. Mr. W. R. Riddell, K.C., for the master plumbers, did not attempt to justify the bonus system, and went so far in condemnation of it as to advise the return of the money improperly taken in that way.

Mr. Watson for the supply men took the technical objection that the section of the code regarding conspiracy did not apply to the acts of two corporate companies, and on behalf of the association strongly repudiated any intention to commit any wrongful or illegal acts. Mr. DuVernet, Crown prosecutor, delivered a scathing denunciation of a combination under which, he said, "citizens had been absolutely defrauded, and under which while making dishonest tenders 'honest' and 'reputable' members of the association had sat around the table, distributing other people's money among themselves and arranging to what extent they could plunder and rob them."

The letter from the Page-Hersey Company to C. A. Sullivan, referred to on another page, reads as follows:

Nov. 28, 1905.

Mr. C. A. Sullivan,
Westmount P.O.

Dear Sir,—You wrote me on the 15th of May last relative to a letter which you had written to Guest & Co. some time before that. In your letter to us you stated, "that on account of his not being on the jobbers' list we could not sell to him. I explained to him when in Toronto that the jobbers handled our output; no reference was made to the Plumbers' Association in the letter—to my memory. We have nothing to do with that association according to our jobbers' list as I understand it."

In the face of this letter we can scarcely understand how you could have written such a communication as that which was read in court as per the newspaper report which we hand you herein. You know perfectly well that we had nothing to do with the Plumbers' Association, and further that pipe was exempt.

We cannot afford to have anyone in our employ who would write letters like the one referred to. Your action has got the company into serious trouble, and has also had the effect of having the writer indicted to appear in the court on Friday on a charge of conspiracy. He has already lost considerable time over this matter, but was finally excused as a witness, as the Crown counsel stated that you were the man they were after as you had written the letter in question. They desire you to explain what your reasons were for having written such a letter in the face of the writer's statement that we had nothing whatever to do with the Plumbers' Association, and sold our pipe to whomsoever we chose. It is probable that you will receive a subpoena to attend court in connection with this matter.

In the meantime we will have no recourse but to dispense with your services, and hand you herein a check for your salary up to the first of December.

We very much regret the necessity for this action, but you can readily understand we cannot afford to take any more chances. Yours very truly,

W. W. Near, Page-Hersey Co.

CHRISTMAS ADVERTISING

A Variation.

WHEN Christmas time draws near you naturally feel that your advertising needs a variation. Ordinary methods will scarcely suffice, you think, because so many more merchants will be advertising and so many more stores will look attractive.

Superior Methods.

Christmas advertising does require superior methods, not because it should be less businesslike than any other advertising, but because it must be adapted to the customs of the season.

Silverware, etc.

Silverware, cutlery, etc., will, of course, be brought to the fore. While a knife is always a knife, and price and quality always determining factors in purchasing, there is an admixture of sentiment with Christmas business which cannot be disregarded. Therefore, your newspaper advertising should have an extra attractiveness and cordiality about it, be bland in tone and not aggressive. Commonalities should be avoided and minute details give place to seasonable references.

Booklets.

The Christmas newspaper advertising might be augmented by a neat booklet containing greetings and an enumeration of the articles announced in the papers. A copy of this booklet could be given to every purchaser from now on, and other copies circulated within a reasonable area.

Show Cards.

A few suitable show cards might also be of service when the people have been attracted to your store. Show cards enliven the display and perform the function of "instant index."

The Package Slip.

Another successful publicity instrument is the package slip. If you feel that issuing a booklet will entail too much expense, you could have slips printed and one inserted in every bundle sent out. The slip can be made particularly effective when it is pressed into the capacity of address label as well. Of course, in the latter case you cannot have much more than a bare announcement printed on the slip. Its effectiveness consists in the fact that it will be seen.

The Window Bulletin.

The window bulletin is an inexpensive but efficient method of appealing to transient trade around Christmas time. On a large card, or piece of manilla paper, you might write: "It's not all gold that glitters, but the spoons you see in this window are silver!" Then, "Thousands of people will be buying skates—why not do it now?" etc. If run regularly Christmas week, with a change each day, good results ought to accrue. The bulletins would certainly not cost much.

The Children.

Children figure considerably in Christmas purchases. Don't overlook them when trimming your window, decorating your store, etc. It would be well to have skates and hockey sticks arranged in the window, with sleighs somewhere in sight. If your store attracts the youngsters, they will see that it attracts their parents.

The Farmers.

An important element to be reckoned with in Christmas week is the farmers. Be sure some copies of your booklet or package slip reach them. It would be advisable, also, to run one or two "direct" advertisements in the weekly papers.

Pictorial Advertising.

A writer in "Hardware" has the following to say.

"To the looker-on one of the most conspicuous advances in the advertising field is the artistic element. The result is that the advertising pages of some of our great magazines are really works of art. While this is true in a certain measure in all advertising, it seems less to have pervaded the hardware world than its subjects deserve. Well, maybe art and anvils are incompatible. Yet, why cannot the man who has a first-class hammer to sell put it and its proverbial companion, "the looking glass," in the hands of a bright-faced though spoiled kid, and let the camera do the rest? Children play no small part in the successful advertising of the present.

The Cow Tie.

"Picking up a trade publication, the eyes fell upon a full-page ad. for a cow tie. Aside from the illustration of the tie, which required but a small part of the page, there was very little use made of the space. What a fine half page might have been given to a pleasing landscape with some prize winner in the foreground secured by one of these ties. Turning a few pages, this very idea was to a certain extent materialized, though evidently designed solely for utility, not art. No restful trees or quiet stream appear in the rear—only bare barn wall. The expression on the face of the bovine is not indicative of the contentment which a first-class tie should inspire. The man on the hunt for the article would probably be attracted, but the possible convert might easily pass it by.

Grace and Beauty.

"Household specialties, as carpet sweepers and floor cleaners, are as promising subjects as baking powder or cereal. Yet we all know the attractive figures which appear in the latter. Let grace in motion combine with beauty in feature, and the woman pushing the carpet sweeper has a chance for her share of attention. Just think what the dealer in angling goods might present in the way of beautiful scenery. Those who cater to the hunter's wants can add natural history specimens to his attractions, deer or grouse being represented under cover of the Blank & Co. rifle.

Ice Cream Freezers, Etc.

"For the ice cream freezer man there is the pastoral scene with the dairy herd—snowbound, preferably; ice skates are suggestive of the ice-covered stream bordered by evergreens and thronged with merry figures; the Christmas turkey as manipulated by a brand new carving knife of superior make would certainly attract notice; the small boy getting his hair cut might do for the clipper ad.; beauty in architecture and interior decoration should be remembered by the paint and varnish man; the prospective captive of the new mouse trap may be as fascinating in advertising columns as in the feature article of a Seton Thompson, even the patent clothes line may be placed in beautiful surroundings, and the toughest article in the hardware stock become a pleasing subject for illustration." A.A.B.

FEWER POCKET KNIVES SOLD.

"THERE is not so much call for pocket knives as there used to be," said a man who has been in the cutlery business for forty years. "There was a time when every man carried a pocket knife, but now you might stop fifty men in the downtown section and ask for a knife and not more than a dozen could accommodate you. We do not carry anything like the stock in this line we did in other lines. Now one person in an office or business house keeps the pencils sharpened for the boss and the help. The old horn handles have nearly disappeared. They are still found in the country stores, but the city man who carries a pocket blade wants something that will not wear out his pockets, and which will not be any extra weight. Some of the old brands of knives which used to be good sellers the year round have entirely disappeared from our cases, and nearly so from the factories. A long time ago the pocket knife most in demand was the 4-inch spring back. One reason why it had such a run was that it was a mighty handy weapon in a fight. When the blade was open the blade stayed put until you pressed a spring which closed it."

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

OF ONTARIO Limited

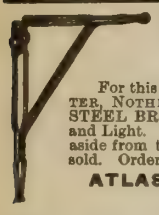
Head Office:

Ingersoll, Ontario.

Walter Mills, General Manager

Ask for quotations for Septic Tanks.

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,

New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables— "Machinery," Newport.

Emlyn Engineering Works NEWPORT, MON., ENGLAND



COVERT MFG. CO.

Troy, N.Y.

Auto Screw Jack

Harness Snaps, Chain, Rope and Web Goods, etc.

FOR SALE BY JOBBERS AT MFRS. PRICE

USE

"HERCULES" BRAND

PORTLAND CEMENT

Manufactured by

THE GREY & BRUCE PORTLAND CEMENT CO.

OWEN SOUND

J. McLAUCHLAN, President.

THE IMPERIAL CEMENT CO., Limited

Makers of the Celebrated Brand

"IMPERIAL" PORTLAND CEMENT

OWEN SOUND, ONT.

PRIEST'S CLIPPERS

BALL BEARINGS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

SEND FOR CATALOGUE TO

American Shearer Mfg. Co., Nashua, N.H., U.S.A

Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

...FULL STOCK...

Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT

ST. JOHNS, QUE.

BUILDING AND CONSTRUCTION

CEMENT MILL MAY MOVE.

THE next meeting of the National Portland Cement Company's shareholders promises to be an interesting one. The directors of the company have recommended the removal of the company's mill from Durham, Ont., on account of the scarcity of raw material in that locality. The town council of Durham disputes the statement that material is scarce, and a committee appointed by it, under the chairmanship of Dr. Jamieson, M.P.P., investigated the question, and reports that there is a sufficient quantity of marl obtainable to keep a cement mill running for a man's lifetime.

The company was capitalized at one million dollars, a quarter of a million of which went to the promoters. A mill was constructed with a capacity of 1,000 barrels a day, and said to be one of the best mills on the continent. In the building of it, however, a liability was incurred, which was increased by inexperience of workmen, and accidents during the first year. No dividends being forthcoming, the stock fell to 16 cents on the dollar.

This last year things went very much better, and the company was enabled to pay back $13,000 which had been borrowed from the bank, and to reduce the indebtedness from $127,000 to $30,000. On the top of this favorable report the citizens of Durham, who are largely interested in the company, were thrown into consternation by the resolution of the directors to move the plant elsewhere.

BUILDING NOTES.

A new curling rink is to be built at Grimsby.

The Methodists will build a $40,000 edifice at Moosejaw.

John Slater, Hamilton, is to build two brick houses to cost $3,000.

Thwaites & Spragg, Hamilton, are to build two brick residences to cost $2,800.

The Hudson Bay Co. are to build a large addition to their retail stores at Vancouver.

Contractor Black, Regina, is erecting a three-storey temperance hotel at Rouleau, Sask.

Ramsay & Philip will build a four-storey office structure in Dauphin, Man., next Spring.

A building permit has been issued at Brantford to E. L. Cockshutt, for brick addition to a store to cost $1,500.

Croker & Boucher, tea merchants, 18 O'Connell street, Montreal, are reconstructing their warehouse at a cost of $7,500.

The Canadian Pacific Railway Co. has spent $64,500 in building operations this year at Calgary. Large new freight sheds to cost $28,000 are also planned for construction.

The Alexander Brown Milling Co., Toronto, have taken out a permit for a flour mill to cost $40,000, to replace the one recently destroyed by fire.

The report of the building done at Hamilton in the month of November shows a wonderful increase as compared with November last year. The figures are: November, 1905, $395,625; November, 1904, $68,200; an increase of $327,425.

The town council of Westmount, P.Q., is considering a new building by-law which, if it goes into effect, will make it unlawful for any person to build, have or maintain any dwelling house which occupies more than two-thirds of the building lot on which it is erected, to construct in such building any sleeping room which is less than 640 cubic feet in dimension, and which does not possess direct communication by window with the out-of-doors.

The report of the building inspector of Montreal as to building operations in the city and vicinity shows that seventy-seven permits for new buildings were issued during the month of November, the cost of the structures being $313,645. Permits for alterations numbered twenty and involved an amount of $26,871. This made a total amount invested in building operations last month of $340,576, an increase over the corresponding month of last year of $105,611.

New York and Brooklyn report 52 per cent. more construction in 1905 than in the corresponding period of 1904. Buffalo, 4 per cent.; Chicago and Cincinnati, 60 per cent.; Columbus, 65 per cent.; Denver, 50 per cent.; Detroit, 56 per cent.; Indianapolis, 41 per cent.; Kansas City, 27 per cent.; Louisville, 76 per cent.; Memphis, 29 per cent.; Milwaukee, 28 per cent.; Minneapolis, 35 per cent.; New Orleans, 9 per cent.; Omaha 69, Philadelphia 19, Pittsburg 49, San Francisco 30, St. Paul 80, St. Louis 88, Tacoma 4, and Washington 77 per cent. These reports are so favorable that they seem exaggerated, but there cannot be much doubt that they are approximately correct.

With another month yet to run, the cost of building operations in Winnipeg this year is within a quarter of a million of the $10,000,000 mark. The number of permits and the value of buildings for which permits were given during the month of November greatly exceed the figures of the same month last year. Following are the statistics: Value of buildings, January 1 to November 30, 1904, $5,640,110; 1905, $9,743,560. Value of buildings for month of November, 1904, $471,590; 1905, $788,771. Number of building permits issued January 1 to November 30, 1904, 1,742; 1905, 2,569. Number of buildings for which permits were issued for month of November, 1904, 156; 1905, 238. Number of new buildings erected from January 1 to November 30, 1904, 1,620; 1905, 2,933.

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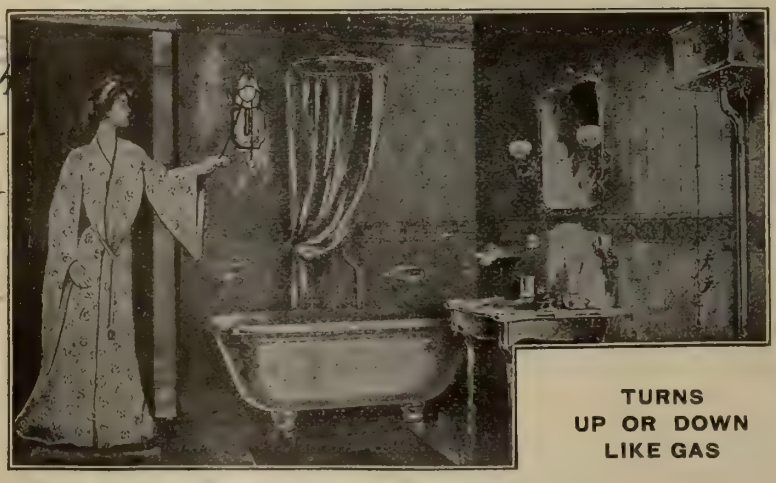
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PLUMBING AND STEAMFITTING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
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Article XXII.

STEAM HEATING.

FOR general purposes the various systems of steam heating may be divided into four classes, according to the pressure of the steam, and the manner in which it is used, and these four systems are called the high pressure, low pressure, exhaust, and vacuum, respectively.

We have already dealt with three or four applications of the low pressure system, which included the "two pipe" gravity, the "single pipe" gravity, and the "overhead" system, any of which might, if desired, and the necessary amount of room for expansion having been allowed, be used for high pressure, but it is our intention to deal on this occasion with a portion of a system which we have already described in part, (Science Building, heating) and to attempt to make clear the method of returning to the boilers, in which is carried a high pressure, the water of condensation from a low pressure system.

It will be remembered that in this system, which is of the "overhead" type, the boilers carry a pressure ranging around 80 pounds to the square inch, while perhaps not more than two to five pounds are carried in the piping, so that it is necessary to have machinery for the purpose of reducing the boiler pressure before it enters the piping system, and of forcing the condensation back again into the boiler against a high pressure.

If the reader will carefully note the following description given in connection with the accompanying sketch he will obtain a very good idea of the manner in which the desired object is accomplished.

In the sketch will be observed what may be regarded as the beginning of the low pressure heating plant on the left-hand side, marked "low" pressure main, from which is run a "flow" pipe supposed to be connected to a radiator from which is run back the "return" pipe shown, and which is connected to the main return "I," which collects all of the condensation from the radiators throughout the building.

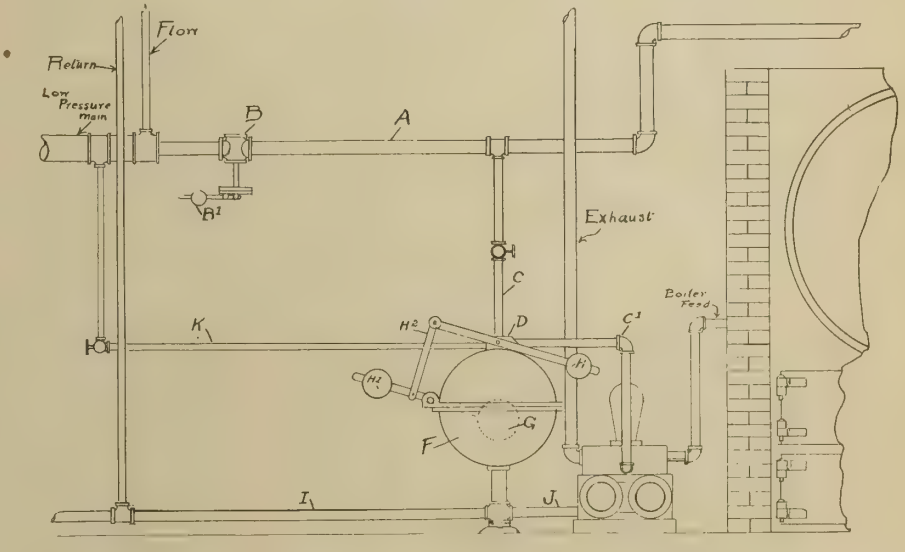
Into the end of the low pressure system is connected the high pressure steam main "A," to which is fitted the pressure reducing valve "B," which is fitted with the counterbalance "B1," and with this counterbalance the valve is adjusted to open or close with the fluctuating pressure on the boiler so as to maintain any desired pressure on the heating system at all times.

The main return "I" is connected to the pump governor "F," and "J" is a continuation of "I" between the pump governor and the steam pump.

Inside the round hollow casting "F" is a hollow iron float "G," (which with lever running through bearing on side of "F" is shown in dotted lines) which is normally in the position shown.

From the main high pressure steam main is taken a branch "C," which connects to a throttle valve at "D," and through it to the steam pump by "C1."

Connected to the throttle valve is a lever with a counterbalance "H," and between this lever and the one on which the float "G" is secured, and on the outer end of which is another counterbalance "H1," is a connecting rod, "H2," so arranged as to allow of the easy balancing by the two counterbalance weights of the hollow iron float "G."



The steam having been turned into the heating system through the reducing pressure valve, "B," the condensation comes down through the various returns to the main return "I," and flows up into the hollow shell "F," until the float "G" is raised, the action of which, as will be apparent, will be to pull down connecting rod "H2," and open the throttle valve "D," which allows the full boiler pressure to pass into the steam cylinders of the pump, at once putting the latter into operation, and it will continue to draw water from the returns and the governor shell "F," until the latter has fallen to a low enough level to permit the float "G" to fall into its normal position, and so shut off the steam from the pump, which will, of course, cease to work, and will not start again until the water has risen high enough in the governor to raise the float again as already described.

A connection "K" from the low pressure side of the pressure reducing valve must be made to the top of the pump governor, for the purpose of equalizing the pressure therein, for, as will be clear, water could not rise in the shell or globe if there was no means of escape for the contained air or steam, and, it will be equally apparent, if once filled with water the latter could not escape unless a vent were given, so that as the connection is made to the low pressure side of the reducing valve "B," from which side the condensation comes, the water may find its level without difficulty, as it will be forced in from the bottom against the same pressure as will be exerted against it from the top through pipe "K." Thus the pressure from both top and bottom being equal, pipe "K" is called an equalizing pipe.

There would, under ordinary circumstances, be some waste of steam by the use of the pump, but not nearly so much waste of fuel as there would be if the condensation were allowed to run away, say into the drains, for, as will be obvious, the condensation will, in the apparatus just referred to, be returned to the boiler at a high temperature, where it may be quickly converted into steam again, while if fresh water were constantly used a great deal more fuel would be necessary to heat it up through the greater number of degrees between its normal temperature and that of steam, and, besides, if it contains any lime, as the great majority of waters do, then serious damage may be done to the boiler by the formation of scale therein.

If the whole system has been properly planned and erected there will be very little waste of even exhaust steam from the pump or engines used in a plant, because arrangements will have been made whereby the exhaust will be used to heat the building, and so save the use of direct steam for that purpose, and this phase of steam heating will be dealt with in a future article.

HAMILTON AND TORONTO PLUMBERS ON TRIAL.

EACH week brings new developments in the "combine" investigations, the chief sensations of the past seven days being the evidence of Messrs. Mann and Sullivan, representatives of supply houses, in the Assize Court before Judge Clute. Both of these witnesses went on the mistaken view that they could improve the position of the master plumbers and supply men charged with conspiracy by giving evidence which appeared to be clearly opposite to the facts brought out by other witnesses. Both injured their own reputations by so doing, in addition to damaging the case for those whom they had tried to benefit and bringing unnecessary discredit upon the supply houses by whom they had been employed. Rightly or wrongly, companies are held responsible for the acts of their servants and it is to be regretted, therefore, that the witnesses referred to were not more considerate of their employer's reputations than they were of their own.

* * *

Last Friday the Toronto Master Plumbers' Association held a "summoned" meeting in the Police Court, Police Magistrate Denison calling the roll and excusing a few for non-attendance on account of sickness or absence from the city. About 150 answered their names, however, the majority being represented by lawyers. Charges were withdrawn against several whose explanations were considered satisfactory by Crown Attorney Curry and against some who had given evidence in previous trials. The balance pleaded not guilty to the charges of conspiracy and after a legal controversy over whether evidence given in preceding cases should be accepted in this case, a remand was arranged until Wednesday of this week. On Wednesday, however, a further remand was made until Tuesday next owing to the case going on in the Assize Court.

* * *

The case in Hamilton was proceeded with last week, and after the evidence of Secretary T. H. Davies, secretary of the Hamilton association, was taken, an adjournment was made until the Toronto cases were disposed of. Mr. Davies intended leaving for Florida to accept a position with an amusement company, but was detained as a witness. Before giving evidence he asked for protection, and was guaranteed that anything he might say would not incriminate him. His evidence dealt with the business of his office, he receiving $15 weekly and the annual expense totalling to nearly $2,000 per year. Mr. Davies admitted that the association had disbanded after the Toronto proceedings were started, and that the association's books and papers were destroyed by him then. It was intended to start up again after the Toronto cases were concluded. He said that in tendering on jobs each member submitted his tender to him, and that he averaged the prices. The plumber nearest the average was given the job. Twenty-five per cent. was added to the actual cost of the work, of which five per cent. went to the association, and the rest to the plumbers. After the expenses were paid the money was divided among the members of the association. The initiation fee was $100. Other evidence given before adjournment was unimportant.

* * *

Tuesday's session produced a sensation when Mr. A. W. Mann, of the Canada Brass & Supply Co., London, went into the witness box to endeavor to explain his contradictory evidence given a week before. He then swore that the company had not refused to supply goods to anyone on the ground of their not being members of the plumbers' association, but when confronted with a letter in which he refused goods to certain firms, for that very reason, he swore the letter was true. When the judge demanded a reconciliation of the two statements, he declared that the reason given in the letter was a subterfuge; that the firm's credit was not good, but that he did not care to say so. The judge told him he did not believe him. On Tuesday Judge Clute was unwilling to accept Mr. Mann's explanation, although the latter protested that he desired to tell the truth, and even brought letters into court which the Crown Prosecutors had no knowledge of.

"To have a judge on the bench tell you he didn't believe you was rather a hard blow to a man, and I wanted to explain," Mr. Mann continued.

"I thought you distinctly deserved it, and I think so still," broke in Mr. Justice Clute sharply. "You can leave the box."

* * *

John B. Reeves, W. H. Meredith and B. J. Morris also gave evidence on Tuesday, another witness being Samuel J. Frame, a clerk employed by Jenkins & Hardy. Mr. Frame acted as secretary of the old Plumbers' Supply Association and the Crown Attorney endeavored to show a connection between the old and new supply associations as well as with the Master Plumbers' Association in order to connect all with the conspiracy charge.

The agreement under which the Plumbers' Supply Association firms worked was as follows: "We, the undersigned, agree to form an association to cover plumbers' supplies at a list price and discount, hereafter to be agreed upon." There was a forfeit of $100 for every violation of the agreement and each firm deposited $500 as a guarantee. There were certain of the larger plumbers to whom the members could sell at whatever prices they pleased. Monthly declarations were filed by the members to show that they had lived up to the terms of the agreement.

* * *

Wednesday's sensation was provided in the evidence of Mr. C. A. Sullivan, advertising agent of the Page-Hersey Iron & Tube Company, Guelph. Mr. Sullivan's testimony as given in the daily papers was especially damaging to himself, but letters put into court on Thursday proved that his seemingly unlikely story told on Wednesday was correct. Mr. Sullivan had no power to sell goods and being approached by Guest & Company, a Toronto firm outside the association, he wrote them a jollying letter containing statements which he acknowledged to be false. Judge Clute reprimanded the witness severely, but the company's action in presenting the letters referred to in court on Thursday fully cleared them of any discredit in the matter. Mr. Sullivan stated in his evidence that he had lost his position on account of writing the "jollying" letter.

* * *

On Wednesday the Police Court proceedings took a new turn when proceedings were begun against those groups of plumbers who met, averaged tenders, exchanged I.O.U.'s or otherwise fixed prices.

W. J. McGuire, George F. McGuire, George Clapperton, Jos. Wright, Alex. Fiddes, Henry Hogarth, Alex. Purdy, Wm. Mansell, Watson Mashinter, Fred Armstrong, David Menzies, Patrick J. Hayes, and James H. Wilson were the first group. It was charged that on or about the month of October, 1903, they did conspire, one with the other, or others of them, by deceit or falsehood and other fraudulent means, to defraud the Toronto Bedding Company, Limited, of the sum of $400, contrary to section 394 of the Criminal Code.

Alexander Fiddes, Henry Hogarth, Wm. J. McGuire, Geo. F. McGuire, Robt. W. Harrison, Chas. Robertson, Geo. Wallis, Geo. Clapperton, Joseph Wright, Fred Armstrong, James H. Wilson, Watson Mashinter, A. Welch, Francis R. Maxwell, Herbert Johnson, Alex. Purdy, Wm. Mansell, Kenneth J. Allison, and Wm. J. Williams were arraigned on the charge that in 1903 they did conspire unlawfully, the one with the other, or others, to defraud the municipality of the City of Toronto of the sum of $500.

Stevenson, of Guelph, A. Malcolm, of Guelph, Geo. Clapperton, Jos. Wright, Alex. Purdy, Wm. Mansell, of Toronto, and H. Mahoney, Guelph, were charged in the month of June, 1904, at the city of Toronto, that they did conspire to defraud the Homewood Sanitarium of Guelph out of $800.

Geo. F. McGuire, Wm. J. McGuire, Alex. Purdy, Wm. Mansell, James B. Fitzsimons, K. J. Allison, Watson Mashinter, Alex. Fiddes, Henry B. Hogarth, Robert W. Harrison, Chas. Robertson, Francis R. Maxwell, Herbert Johnson, Jas. H. Wilson, George Walis, James Fiddes, J. E. Gray, George Clapperton, and Jos. Wright were arraigned on the charge of conspiring in July, 1904, to defraud Messrs. Warwick Bros. & Rutter, Limited, of the sum of $1,200.

The cases were adjourned until next Tuesday.

CONCRETE CONSTRUCTION OF BUILDINGS

EVER since the disastrous fire of a year or so ago there has been a steady increase in the number of large wholesale buildings of modern type. In many instances large business houses have exercised most excellent judgment in the erection of their new homes in using only indestructible and non-combustible materials. The illustrations herewith reproduced show views and

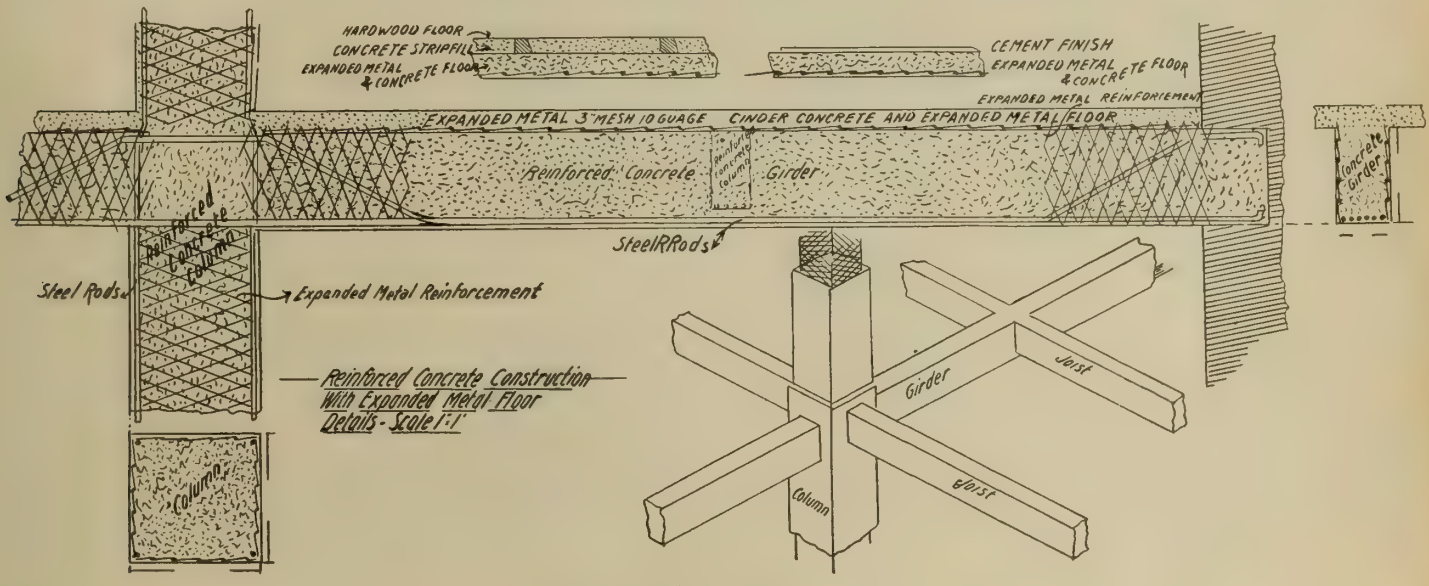


Fig. 1—Details of Concrete Work in Toronto.

umns. The dimensions of the building were 192 feet in length and 42 feet in width, there were four stories and the roof, the heights of same being 10 feet in the basement, and 15 feet, 14 feet 6 inches, 13 feet 6 inches, and 13 feet 6 inches respectively, for the floors above.

The column construction is clearly shown and may be described as having been built of concrete, reinforced with expanded metal and upright bars ; in the same manner the girders and beams were constructed of concrete reinforced with expanded metal and iron bars. The slab of the floor was of concrete and expanded metal only. In Figure 2 is shown the centreing in place during the progress of the work. In Figure 3 is shown an interior view of the finished building. In the construction of the columns and the beams stone concrete was used, while in the floor slabs cinder concrete was adopted. The columns were spaced at distances 16 feet by 12 feet and the building was designed to carry a live load of 300 pounds per square foot. The stairways of the building were encased with 2-foot cementine walls.

Figure 4 reveals the interior of the Dunlop Tire Co.'s factory taken just after the removal of the centreing from the concrete floors. The structure shows brick walls, while the floors and roof are of reinforced concrete ; the size of the building being 200x50 feet, with power house 50x50 feet. The columns and beams are reinforced with three trussed rods, having centre section of 1x2 inches making total reinforcement 6 square inches. These trussed rods are a new design, introduced at Toronto, and are intended to get best possible results with greatest economy of metal. The beams are 20-ft. span, 16x24 inches area. The floor slabs are 16 ft. span, 7 inches thick reinforced with expanded metal, 3-in. mesh, 10 gauge, supplemented with $\frac{3}{4}$-in. round rods. The floors are intended to carry heavy loads, machinery, etc., with capacity of 300 lbs. per square foot safe load.

In Figure 5 is shown another modern idea in construction, being that of fire

give an idea of the method adopted in the erection of a store and warehouse for Brown Bros. some months ago.

In planning for this building the firm asked for competitive bids upon the whole building for slow burning or mill construction as compared with concrete, and they chose the latter at figures practically the same. The system they chose was that offered by the Expanded Metal Fireproofing Co., Limited, Toronto, and the details of their construction are quite clearly shown in the three illustrations, Figures 1, 2 and 3 given herewith. The walls of the building were of brick, with two lines of col-



Fig. 4—Interior Dunlop Tire Co. Factory.



Fig. 5—Fire Protection for Light Wells.

protection of light wells, as exemplified in Toronto building. In a great many buildings of wood interior construction



Fig. 2 Showing the Centering in Place During the Progress of the Work.

the light wells and elevator or stairway openings are a costly hazard from an insurance point of view. By constructing a fireproof enclosure around such openings, owners of such buildings can get a considerable reduction in insurance rates. A great many of these enclosures have been protected by the use of expanded metal placed on channel furring and plastered on both sides to a thickness of 2 inches.

GREENHOUSE HEATING BY STEAM.

A RECENT inquiry in the Florists' Exchange as to how much steam piping was necessary to heat a given greenhouse was answered by U. G. Scollay, of Brooklyn, N.Y., and while the method of arriving at the result was not given, the conditions of the problem and the proportions of the apparatus advised will doubtless prove of interest. The correspondent of the journal mentioned wanted to know how many 1¼-inch steam pipes it would take to heat a greenhouse 30x65 feet, built of wood, lined thoroughly with paper roof and sides (shingle roof), with one 30-inch continuous ventilating sash running along each side and also on the roof, and he also wanted to know what size main it would take. The house is located 500 feet from the boiler. He desired to maintain a temperature of 40 degrees with the outside temperature 10 degrees below zero.

Mr. Scollay's reply was: "You will require 440 lineal feet of 1¼-inch pipe in your house to insure 40 degrees inside with 10 degrees below zero outside. This divided up will give you about seven rows. I would advise placing a valve at each end of each of the six rows in order that you may at all times have the heat under control. This is more necessary in steam than in hot water work, for the reason that hot water may be controlled by the fire in the boiler, while with steam pressure or vapor must be kept up in any event, which makes it imperative to regulate by the amount of surface kept in active use. For the distance these coils are from the boiler I would advise not less than 2½-inch steam main with 2-inch return. I of course assume that it is your intention to thoroughly protect these main pipes. Five hundred feet away from the boiler is a pretty fong reach. While I give you these sizes of mains I am unable to say how they will work in your case, for the reason that I do not know how you will be compelled to run them. There are numberless complications liable to arise, so very numerous, in fact, that it is scarcely of any use for me to speculate on what your conditions are. Candidly, unless the conditions are exceptionally favorable for getting steam to your house and returning the condensation to your boiler, I would advise the installation of a small steam boiler for your house, say of 400 square feet capacity. Possibly you have a large central plant and prefer to take steam from it. If so, be very careful to allow ample height above the water line of your boilers for your coils in order that dry steam may be obtained. Pardon me for suggesting it, but our experience inclines us to hot water for small jobs of this kind, in that regular temperature is more easily maintained. If you should discard the idea of steam and adopt water it would take five rows of standard cast iron greenhouse pipe or its equivalent in 2-inch pipe, say eight lines. A good boiler of 500 square feet would take care of the work nicely. Of course I mean that in case of either steam or water the small boiler would be placed in a pit close to the house."

A go-as-you-please store makes a go-as-you-please statement at the end of the year.



Fig. 3—Interior View of Finished Building.

The respect of his clerks is a producing power that works while the merchant sleeps.

PUBLIC BATHS IN CITIES.

A RECENT decision of the Toronto Board of Education to establish a public bath for children in an unused schoolhouse should start an agitation for similar bathing places in other Canadian cities.

In ancient cities the provision of bathing places for the populace was considered a most important feature of every community. This fact gave opportunity for the exercise of many artistic ideas in designing both interiors and exteriors of bathing places. The same opportunity still exists, although in a greatly lessened extent, in many of our modern cities. Only recently a new public bath house was opened for use in the thickly populated section of Cleveland, which was in every way attractive and well adapted for its uses.

The city of Pittsburg has procured from a well known London architect plans for a public bath, which have been submitted to the public bath committee of that city, together with plans from several local architects. The design from the foreign architect is patterned after similar institutions in Europe and includes a circular swimming pool for men surrounded by baths with a smaller swimming pool and baths for women. The specifications also include rest and reading rooms, giving to the institution a club feature which it is thought will be appreciated. It is proposed to expend $75,000 in the erection of the building, and the enterprise is backed by the civic club of Allegheny county.

HEATING PROBLEMS.

IN several houses in which the system of hot air heating is employed ample provision has not been made for the escape of the cold air, says a writer in the American Artizan. The arrangements for sending the hot air up to the rooms are complete. It is expected that the hot air coming up into the room will force the cold air out. The exit is supposed to be through the cracks of the window or through some door. Very often the systems of heating arranged in this way are found to be inefficient. The furnace is blamed and perhaps the system of piping. The true cause lies in the fact that in order to get warm air in, you must get the cold air out. The egress of the cold air must be provided for by something more than slipshod methods and is not to be left to chance. Efficient heating engineers have used the cold air register for many years and most of them recognize its value. The fact remains, however, that a great many engineers in the smaller towns and in the more isolated sections of the country are partially or wholly ignorant of the advantages to be derived by its use.

It is a well known fact that cold air is denser than hot air and has greater specific gravity than hot air. Cold air will displace hot air whenever possible. Hot air does not rise; cold air shoves the hot air up. In the same way cold air will keep the hot air down in the furnace pipes. In a room, the windows of which are not open and which is sealed or partially sealed in other respects, it is almost always impossible to force the hot air up. In one house there was a good fire in the furnace and only one register was left open. There were no cold air registers. Nevertheless, the room with the open register could not be heated. Such a condition of affairs can be due to no other cause except faulty construction.

A cold air register may be supplied with every room of considerable proportions. This register should be of almost the same magnitude as the hot air register. It is a good plan to run a cold air return pipe to the furnace, connecting all of the branch cold air ducts to the same trunk line. Of course this pipe should be entirely separated from the regular cold air pipe running from the outside of the house. At least one large cold air register is desirable in every house. All of these things are generally known, but, strange as it may seem, they are not generally regarded.

SOME PIPE WRINKLES

WHEN a plumber has finished setting a fixture in a new building where the piping and faucets are nickel-plated, he should take a little whiting and wet it until it is quite thin, says the Plumbers' Review. Then dip a sponge into the mixture and rub it lightly all over the nickel-plated work. He should let it remain until he is ready to leave the building, then rub it off with a piece of flannel, and the plating will shine as bright as if it had just come from the plater's. The whiting will preserve the plate for an indefinite time. When working brass pipe it is sure to become very dirty and stained, and it is difficult to remove the discoloration and renew the brightness. To clean the pipe after it is in place take some fine sea sand, such as masons use when running white mortar. Put it in a pan, wet it, and then take a handful and rub the pipe briskly for a few minutes. A smooth, clean polish will result that will gratify the eye of the customer. If it is carefully dried while it is still bright a coat of colorless varnish will protect it from the air and keep it bright a long time.

VALUE OF SPRINKLERS.

THE value of sprinklers as a means of protecting factories from destruction by fire is generally known, and their use has become quite general. The cost of their installation is heavy, however, and in consequence the erection of fireproof factories is receiving much attention. A combination of heavy walls, concrete floors, roofs, staircases and elevator shafts, with glass windows and metal window frames, costs but little more than the old factory construction of brick and wood. The sprinkler makers have been, until recently, in a trust, but an independent corporation, which lately entered into the business, seems to have won much favor with architects, owners of buildings and capitalists. Some time ago a proposition was made to a manufacturing company in Michigan to equip their plant with sprinklers, the company furnishing them agreeing to accept in payment for the same the amount saved in the premiums held by the company after the service had been installed, over the old rate, for the period of seven years. The company proposed that the amount of the savings for seven years on account of the reduced rate accorded a sprinkled over an unsprinkled plant, be accepted by the company in settlement for their account upon the completion and acceptance of the sprinkler system. This was agreed to and a contract was entered into upon the terms mentioned.

A PLUMBERS' AVENUE.

COTTER BROS., plumbers, Winnipeg, have moved into commodious quarters in their new brick block, corner Fort street and St. Mary's avenue. The new store is a four-storey brick building, 35 x 120 feet, designed particularly for a plumber's shop, having a draughting room, brass, pipe, iron and repair rooms on the ground floor, besides well arranged offices and a very fine showroom. In the basement are the stock and storage rooms. The upper floors will be used exclusively as bachelor apartments and will have a large number of rooms. The building has all the latest modern conveniences.

Cotter Bros. employ about 70 men, and have been in business in Winnipeg for thirteen years, and have secured such extensive plumbing contracts as the Union Bank Building, and the new post office. A suitable name for Fort street now would be Plumbers' avenue, as there are located on this street no less than four plumbing establishments.

THE PLUMBER WON.

A plumber and an upholsterer were recently engaged in fitting up a swell residence in the west end, and got into a discussion as to which was the heavier, a pound of lead or a pound of feathers.

"I'll bet you a half dollar that I can prove to you that a pound of lead is heavier than a pound of feathers," said the plumber.

"I'll take that bet," said the upholster.

The plumber cut a piece of lead pipe and pared it down until it weighed sixteen ounces. Then he got from the upholsterer the same weight in feathers.

"Now, said the plumber, holding the lump of lead in his right hand and the bag of feathers in his left, "let me drop the lead on your left foot and the feathers on your right, and if I don't prove that the lead is the heavier I'll pay you half a dollar."

The man of feathers would not consent to the trial, but paid for the whisky and cigars.

PLUMBING NOTES.

New Liskeard may install a system of waterworks shortly.

London proposes to spend $251,000 in improving its water supplies.

A. A. Earl, plumber, 1099 Queen street west, Toronto, will shortly move into larger quarters.

Goderich is to secure an engineer's report on the best methods of improving its water supply system.

Peterboro has decided to spend $15,000 on waterworks and $4,000 on extending its sewerage system.

R. Cunneyworth has opened a plumbing stock at 627 Queen street west, Toronto.

St. Catharines proposes to spend $20,000 in extending its sewerage system.

A. J. Miller has opened a plumbing and heating shop at 715 Queen street west, Toronto.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 8, 1905.

PRICES for plumbing supplies have remained quite unchanged during the past week, but the continued strength of lead in the primary markets has confirmed the impression that present figures on lead pipe will have to be advanced very shortly. This will make no serious impression on the trade, however, as orders for this class of goods are falling off at this season.

The Winter having fairly set in, plumbing contracts now on the tapis are being hurried to completion and the rest of the season will be confined to miscellaneous jobbing. In consequence, there is rather less activity shown than last week.

Many dealers are still reporting shortage in several sizes, a fact which would tend to keep prices firm, altogether aside from the obvious strength of the market.

Range Boilers—Conditions remain the same as before, with demand fair and prices firm. We quote as follows: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Owing to the phenomenal price now commanded by pig lead, it is thought to be a matter of but a very short time, before pipe will be sharply advanced. Meanwhile, we are quoting as follows: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—The scarcity is rather more pronounced this week, and ruling prices are held very firm. We quote: Discounts on all sizes of nipples up to 6linch, 67 1-2 to 70 per cent.

Iron Pipe—Many jobbers complain of a short supply in particular sizes. Prices are unchanged, and we quote: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings—Sales are holding out well in the advanced season and we are still quoting: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—No change has taken place in prices, but as lead and tin are both stronger, the price given last week is decidedly firm. Our quotations are: Bar solder, half-and-half, guaranteed, 22c.: No. 2 (wiping solder), 18c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto December, 8, 1905.

A DROP in the prices of galvanized iron range boilers, of 30 gallon and larger sizes, and a continued stiffening in the prices of iron pipe are the features in the week's market report. Lead pipe continues very firm, but no further advance is recorded.

Some dealers report a slight falling off, but all say there is a large business still doing. Some roughing in work on new buildings is being done, but most orders are for finishing materials. Last month was far ahead of a year ago and this year's total will be a record breaker.

Lead Pipe—Prices continue very stiff, but no change is reported. Business is active. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 per cent.

Soil Pipe and Fittings—Buying is very active with prices very firm. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Quotations are slightly higher. Business is lively and the market is stiffening. We quote the following prices: Black, 1-4 inch, $2.09: 3-8, $2.09: 1-2 inch, $2.42: 3-4 inch, $3.04: 1 inch, $4.37: 1 1-4 inch, $5.96: 1 1-2 inch, $7.15: 2 inch, $9.54: 2 1-2 inch, $15.00; 3 inch, $19.35: galvanized, 1-4 inch, $2.91: 3-8 inch, $2.91: 1-2 inch, $3.29: 3-4 inch, $4.19: 1 inch, $6.02: 1 1-4 inch, $8.21: 1 1-2 inch, $9.85: 2 inch, $13.14: 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Prices have dropped on some sizes. Buying is quite active, however. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $4.75; extra heavy, $7.50; 35 gallon, standard, $5.75; extra heavy, $8.50; 40 gallon, standard, $6.75; 40 gallon, extra heavy, $9.50; 52 gallon, $11.00; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29: extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Business is active. Prices steady. We quote: Bar solder, half-and-half, guaranteed, 21 1-2c. and wiping at 20c.

Enameled Ware—Stocks are scarce and orders heavy. We quote. Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

A GROWING CONCERN.

WITH shops in Toronto and Peterboro, the recently incorporated Thorn Plumbing Company, Limited, capitalized at $20,000, is now in good shape to extend its growing trade. The taking in of new capital has allowed a larger stocking up of material and outside jobs are being booked, A. J. LeFay, of the Peterboro branch, now being at work on a steam heating system being installed in a hotel at High River, Alberta.

The Toronto office has handled some large contracts, the plumbing system of the new A. A. Allan building on Bay street being a recent one. Mr. J. H. Thorn is president and general manager of the company, the secretary of the Toronto branch being T. A. J. Hunt. The Peterboro branch is managed by A. J. LeFay, the secretary being A. J. Jackson, recently of Toronto.

A good cement for metal joints consists of ground white lead worked up with enough powdered red lead to bring it to the consistency of putty, boiled linseed oil being finally added.

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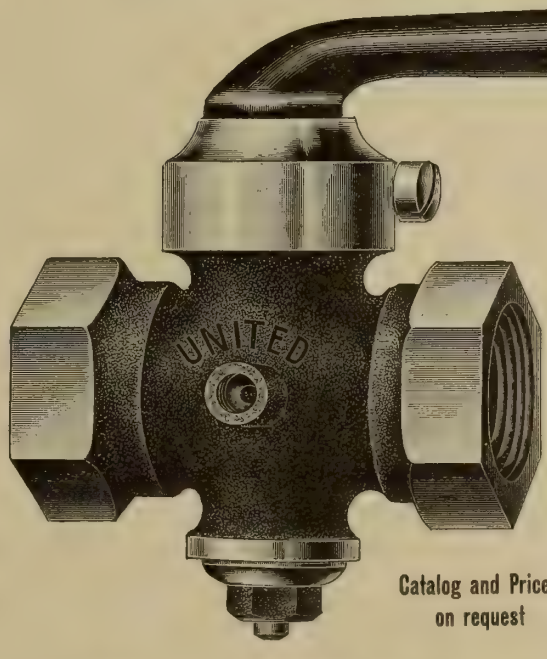
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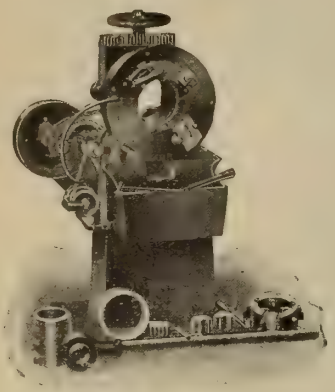
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These machines are our portable hand machines, mounted on base and driven by compound gears with cone pulley, and are so arranged that either hand or power can be used at will, or the machine can be readily taken from its base and used as a portable hand machine. The chasers are set by graduation to any size desired, are released while the machine is in motion, opened to permit of pipe being cut off, and closed instantly and positively, one set being used to thread several sizes of pipe. They can be sharpened by grinding and are readily replaced by chasers cutting any style or pitch of thread, either right or left. **Four sizes—Nos. 5½, 6½, 9½, 11½.**

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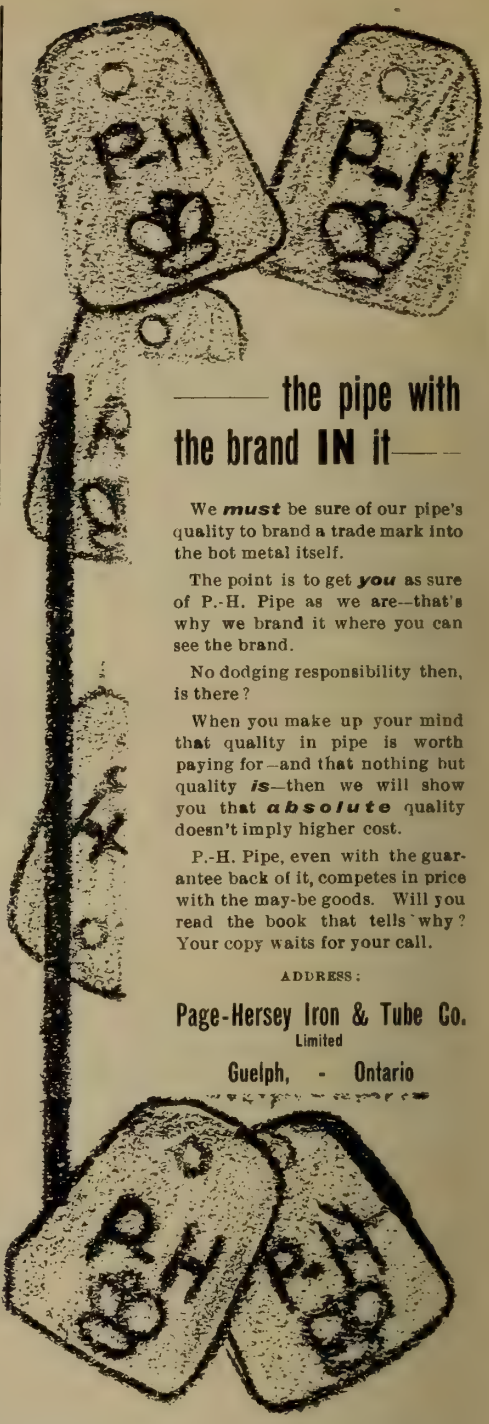
CLEANING RUSTY PIPE.

At the annual meeting of the Pacific Coast Gas Association in San Francisco an interesting experiment on the cleaning of rusty pipe was described. Some plain and steel tubing for use in high pressure lines came from the factory to the point of shipment on flat cars, and in consequence was badly rusted before it could be placed under cover. Cleaning machines not being available, a part was cleaned by hand and the finding of efficient tools proved a serious problem. Coarse and fine files were not much of a success, because they would not clean out pitted spots and irregularities in the surface of the pipe without removing valuable metal. Emery cloth and sand paper did not last long enough to make a showing. Steel wire casting brushes proved quite efficient, coarse brushes being used to loosen the larger pieces of scale and rust, and fine brushes to work into the pits and clean the dust off. Soft red brick, such as would be used only for filling, and furnace slag were found excellent, the fine particles working into the pitted spots and irregularities as they broke off. The dust left can best be removed by a fine wire brush, leaving the surface of the pipe clean and bright, ready for receiving the paint.

LOSS OF HEAT FROM IRON PIPES.

A PAPER was recently delivered before the Canadian Society of Civil Engineers by R. W. Leonard on the above subject. The author speaks of the loss of heat from pipes carrying warm water and goes on to say that he made experiments on 1-in. and 2-in. pipes, black, and rusty black, or ordinary type, 1-in. pipe and 28 and 26 gauge, or 0.016-in. and .018-in. thick on 2-in. lap-welded boiler tube and 1-in. welded galvanized steam pipe. The pipes were filled with warm water and exposed to air. A 2-in. black pipe 0.154-in. thick, containing 5 lbs. of water, had a surface of 2.20 square feet, being 3.54 ft. long. It cooled from 142 degs. Fah. to 32 degs. Fah., and lost heat at the rate of 124 British thermal units per hour in still air at 7 degs. to 10 degs. Fah. Cooled from 126 degs. to 32 degs., the loss was 112.6 units under the same conditions, and 217.3 units in an air current of 8 to 12-in. per second at 5 degs. to 7 degs. Fah. of temperature, thus showing the extreme importance of non-movement. In water at 32 degs. Fah. the same pipe lost heat at the rate of 309 units per hour when cooled from 126 degs. to 32 degs. and at 269 units when cooled only from 116 degs. to 32 degs. In a current of only 1½-in. per second of water at 32 degs., and cooling from 116 to 32 degs., the loss was as high as 849 units per hour. Cooled from 142 degs. to 32 degs., a 2-in. pipe only 0.095-in. thick cooled at the rate of 136.7 units in still air of 7 degs. to 10 degs., of 385 units in still water at 32 degs. Fah., and of 1,005 units in a current of 1½-in. per second. Thin galvanized pipes lost heat at higher rates, and thin-tinned pipes at still higher rates. The figures obtained are consistent.

In every town there is some demand for small electrical goods, such as bells, search lights, batteries, etc. Get after this business.



——— the pipe with the brand IN it———

We ***must*** be sure of our pipe's quality to brand a trade mark into the hot metal itself.

The point is to get ***you*** as sure of P.-H. Pipe as we are—that's why we brand it where you can see the brand.

No dodging responsibility then, is there?

When you make up your mind that quality in pipe is worth paying for—and that nothing but quality ***is***—then we will show you that ***absolute*** quality doesn't imply higher cost.

P.-H. Pipe, even with the guarantee back of it, competes in price with the may-be goods. Will you read the book that tells why? Your copy waits for your call.

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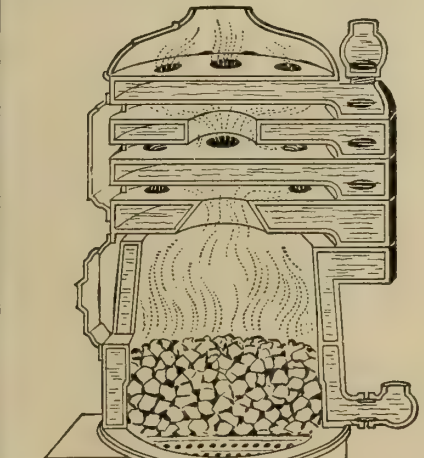
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Most dealers know just why the Oxford Heating System is superior.

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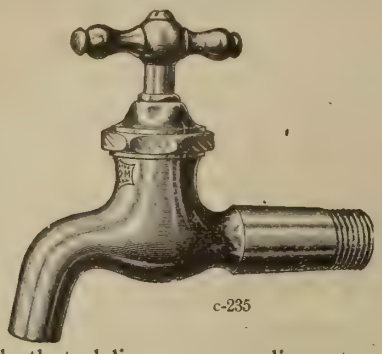
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In Mueller Compression Bibbs the nose is designed with such a taper that it delivers the stream solid. The most critical customer for whom you install one can comment on it only to your business interest.

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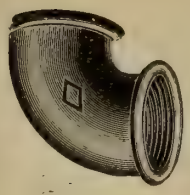
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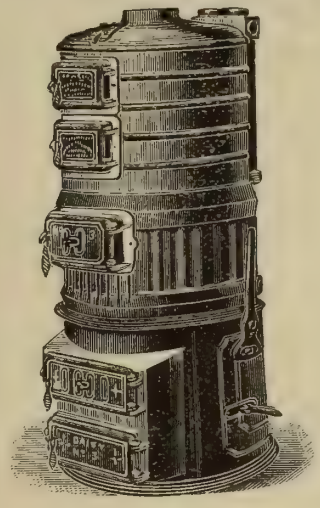
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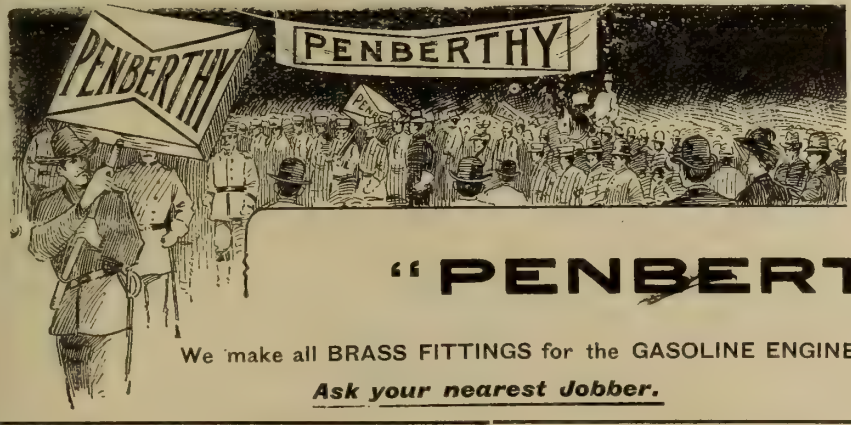
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Ask your nearest Jobber.

WM. STAIRS, SON & MORROW, LIMITED

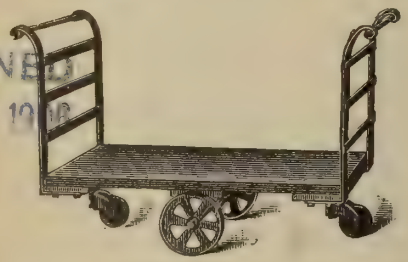
HALIFAX, N. S.

Have a complete line in Enameled Sanitary Goods and solicit enquiries, and all Orders given prompt attention.

TRUCKS FOR WAREHOUSE HOTEL AND RAILWAY USE

Special Trucks made to order.

Furnished with Rubber Tires if desired.





RETURNED FEB 17 1906

WE CARRY THE STOCK

SEND FOR TRUCK CATALOG

THE CANADIAN FAIRBANKS CO. LTD.

MONTREAL TORONTO WINNIPEG VANCOUVER

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

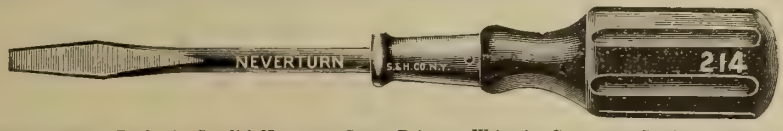
Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

BEFORE PLACING ORDERS FOR
GALVANIZED SHEETS
GOOD WORKING-UP QUALITY, ASK
RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND,
FOR PRICES OF THEIR J.C.M. BRAND

Swedish Neverturn Screw Drivers

BO-RAS-IC STEEL—With steel ferrule, rosewood finished handle. Will neverturn in the handle



Ask your Jobber or Dealer for Swedish Neverturn Screw Drivers. Write for Carpenters' Section of Green Book.
Canadian Sample Room:
215 Coristine Bldg., MONTREAL.
A. C. JENKING, Canadian Mgr.
SMITH & HEMENWAY CO.,
296 Broadway, Dept. 214, New York City

HARDENED AND TEMPERED
SPRINGS
Send Specifications to ANY SHAPE.
The WALLACE BARNES CO., BRISTOL, Conn.
NEW CATALOG JUST ISSUED.

The most light for the least money
C. G. E. INCANDESCENT LAMPS
LONG LIFE EFFICIENCY RELIABILITY
Write for prices and quantity discounts.
CANADIAN GENERAL ELECTRIC CO., LIMITED
HEAD OFFICE: TORONTO, ONT.
District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland.

You Can Sell
the **Metallic Ash-Sifter** for the same price that you sell wooden sifters. Why then sell the wooden sifter? No person would take it in preference to the
METALLIC ASH-SIFTER
if both the sifters were before them. The **Metallic Ash-Sifter** is made so as to be adaptable to our **Patent Wire Bale,** which takes the weight of the sifter off the operator; and there is a **Metal Cover,** too, which prevents the dust from rising. You should sell the **Metallic Ash-Sifter.**
C. M. CUTTS & CO., Toronto Junction, Ont., Sole Makers

Sort Up Your Stove and Heating Stock.
TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.
Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.
OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

A WORD TO PLUMBERS
Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.
A. B. JARDINE & CO.
HESPELER - - - ONTARIO



KERR'S GENUINE WEBER
GATE VALVES
have many imitations, but none equal the "real" article made by us. Be sure you get "Kerr's." Every valve made of the best red metal, and beautifully finished.
The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE - ONTARIO

SKILL AND EXPERIENCE

Produce

SHEATHING
TARRED FELTS

"BLACK DIAMOND"

BUILDING PAPER
WRAPPING PAPER

READY ROOFING

These five lines are always in demand, there is no difficulty in selling them. Will you put a stock in?
Of course, you already have our "Cyclone" and "Joliette" brands of **Sheathing**. You know that these goods have no equal.

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Dec. 8, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, 16 x 20 base	$6 50
IX 16 x 20 "	8 00
IXX, 16 x 20 base	9 50
Famous, equal to Bradley—	
I C, 16 x 20 base	6 50
I X, 16 x 20 "	8 00
I X X, 16 x 20 base	9 50
Raven and Vulture Grades—	
I C, 16 x 20 base	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C, 16 x 20 base	5 50
I X, 16 x 20 "	6 50
IXX, 16 x 20 "	7 50

Allaway's Best"—Standard Quality.

I C, 16 x 20 base	4 75
I X, 16 x 20 "	5 75
I XX, 16 x 20 "	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., 14 x 20 base	4 00
I.C., special sizes, base	4 25
20x28	8 00

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 00
IX., Terne Tin	8 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. 14x60, " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 00	7 50
" " 26 "	7 50	8 00

10c. extra for squares and odd sizes.

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 97½	2 00
Forged iron "	2 22½	2 43
Refined " "	2 37½	2 40
Horseshoe iron "	2 37½	2 40
Hoop steel, 1½ to 3 in. base		2 75
Sleigh shoe steel "	2 17½	2 20
Tire steel	2 27½	2 30
Best sheet steel		0 12
B K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality, best warranted		0 18
"I" " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 65
Chas. Leonard	0 08	0 09
CrucibleSteel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 16
" Silver steel		0 12
" Black Diamond	0 08	0 09
Thos. Jowett & Sons B P.L. tool steel annealed		0 10½
Self-hardening		0 45
Rapid self-hardening		0 75
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.
The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
14 gauge		2 55
16 gauge	2 40	2 30
18 "	2 35	2 35
20 to 24 gauge	2 30	2 50
26 "	2 30	2 70
28 "	2 40	2 90

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary, 52 sheets	2 60
All bright "	3 85
Galvanized Canada Plates, 52 sheets	4 10

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 25	
22 to 24 gauge	3 50	3 75
26 "	3 75	4 00
28 "	4 00	4 25

Apollo.

10½ oz. (American gauge)	4 15
28 gauge	4 00
26 "	3 85
24 "	3 75

	Comet Bell.	Queen's Head.
16 to 20 gauge	3 25	
22 to 24 gauge	3 50	3 75
26 "	3 75	4 00
28 "	4 00	4 25

American brands, $3.90 for 10⅝ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	19 25	19 50

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	23 00
Plain, 14 oz.	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 25	7 50
Domestic " "	7 00	7 25

ZINC SHEET.

5-cwt. casks	8 00	8 00
Part casks	8 25	8 25

LEAD.

Imported Pig, per 100 lb.	4 30	4 50
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 05½
Sheets, 3 to 6 lb. "		0 05¼

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 10 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$19 15		17 15
5 feet "	20 15		18 15
5½ " "	21 65		19 65
6 " "	24 40		22 40
Plate E II			
5 feet 2½ in. "	18 65		16 65
5½ " 2½ " "	20 15		18 15

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c. 30 & 10 p.c.	
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality		2 55
" " " " " B "		2 40

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 09
⅜ "	2 09
½ "	2 37
¾ "	2 98

Black pipe—	Per 100 feet.
1 inch	4 27
1¼ "	5 84
1½ "	7 01
2 "	9 35

Galvanized pipe—	
⅛ inch	2 91
¼ "	2 91
⅜ "	3 22
½ "	4 13
¾ "	5 93
1 "	8 09
1¼ "	9 71
1½ "	12 95
2 "	

Lead Pipe discount 25 per cent.
Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings— Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work. discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
12 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock net	1 90
No. 4 " "	1 75
No .7 Fuller's "	2 10
No. 4½, " "	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 65 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

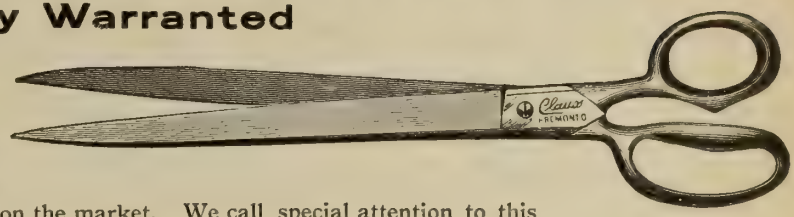
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
0	7.00	9.50
52	11.00	14.00
66	18.00	20,00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand

Fully Warranted

Paper Hangers' Shears



Hand forged from finest steel and welded on our composition metal, hardened in water and tempered by natural gas. This shear is made purposely for paper hangers' use, and is more durable than other of its kind on the market. We call special attention to this Shear. Japan handles and finely finished blades. Ask for discounts.

Clauss Shear Co., 169 Spadina Ave., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb. Montreal	Toronto
Bar, half-and-half, guaranteed	0 22	0 21½
Wiping	0 18	0 20

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	....	0 08
Chrome yellow	....	0 15
Golden ochre	....	0 08
French "	....	0 06
Marine black	....	0 04
Chrome green	....	0 10
French permanent green	....	0 13
Signwriters' black	....	0 15

WHITE LEAD.	Per 100 lb.	
Pure	5 50	5 80
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	....	$5 25
Genuine, 100 lb. kegs, "	....	5 50
No. 1, 560 lb. casks, per cwt	....	5 00
No. 1, 100 lb. kegs, per cwt	....	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07½
No. 1	....	0 06½
No. 2	....	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 40
" " " ½ gal.	....	1 35
" " " gal.	....	1 30
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PARIS GREEN.	Per lb.	
Petroleum, barrels	....	$0 15½
Arsenic, kegs	....	0 16
50 and 100 lb. drums	....	0 16½
25 lb. drums	....	0 17
1 lb. paper boxes	....	0 17½
1 lb. tins	....	0 18½
½ lb. paper boxes	....	0 19½
½ lb tins	....	0 20½

Terms 2 per cent. off 30 days or 90 days.

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each	..	2 00
Granitine floor finish, per gal	.....	2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		
Canada Paint Co's sun varnish	....	2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	0018

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.		
Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	
Canadian pitcher spout	1 40	

A Profitable Investment

is made when you lay in a stock of Paterson's Building Papers and Wire Edged Ready Roofing. These goods have the Quality and Reputation that make them popular with your customers.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
100 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley s discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	.... 9 00
Rope, ½ "	"	.... 12 00
Rope, ⅝ to ¾-inch	"	.... 14 00
Leather, 1-inch	per doz.	.... 4 00
Leather, 1¼ "	"	.... 5 20
Web	"	.... 2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic per doz. 1 10 1 20

Sledge.

Canadian per lb. 0 07 0 08½

Ball Pean.

English and Canadian, per lb. 0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net 3 00 4 00
Store door per doz. 1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American per doz 1 00 1 25

Plane.

American per gross 3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb.		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.

Screw hook and hinge—		
6 to 10 in. per 100 lb.	....	4 50
12 in. up "	....	3 25
Spring, No. 20, per gro. pairs	....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	.... 0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.'Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star per doz. 3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	.... 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$ 3 95 to $5 00
Star, 12 to 16-in cut	2 75 to 3 05
Daisy, all sizes	2 50

Woodyatt, ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	.... 6 75
Plumbers	"	.... 3 00

OILERS.

McClary s Model galvanized oil can, with pump, 5 gallon, per dozen 10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PIANS.

Per dozen ... 6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	... 7 80
" "	"	.... 9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ 40 per cent.

GUNS and AMMUNITION

Before placing your orders, be sure and see our large illustrated catalogue which will be sent to **Wholesale** buyers upon request.

BEST VALUES——REASONABLE PRICES

J. A. HENDERSON MONTREAL

Agent for . . **T. W. & J. WALKER** WOLVERHAMPTON

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros ' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 10½
Pure Manilla	0 15
"British" Manilla.....	0 11½
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord. 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century.....$6	25
" " No. 1 Maple Leaf.....	5 25
" " Happy Medium.....	4 25
" " Watch Spring.....	4 25
" common frame.....	4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	...	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ½ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.
German.....per doz. 4 75 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 55 per cent. off the list.
Copper wire, discount 55 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80 No. 19, $2.50. All prices per 1000 ft. measure F.o.b. Hamilton, Toronto, Montreal.

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Galvanized barb.....	2 75
Galvanized, plain twist	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

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HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

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Terms, 2 per cent. off 30 days.

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Square " "	59 00
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Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

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Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

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WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

They All Roll Best—The Best All Roll on STORM KING BARN DOOR TRACK



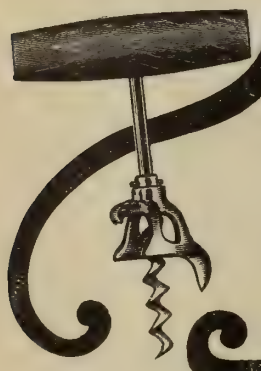
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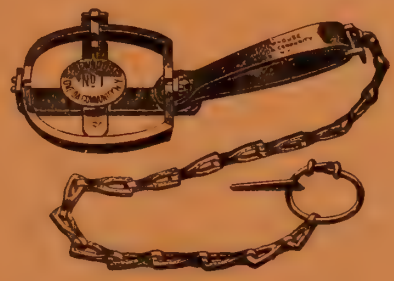
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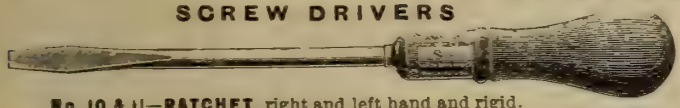
OTTAWA, ONT.

Other Tools are very Good Tools, but

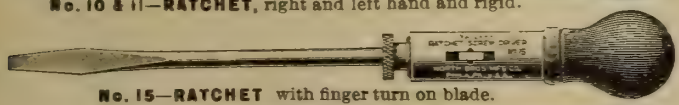
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The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

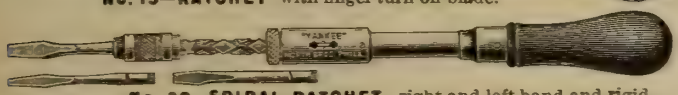
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No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET -right and left hand and rigid.
No. 31— " " (heavy pattern)
No 20 - " " right hand only.



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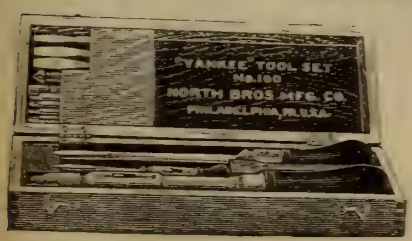
No. 12—RATCHET, with stub blade.



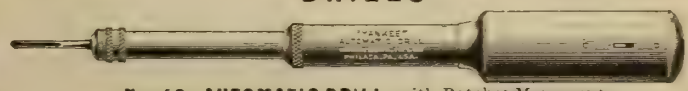
No. 60—POCKET SCREW DRIVER.



Countersink, for spiral ratchet screw driver.



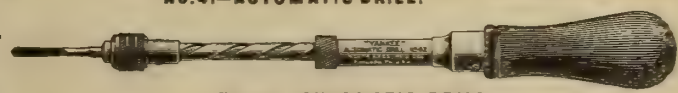
DRILLS



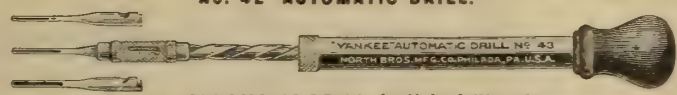
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



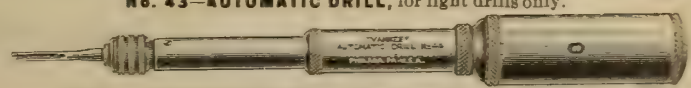
No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

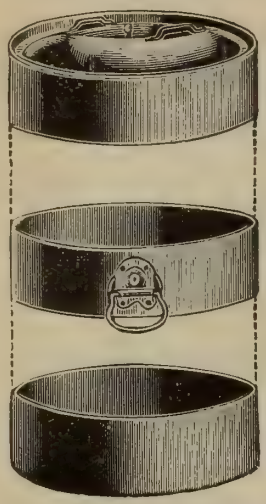
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"BROAD HOOP" Pattern—Composed of the following: 1 Broad Hoop Bottom, 1 Cover, 1 Centre Hoop 6 inches wide, 20 gauge, 1 Broad Top Hoop, 1 pair Cover Handles, 1 pair Side Handles.

and Milk Cans with Broad Hoop Patent Roll Rim Bottoms

are in great demand and their general popularity is increasing yearly.

They give satisfaction to users and dealers alike.

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Heavy Rolled Edges make our PATENT BOTTOMS doubly durable and waggon and factory floor protectors.

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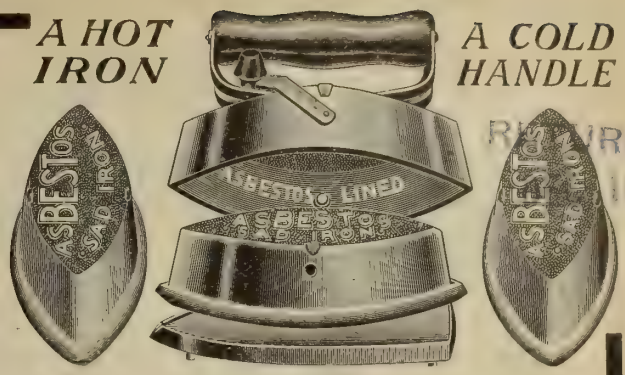
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To Mantle Book page



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Sleeve and Flounce Irons

Good Tools are Cheapest in the End

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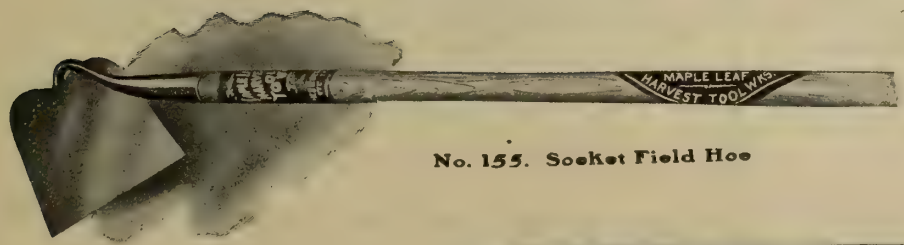
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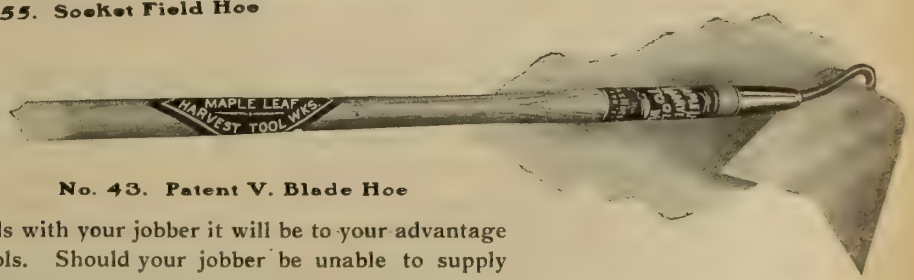
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THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

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Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

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also **The DesJardin Patent Log Sleighs**

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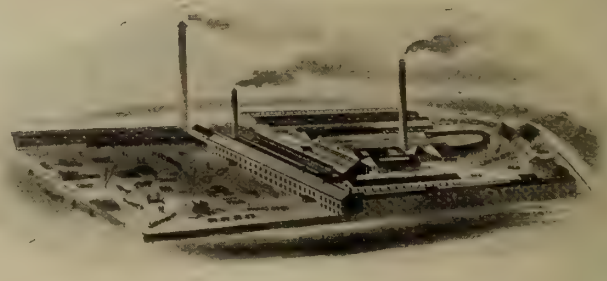
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—Benjamin Franklin, 1758

A few words about ourselves and our "C" brand horse nails.

This Company was established in 1865, and we have therefore been manufacturing horse-shoe nails for 40 years. We make nothing else, and are the largest producers of horse nails in Canada.

Our "C" brand horse nails are of one quality only—the best that our long experience can produce. We use for their manufacture exclusively a special quality of material, made for our purpose in Sweden, which is the best procurable in the world, or used by any maker of horse nails.

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Our nails are of the best designs and proportions for Canadian use. They will drive easiest, and stand more hard usage than any other horse nail made or sold elsewhere.

We solicit your kind preference for the "C" brand horse nails when ordering.

We shall be glad to furnish free samples of our various patterns to farriers or dealers.

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PERFORATED SHEET METALS

IN

Brass, Copper, Steel, Etc.

All sizes of perforations and thickness of metals for

Miners' Use,
Grain Cleaning Machinery,
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Are made right in every particular. Made to give perfect service and long wear.

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BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

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CHAMBLY CANTON, QUE.

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led us to make other things which appeal to the women in the home and are handled by the same jobbers and retailers. The trade, we think, recognizes that they can count on us to help move anything we make.

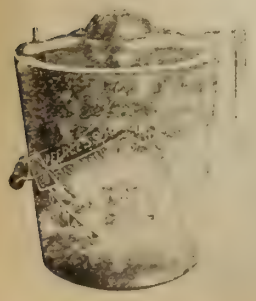
Peerless Iceland Freezer

(Ice Cream in Three Minutes)

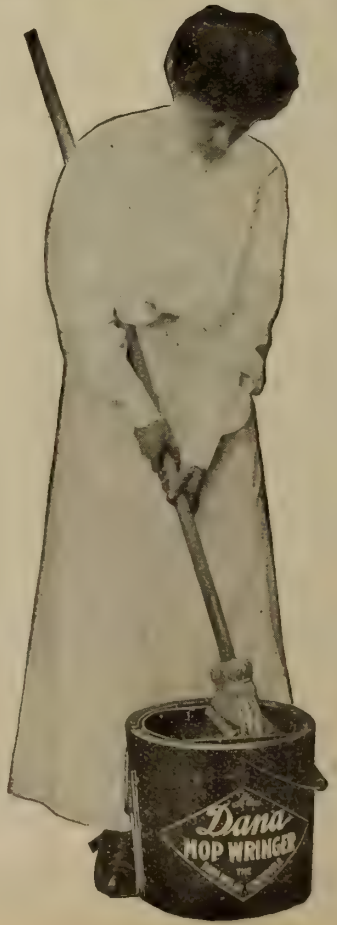
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Wrings the mop dry in five seconds—does it without wetting the hands and without danger of upsetting the bucket and wetting the feet. You stand in a natural position—both feet rest firmly on the floor. The latest, the simplest, the best Mop Wringer on the Market.

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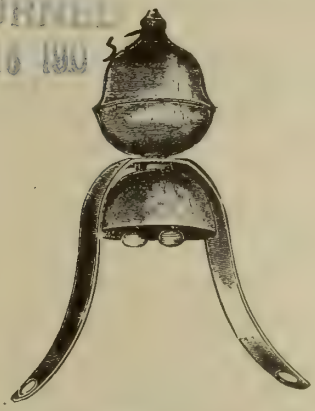
(For the window.)



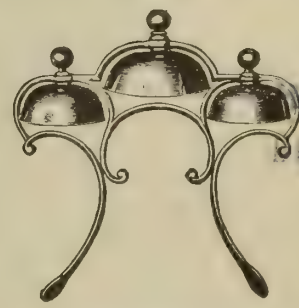
GOOD TONED SLEIGH BELLS



No. 10. Cast Brass Nickel Plated Saddle Gongs



No. 8. Cast Brass N.P. Saddle Gong



No. 12. Cast Brass Nickel Plated Saddle Gong.

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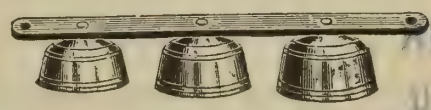


No. 97BB.	Brass Bells,	-	Black Leather Straps	
No. 67BR.	"	"	- Red	" "
No. 97NB.	Nickelled Bells		Black	" "
No. 97NR.	"	"	Red	" "

Shaft Gongs



No. 27. 3 Nickel Plated Dome Bells



No. 28. 3 Band Gongs, Nickel Plated



No. 30. 4 Nickelled Swiss Chimes. Fine Tone



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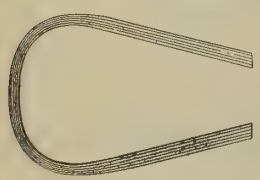
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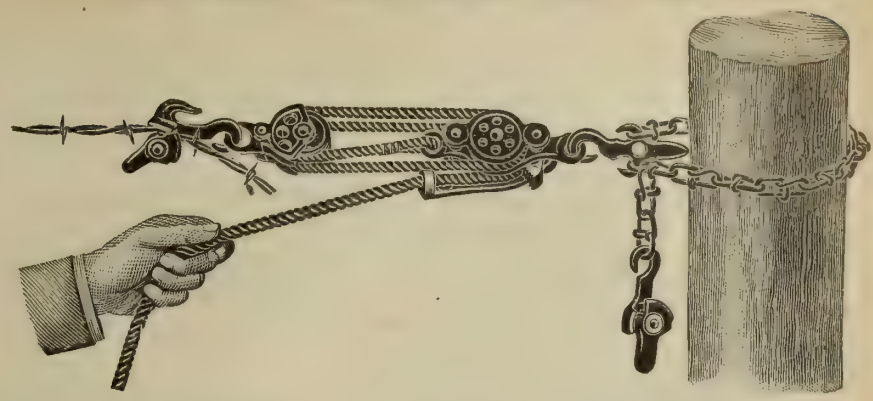
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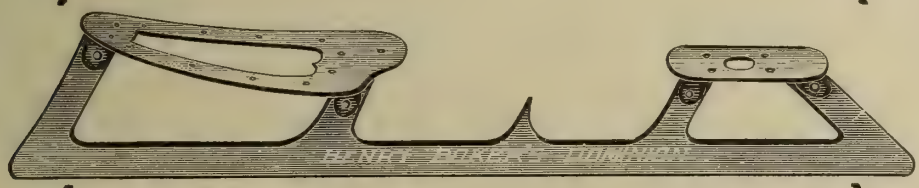
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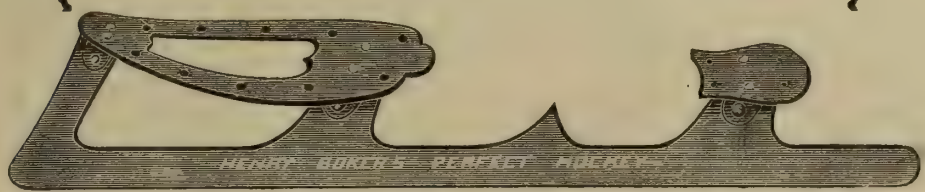
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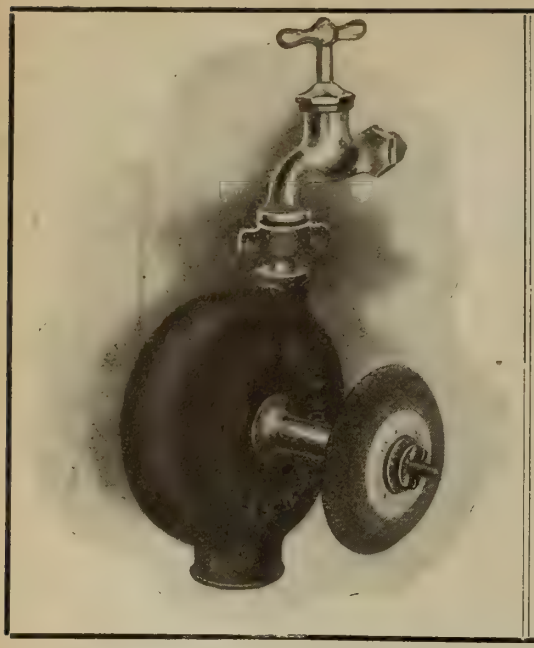
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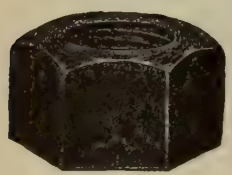
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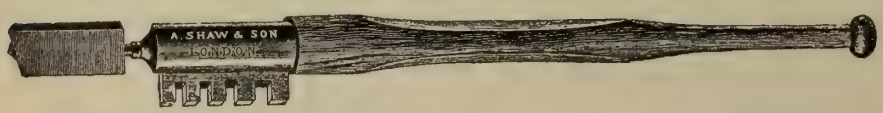
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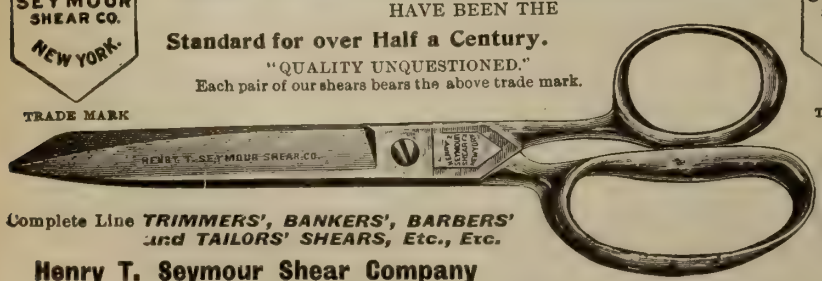
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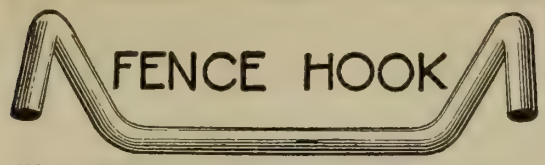
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will introduce the light (provided there is sky to draw from) and make the interior space as bright as if it were a corner room overlooking wide streets.

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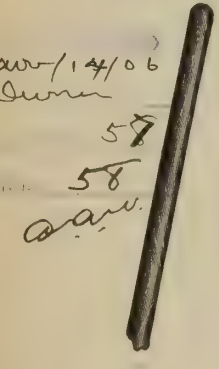
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Arctic Snow Shovels

are securely fastened to the handles by bolts, which pass through iron straps encircling the handles.

Are the shovels that you are selling made in this manner?

We stock them in two qualities—Japanned and Galvanized.

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KEMP MFG. AND METAL CO., Limited,
McDermot Ave. East, Winnipeg, Man.

THE TARIFF COMMISSION IN THE WEST

POINTS OF INTEREST TO THE HARDWAREMAN

ON December 4th and 5th the Tariff Commission held its long postponed sessions in Winnipeg. Business men showed keen interest in the proceedings and all were given a courteous hearing by the commission. Hon. Mr. Fielding displayed a remarkable knowledge of trade conditions, and his keen searching questions were favorably commented upon by the business men present.

On the opening day almost the entire time was occupied by the farmers whose spokesmen argued strongly for a general reduction of duties. They were willing to forego all duty on farm products in return for a reduction of the duty on some manufactured products mentioned. They asked for free lumber, fence wire and binder twine, and for a reduction of the duty on cement. They also asked that the duty on agricultural implements, machinery and wagons should not exceed 15 per cent.

Tuesday Sessions.

On Tuesday the manufacturers and business men had their innings.. J. H. Ashdown addressed the commission on the question of dumping and spoke in part as follows:

"So far as known no question of dumping ever arises unless the product is controlled by a combination or monopoly in the United States. The price to the Canadian trade before the enforcement of the so-called dumping clause was the same as to other foreign trade, and was in no case that we know of, less than a fair value. The operation of the dumping clause as a rule injures the consumer and benefits no one except it be the American manufacturer, who generally raises his price accordingly. While these clauses are on occasion extremely unjust, as well as annoying in their operation to the importer, after inquiry we know of no case in which they have benefitted the manufacturer by preventing importation. In case they are still to continue, then we would ask that they be amended to allow of a margin to the Canadian dealer of at least 7 1-2 per cent. below the home price, instead of 5 per cent. as at present, and a graduated scale between that and 10 per cent. before any forfeiture of the difference is caused. That all freight allowances made to the Canadian importer by the manufacturer be allowed provided the same does not exceed that allowed to any portion of his home trade and does not exceed the rate of freight to Canadian destination.

Mr. Ashdown spoke also in regard to cement. He said the rate of duty on the importations of this season is 47.65, or nearly 48 per cent. In view of the facts that cement is increasingly largely used in foundations and superstructures of all kinds of business, and that the Canadian manufacturers are not able to supply the market, he urged that it might fairly be considered as raw material, and that, in view also of the fact that the freight charges are of themselves a very material protection to the home manufacturer, cement should be placed on the free list; otherwise, if Portland cement were not placed on the free list that the rate of duty should be lowered so as not to be more than 10 per cent. of the value. In case the present, or any duty on cement is continued, he asked that a refund be allowed on the value of the sacks returned, provided they be returned within six months of their importation. There had been imported this year 180,000 sacks of cement; of these 60,000 had come in before the special duty on sacks was imposed; since then $3,002 had been paid on 120,000 sacks. Some 90,000 of these sacks had been again exported, and under all ordinary rulings a rebate should have been had on these, but it had not been applied for because they had not been returned within 30 days as required, for the reason that this was impossible.

In answer to the chairman, Mr. Ashdown stated that the 48 per cent. had been paid in the actual importations on values approved by the customs.

Manufacturers' Views.

On Tuesday afternoon a hearing was accorded the Manitoba branch of the Canadian Manufacturers' Association. The manufacturers present were L. C. MacIntyre, E. F. Hutchings, E. L. Drewry, T. R. Deacon, G. F. Stephens, For the most part their representations were general in their character, the speakers contenting themselves with arguing generally the benefits to the west of the industries which protection would foster.

L. C. MacIntyre.

L. C. MacIntyre was the first to address the commissioners and he spoke in part as follows:

"As vice-president of the Canadian Manufacturers' Association for Manitoba, I take pleasure in introducing a few of the manufacturers of Winnipeg. While some of those present may have special cases to lay before the commission, our main purpose in coming here to-day, is to express our belief in a reasonable increase in the general protective tariff, as a means of building up varied industries in Canada, affording employment for all classes of our citizens and creating a home market for our farmers, while at the same time giving a preference to goods of British manufacture.

"There is a mistaken notion in the east, that the west must always be a purely agricultural community. We believe that the natural resources of the west are such that it may have interests as varied as those in the east. It will take time to establish them, but the higher the tariff against the United States is made, the more quickly will industries of all kinds be established in the west.

"We believe that the people of the Canadian west should do their own manufacturing so far as possible, but when we cannot get what we want right here at home, we think that our fellow Canadians in Eastern Canada, who are helping us in building up and developing the west, should get a preference over all outsiders. If we cannot get what we want, either in the Canadian west or in Eastern Canada, we should then seek what we want in Britain, in preference to foreign countries.

"We do not pretend to advise the commission how high the tariff should be, but it should be high enough to cause many of the great manufacturing companies of the United States, who are now selling large quantities of goods in Canada, to establish branch factories in this country. If the Government will do this much, we think the cities and towns of the Canadian west will be able to convince American capitalists that a good many of the branch factories should be located west of Lake Superior.

"The building up of factories throughout the Northwest, will make mixed farming profitable. Continually growing nothing but wheat will in a few years exhaust the soil. However, bad years for wheat may come, even before the soil is exhausted. The farmer who is able to sell meat, milk, butter, eggs and vegetables in local markets will not be ruined by a failure of the wheat crop.

"Mr. Andrew Graham, who addressed this commission yesterday, arguing against protection, said that mixed farming was most profitable and that exclusive wheat growing cannot be profitably continued very long. Mixed farming is an impossibility except in a country having home markets. It is a well known fact that mixed farming is most profitable in those districts which are close to manufacturing towns.

"With reference to the price of agricultural implements, I have seen it stated very positively that, although the

cost of transporting agricultural implements from Toronto to England is less than from Toronto to Winnipeg, the price of agricultural implements is considerably higher in free trade England than in Manitoba. There is no duty on agricultural implements in England. I have not myself verified this statement, but no doubt the commission could without difficulty ascertain whether it is true or false. If it is true it completely knocks out the argument that protection always enhances prices.

"No doubt we will always continue to buy a good deal outside of our own province and it will pay us better to buy from the eastern provinces or from England, than from foreign countries, because our surplus crop must go eastward over Canadian railways, and if the railways bring back manufactured goods they can afford to carry grain cheaper than if the cars came back empty. Moreover, our farm products are almost entirely shut out of the United States by their high tariff, whereas we can send our products freely to the eastern provinces of Canada. We would not think it advisable for the Government to take any steps to reduce the tariff.

"The era of prosperity that we have enjoyed for the last number of years must show them conclusively that their tariff policy has been to the best interests of the country, and I am pleased to say that the farmers of the great western country are sharing in this prosperity. I know farmers in Manitoba that show a net profit of seven thousand dollars for their year's labor, and also farmers that bought farms and paid for them with proceeds of one year's crop. It is not all sunshine for the manufacturer. There is keen competition in all lines, and it is only by careful management that a profit is made."

Protection for Machinery.

Mr. T. R. Deacon, who followed, spoke with special reference to boilers and machinery, protesting against any reduction of the tariff, and advocating protection as the only means by which Canadian manufactures could be built up. Protection, he believed, did not necessarily mean an enhanced price to the consumer, and if the farmers wanted a reciprocal tariff, that could be best brought about by meeting hostile tariffs with similar hostile tariffs. The American tariff made it out of the question for his firm to send boilers and machinery into the United States, but large quantities of these goods were imported by western Canada, and the manufacturers in this country had only an infinitesimal portion of the market. One advantage which the manufacturers at Minneapolis and St. Paul had, was a favorable freight rate on their material, the rate per 100 pounds being 29 cents from Pittsburg to Minneapolis, a distance of about 1,500 miles, against 71 cents from Pittsburg to Winnipeg, which was only 450 miles further. The only advantage which the Canadian manufacturer had was the difference in the tariff on his material and his finished product, which was only 15 per cent., boiler plate paying 10 per cent. duty and the boilers 25 per cent. Against this had to be set the heavier freight rates, the cost of bringing mouldings and fuel from a distance, and dearer labor, which, between them more than eliminated the margin in his favor.

Replying to questions by the commissioners, Mr. Deacon said labor amounted to about one-third of the cost of a boiler, and he had to pay more for labor in Winnipeg than the manufacturers in St. Paul and Minneapolis, because in the American shops more unskilled and boy labor was used. About 100 men were employed in his shops, and there were two other similar concerns in the city. They were not supplying anything like the whole local demand. If the home market was secured for them, they could treble or quadruple their plant, the capital being at their disposal when needed.

E. F. Hutchings.

E. F. Hutchings had no special requests to prefer on behalf of his own business, but he argued strongly that every assistance should be given to the manufacturers of the west. He recall-getting 95 cents, $1.00 and $1.10 a dlerv line was imported from the United States, but the Canadian Government imposed a duty which swept American goods out of the market and built up a strong Canadian industry.

G. F. Stephens.

G. F. Stephens considered a protective tariff an absolute necessity. He made little complaint regarding the tariff as a whole as it affected the paint, oil and glass trade, but he pointed out some anomalies. Last session a duty of 30 per cent. was imposed on dry white lead for grinders' purposes. The president of the new lead works in Montreal had assured him that it was not the intention to raise the price, but nevertheless there had been a sharp advance. It was an anomaly that, while the duty on white lead is 30 per cent., the duty on paint is only 25 per cent. It was also an anomaly that putty, largely composed of linseed oil, should come in at 20 per cent. The manufacturers of mixed paints had, thus, no protection at all. Farmers in Manitoba have been getting 95 cents, $1.00 and $1.10 a bushel for flax seed, while in the United States $1.50 to $1.60 is paid. There is a high duty on flax seed going into the United States, and a low duty on flax seed coming into Canada. Farmers in Canada are asking for free trade, while farmers in Minnesota and Dakota are getting 40 to 50 cents a bushel more for their flax seed.

The chairman remarked that the American duty of only 25 cents would not account for this difference.

Asked if the product here was increasing, Mr. Stephens said that enough was grown for the need of the country and considerable for export. It was crushed here. Asked how the cultivation paid, he pointed out that there is this advantage. The ground could be plowed in the Spring and the seed sown on first breaking, and a fairly good crop grown.

The chairman remarked that, as a general rule, the commission was not asked to advance duties, but was asked not to increase them, but in this instance it was stated that prices had been increased.

Mr. Stephens understood this had been done to help British Columbia, and the price of lead all over the world had gone up.

The chairman asked whether the manufacturers had not taken advantage of the increase of duty.

Mr. Stephens, in answering, said he had never seen a manufacturer yet who did not get all he could. He thought a business that could not prosper with a duty of 40 per cent. had better be cut out.

E. L. Drewry, chairman of the Manitoba branch of the Canadian Manufacturers' Association, reminded the commission of his evidence at the last visit of the commission. He was waiting anxiously for the result of the commission to see if there would be anything done towards keeping out American lager. In general he could agree with everything that had been said. No one had any special grievances. All had spoken on the lines of building up the country. In Winnipeg we must be looking forward to the establishment of a manufacturing centre. To lower the tariff and alter existing conditions would seriously interfere with the progress of the west, and with the whole of Canada. The future of this country is bound up in its being able to manufacture all that is wanted in the west. If the commission, after thorough revision, could see their way clear, there might be cases in which the duty was sufficient to protect, and in others they might raise the duty where it was required. The local branch of the manufacturers' association felt they could not do better than re-affirm the resolution of the parent association. It was a splendid idea, that of a commission visiting different parts of Canada, and studying the local conditions.

L. C. MacIntyre, chairman of the representation from the manufacturers' association, thanked the commission for the kind hearing and expressed the hope that they would take to heart the words they had heard. He said that without manufacturing interests the country would not prosper, but it was bound to go ahead if its manufactures were protected.

It is time to turn the attention of the sporting goods trade from football goods and ammunition to gymnasium pharaphernalia. How many exercisers could you sell if you tried? Or sets of boxing gloves, or foils and masks, or punching bags, or basket ball material? Isn't there a demand for some of these things, at least, in your town?

JUSTICE OF ESTABLISHED PRICES

By O. A. Keyser, in National Hardware Bulletin.

CO-OPERATION for profit—that expresses the underlying principle of all mercantile associations.

Every business man is in business to make money. If conditions become such that the money-making possibilities of a business are jeopardized, immediate steps are taken to remove those conditions altogether or to limit their harmfulness.

The worst enemy of profit is undue competition. When my competitor acquires such an advantage over me that my chances of making money are limited or imperilled, I must endeavor to overcome my competitor's prestige or remove myself from the sphere of his competition.

There are two sure ways by which the retail dealer can overcome unfair competition: first, by selling goods which his competitor cannot get; second, by selling goods which his competitor cannot sell at less than a certain fixed price.

Since the retailer must buy manufactured goods, it is evident that he must look to the manufacturer for assistance in keeping certain goods out of the hands of his competitors and for establishing fixed minimum prices. It is, therefore, evident that the retailer needs the co-operation of the manufacturer.

Right here it may be said that the manufacturer is not forced to distribute his goods through any particular channel. He may have reasons to place the distribution with one or more classes of trade. If he finds that course most advantageous to himself, he will doubtless continue in it. On the other hand, if the class of trade with which he had entrusted the distribution of his goods does not do the line justice or does not appreciate the privilege of distributing the line, the manufacturer is not compelled to limit his output to that particular class. However, the manufacturer is only too willing to co-operate with the distributor who will reciprocate by pushing his line.

As far as the retail trade is concerned, the manufacturer will be a friend or a foe—just as retailers in general decide. If the retail hardware dealer, for instance, appreciated the policy of a manufacturer who keeps his article out of the hands of catalogue houses and establishes minimum retail prices, it is natural that this manufacturer will continue his policy and co-operate with the retail hardware dealer as much as possible.

In establishing prices, the manufacturer must bear several things in mind. He must price his line with respect to its intrinsic value. He must vary the price according to differences in freight tariff. He must fix prices that will insure a profit to himself and at the same time leave a good margin of profit for the dealer.

If the prices are just and fair according to these conditions, the dealer should at all times see to it that the prices are not violated either by himself or by his fellow tradesmen. Since minimum prices are established by the manufacturer for the protection of the retail dealer, it is only reasonable that the manufacturer should expect the retailer under all conditions to respect these prices. To violate a liberal policy is, to say the least, a small and ungrateful act. It belittles a dealer in his own eyes and in the estimation of his business associates.

Sometimes a dealer excuses his price-cutting on a certain article by saying that Bill Jones, up the street, offered that article below the minimum price. Such an excuse is a poor one and shows lack of thought on the part of the dealer who makes it. Why not write to your jobber or the manufacturer before meeting a cut price? Perhaps the matter can be soon adjusted. Your price-cutting doesn't remedy matters, but makes things worse.

For instance, Bill Jones, up the street, sells an article below the minimum price. Now, John Smith thinks that he has to meet this price. Bill Jones, not to be out-done, makes another cut. Then John Smith follows suit. Soon Bill gets his selling price down to cost and John has to sell at a loss to go him one better. Now wait, gentlemen. What good does it do? If you have to sell at cost or below, why not close up your shop and go into retirement before your savings are exhausted in this game of cut-throat competition.

Be reasonable. When a manufacturer will leave nothing undone to insure a profit for you, don't spoil the whole thing by slashing prices into smithereens. Ask the manufacturer to arbitrate the matter, and he will be only too glad to do so.

The manufacturer of a patented article has a legal right to enforce the maintaining of the prices which have been established by him. Patent rights are granted in order to encourage the making of useful inventions. The only profit that an inventor gets out of his invention is that which comes from having the sole right to manufacture and market it. If an inventor were not protected in this matter, he would not have any inducement to think out problems and appliances that promote the welfare of humanity in general.. The invenor is a public benefactor and deserves a reward for his effort.

Now, if everyone could manufacture a new invention as soon as it is placed on the market, what incentive would inventors have to think out new appliances? It is to place a premium upon invention that the Government gives the patentee of an invented article a monopoly as far as the making of that article is concerned.

Furthermore, of what value would this monopoly be to the patentee if he could not profitably market the article which he had invented? Suppose that the trade in general would slash the price until there would be no profit in distributing it to the public. What good would it do the patentee to manufacture his invention if its selling price has degenerated to the cost of production? It therefore stands to reason that the patentee's monopoly must include the marketing of his invention.

It has, therefore, been decided by the courts that the manufacturer of a patented article has the right, by nature of his monopoly, to establish and maintain arbitrary prices on his patent. Whoever violates the established prices is an infringer and liable to a damage suit for infringement.

At first thought it may seem that such a law is a violation of the seller's liberty, but such is not the case. A dealer is free to distribute the patented article in the prescribed manner or leave it entirely alone. By accepting the agency for a patented article, the dealer accepts all the conditions along with it. If he does not like the conditions, he is at liberty to decide that he will not act as a distributor of the article.

This is no hardship. It is a protection. The dealer knows that his profit is assured by law, and, if his competitor violates the prices which have been established, recourse for satisfaction may be taken to legal procedure. The manufacturer is in this way empowered to make the handling of his product advantageous to the dealer who wants to do a straight business with clean profit.

The retail dealer who takes advantage of a manufacturer's co-operation is wise. Your strongest ally in settling questions now confronting the trade is the man who makes the goods which you sell for a livelihood. Don't lose sight of this fact. By your reciprocation, encourage the manufacturers whose liberal selling policy means coin in your till.

HARDWARE AND METAL

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JOHN BAYNE MACLEAN

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NEW ADVERTISEMENTS.

H. G. Eadie, Montreal.
Collins Mfg. Co., Toronto.
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MOVE PRICES UPWARD.

NOW is an opportune time for merchants to advance prices on practically all classes of goods in which metals figure as component parts. Stocks in hand cannot be replaced at their original cost on account of the marked advances made recently for nearly every metal listed. A glance over the market quotations of the past few weeks will convince any merchant of the truth of this statement, and should convince him of the advisability of readjusting prices being charged.

The fact that merchants are too prone to give away the advantages gained through purchasing goods at cut prices—lanterns, for instance—was recently commented upon. Is it not equally true that in order to gain a reputation for low prices some merchants continue to quote low prices on lines on which the conditions of the market warrant higher prices? If one merchant in town keeps prices down to what the goods cost him, rather than increasing them to the figures they can be replaced at, other merchants have to follow suit.

Get together. Talk matters over with your nearest competitors, and arrange prices in accordance with market conditions. And when an opportunity for wider co-operation presents itself in the form of a Provincial Retail Hardware Merchants' Association get in line with the movement of the times towards organization, and enlist as a member of the new body.

REFRIGERATION AN AID TO COMMERCE.

DISPATCHES from New York last week mentioned that the annual convention of the Refrigerating Engineers of America was in session there, a fact which will bring home to the minds of our readers the immense developments which this industry has undergone.

There are few hardwaremen in Canada who do not sell good quantities of refrigerators in the Summer season. If they are inclined to moralize they cannot fail to think of the manner in which they are helping along a principle which has been one of the most important factors in developing the commerce of the world. Those who live on the main lines of our great railways must have been struck with the sight of vast trains of refrigerator cars, carrying salt and even fresh meat from Chicago to all parts of the country, and fruit from one side of the continent to the other. Cold storage plants established here and there in our country are doing great things to eliminate waste, and the equipment of modern ocean liners makes it possible to give our Mother Country better goods, and our own people better prices.

DISCOUNT CHEQUES FOR CUSTOMERS.

TRADING stamps are not now permissible for use by Canadian merchants, the new law which went into effect on November 1 having forced their discontinuance. Many hardware merchants, however, desire to encourage cash buying, this being the chief argument in favor of the use of trading stamps or the giving of similar inducements to customers who pay cash for goods purchased.

The National Cash Register Co., of Toronto, Ont., and Dayton, Ohio, have devised a system which does away with the necessity of trading stamps, while accomplishing the same purpose. Their plan, also, is understood to be entirely in accordance with the provision of the new law, the idea, briefly, being to give each customer a check taken from the cash register which records the amount of the customer's purchase, and guarantees the customer a discount of 5 per cent. in cash, or to be applied on future purchases at the store. The checks are, of course, given only on cash purchases.

The system is in force in many districts, and is said to be giving entire satisfaction, doing away, as it does, with the necessity of holders of checks going to a trading stamp store in order to redeem the checks which have been saved up by the customers. Hardware merchants who desire additional information regarding the system should write the above mentioned company for printed matter, which they are now getting out, describing the plan in detail.

THE HOLIDAY TRADE.

ONLY one more week's shopping remains before Christmas, and the wise merchant is making the effort of his life to make this week the climax of a successful season. Open weather has affected Winter trade somewhat, but reports from various sections show that the volume of business done so far has been quite satisfactory.

To get his rightful share of Christmas trade the hardware merchant must have the goods, display them, advertise them, and, most important of all, sell them. Besides guns, sleds, skates, silverware, cutlery, etc., the various novelties of the season should be kept before the eyes of possible buyers.

The merchant who is going to sell many holiday goods has to feature them in his store windows. Placard the goods as Christmas novelties and use plenty of cards suggesting the idea of the season, and naming the price. Many people will buy an article when they know its price, who would never go into your store to inquire the cost.

Decorations and Winter scenes are always attractive. The passerby, the shopper, is in sympathy with the sentiment of the season, and anything that features that sentiment will gain his approval. Change the window display frequently, and always put in a card extending an invitation to visit the store—that the display inside is just as free and just as good as the one in the window.

Give the inside of the store a holiday appearance by investing a few dollars in Christmas decorating. Put up some holly, evergreens, etc. Display the Christmas articles, and mark the prices plainly. It is also a good idea to picture a Santa Claus in some way. It never fails to interest the children, and when the children are interested their parents are not indifferent. Many successful plans have been worked.

One merchant we heard of adopted the plan of placing a letter box in his store with a card that letters mailed there to Santa Claus would be delivered immediately. Many scores of letters were mailed, and the merchant forward-

ed each letter to the parents of the children. The idea was a novel one and was generally appreciated by the parents.

By using the local newspaper freely and making the store attractive the merchant should create a demand which will result in having the holiday goods in the hands of customers rather than carrying them in stock and tying up capital. A little enterprise now will prevent a lot of worrying when stock-taking takes place.

AN INSTRUCTIVE TOUR.

INTERVIEWED by a Hardware and Metal representative, Mr. Peleg Howland, head of the firm of Messrs. H. S. Howland, Sons & Co., Toronto, who returned a few days ago from a tour through Western Canada and the Western States, stated that the trip, extending over a couple of months, had been most instructive and beneficial to him. Although he had been as far west as Calgary previously, this was the first occasion on which he had visited the Pacific Coast. Speaking of the scenery, Mr. Howland said that in his opinion the views along the C.P.R. through the mountain passes in British Columbia far excelled the famed Shasta route in California, and the mountain scenery between Salt Lake City and Denver.

Mr. Howland stated that everywhere between Lake Superior and the Rocky Mountains there was evidence of a large increase in population, every town and city showing a marked growth and appearing to be very prosperous. The merchants, generally, speak hopefully of future prospects, and while there is general satisfaction with this year's trade many complained of collections being slow in their districts.

"Is not the cash system being introduced more generally in the west?" asked Hardware and Metal. "Yes," said Mr. Howland, "it is in the older settlements, but there is still far too much credit given by merchants, especially in the smaller places. Both wholesalers and retailers are endeavoring to develop the cash system and minimize the credit evil, and the recent organization of hardware merchants into an association should help them considerably in this direction."

"How do the western stores compare with those of the east?" was asked. "Very favorably," replied Mr. Howland. "In many of the large towns, and in some of the smaller places, I saw stores which in their interior arrangement excelled the average hardware store in the east. There appears to be more elbow room in the west, and the merchants take advantage of this by having large stores. Their stocks, too, are very complete and well arranged, and many side lines are carried. In several stores I saw cut glass and the cheaper grade of watches displayed for sale."

"How about the Pacific Coast Cities?" "I cannot make any comparison as regards them," replied Mr. Howland, "as this was my first visit to the coast. Vancouver appeared to be experiencing a boom, and a conservative man from the east would gather the impression that the city is growing too fast. It is, however, the best business city, and its rapid growth may be warranted by this fact. Victoria is growing more slowly and is very popular as a headquarters for tourists. The feeling in Nanaimo is very hopeful, but as the city is just recovering from the recent disastrous coal strike business will be affected there for some months. New Westminster is also growing steadily."

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our Book 144
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Mr. George Caverhill,
Of Caverhill, Learmont & Co., Retiring President of Metal and Hardware Branch of the Montreal Board of Trade.

NEW OFFICERS ELECTED.

At the annual meeting of the metal and hardware branch of the Montreal Board of Trade, held last week, the following officers were elected for the ensuing year:

President—Geo. O. Kohl; vice-president, A. A. Brown; directors, Fred Bacon, H. J. Fuller, C. H. Godfrey, and W. S. Leslie.

The new president of the branch, Mr. Kohl, will be their candidate for the council of the board of trade.

Don't forget the accessories— the stove boards, shovels, dampers, flue stops, collars, polishers, etc. There is always a chance for them.

THE CONSPIRACY TRIALS.

A FULL account of the closing scenes in the first conspiracy trial is reproduced in the pages devoted to the plumbing and steamfitting trades. The addresses by judge and counsel will be interesting reading to hardware merchants throughout Canada as well as those concerned directly in the trade under fire.

The members of the two organizations, supply men and master plumbers, are still being held up as highway robbers in the daily newspapers. An article in the News of December 12 is remarkable chiefly for the ignorance of the writer and his supreme confidence in the gullibility of the public. According to the article the 166 master plumbers in Toronto filched from their customers each year the sum of $830,000 per year. The writer figures in 25 per cent. profit on a supposed total of business done, the whole mass of figures being evidently the work of a junior reporter. The Star of December 13 editorially expresses surprise that the plumbers can continue doing business after the exposures they have been subjected to. There should be no surprise on this point. The great body of master plumbers have not as much need to be ashamed of their actions as the editors who have published such untruthful yarns to satisfy their readers' love for sensationalism — and make profit. Hardware and Metal has no defence to offer for the larger plumbing houses whose greed led them to make the illegal "I.O.U." system so common and who drew many of the smaller houses into the net. We submit, however, that business men have a right to agree amongst themselves in order to secure a living profit and that if such an agreement was overstepped the lawyers concerned must bear their share of the blame. If the plumbers had not desired to keep within the law the attorneys would not have been consulted.

With other trials to come on next week it is too early to forecast what the result will be. But those who are predicting that the associations will disband are doomed to disappointment, as while their influence will likely be weakened as a result of the litigation, there are sufficient members who know the benefits of organization not to allow the associations to dissolve when slight changes in their by-laws will make them within the strictest interpretation of the law. Those members who have been bearing the brunt of the newspaper publicity, have been in constant attendance at court, and have in addition had to pay heavy fines, deserve much from their fellow members. As a rule the men who profited most from the actions declared illegal have kept in the background, allowing others to bear the disrepute.

PROMINENT RETAILER SPEAKS.

A WELCOME visitor to the Montreal office of Hardware and Metal last week was Mr. James Purvis, of the well-known firm of Purvis Bros., Sudbury, Ont. Mr. Purvis spent nearly the whole week in Montreal calling on a number of his business connections.

Speaking about his letter to Hardware and Metal, which was recently published in these pages, Mr. Purvis declared he did not understand the silence of hardwaremen throughout the country regarding cartage and "advance" charges on shipments from Montreal and Toronto. He did not believe himself to be the only sufferer by a long way, and he was particularly anxious to have the matter thoroughly threshed out in this, the representative paper of the hardware trade.

Mr. Purvis is thoroughly in accord with the idea of organizing a retail hardware association to cope with such difficulties as those before mentioned. His wide grasp of current affairs, and his prominent position in the trade, will make him a most valuable man in such an association, when it is definitely organized.

An interesting point in connection with our paper, which was raised by Mr. Purvis, was the value he placed in the current market quotations published every week, and revised from time to time as often as changes are made in the prices of the various hardware lines. He has often made use of this list to great advantage, when his own price list has been lost or misplaced.

We would be more than pleased to welcome in our Toronto, Montreal or Winnipeg offices any retailers who may be in those cities on business. Our headquarters are most central, and, as we are anxious to keep closely in touch with the retail trade, we are never too busy to exchange ideas with such visitors.

DOMINION C. T.'S ANNUAL BANQUET.

The annual banquet of the Dominion Commercial Travelers' Association will be held in the Windsor Hotel, Montreal, on Thursday, December 21. The committee report that from all indications this banquet will be the best in the history of the association. The lists of invited guests and speakers are in the first rank of commercial, legal, literary and Parliamentary life, and a good treat is in store for the guests.

Remember the annual inventory on the first of the year. Aim to have stock well up when that date comes.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 10.

MANY are the qualities which go toward making up a successful commercial traveler. First and foremost is a knowledge of his goods, as, in these days of scientific salesmanship, a traveler who has to speak in generalities stands a poor chance of landing a good trade. And, next in importance, comes the question of personality. The man who succeeds on the road is the one with an even disposition, who can display an unfailing enthusiasm and show as good a front under a succession of "throw-downs" as when he is selling car lots. In other words, he must be a man capable of turning failure into success.



J. C. Watson,
Representing Lewis Bros., Montreal, in Nova Scotia and Prince Edward Island.

The genial disposition of Mr. J. C. Watson, a cut of whom is presented here, peculiarly fits him for the performance of his duties, and to his strong personality he owes the fact that he is one of the most valued of Lewis Bros.' numerous traveling staff.

Mr. Watson has a wide acquaintance with hardware lines, and all his time on the road has been spent in calling upon this trade. For five years he represented the Whitman & Barnes Mfg. Co., tool makers, of St. Catharines, Ont., and his work was so successful as to bring him to the notice of Lewis Bros., Limited, the enterprising wholesale hardware dealers of Montreal. Mr. Watson accepted a position with this firm, and for six years he has been making a record for himself in Nova Scotia and Prince Edward Island.

Being in his very prime, Mr. Watson has many years of further successful service ahead of him, and his friends are confident of his ability to hold the fine trade he has won.

HOLIDAY REMINDERS.

KEEP the window full of seasonable articles. This is the time of the year when people are looking for suggestions, and a glance into your window may bring in a good customer.

Hang out a "Skates Sharpened" sign.

Push nut crackers and nut picks.

Most markets are advancing. Get a profit.

Carving sets and pocket knives are popular presents.

The majority of people, men in particular, start out to buy holiday presents without an idea of what they are going to purchase. They want to look around and see, and therefore it behooves the merchant to have goods well displayed, and have the price attached, so that all may see at a glance. The person who wants to spend $5, and sees something that just comes within the limit, is apt to buy, while perhaps embarrassment would result from a continual pricing of goods.

Don't allow your clerks to importune people to buy. Make everyone feel who enters your store that your display of goods is one you like to have looked over and inspected whether they buy or not. Many like to go in and look around. Make all feel at home and let them look to their heart's content, until they ask to be shown goods. Then is the time for the salesman's fine art to be put to work.

Frothingham & Workman, Limited, Montreal, are issuing a unique series of advance cards to be used by their travellers. Each card illustrates some hardware line carried by this enterprising firm, while printed on the same side as the address is a notice of the traveller's next call. The reverse side of the card is a blotter, which insures the card being preserved and used instead of being consigned to the waste basket.

CORRECTION.

A mistake has been made in A. L. Silberstein's advertisement. We have quoted hollow ground razors at $2.50 and double concave $3.00. These figures should be $2.00 and $2.50.

PERSONAL MENTION

Ontario.

Mr. A. V. Cline, plumber, Grimsby, was a visitor in Toronto on Wednesday.

Mr. James Hardy, of Jenkins & Hardy, has been in Montreal during the past week.

Fire did about $150 worth of damage to the Petrie Mfg. Co.'s plant at Hamilton last Monday.

The Nickel Copper Co. has taken over the business of the Hoepfner Refining Co., agreements confirming the amalgamation having been completed during the past week.

Mr. Harry C. Martin, British Columbia representative of H. S. Howland, Sons & Co., is in Toronto on a trip which will keep him in the east until after the holidays.

Mr. W. S. Andrews, controller of the Canadian General Electric Co., Toronto, intends to sever his connection with that company and engage in business for himself as a public chartered accountant.

The Anthony Fence Co., of Tecumseh, Mich., are opening a branch in Windsor for the manufacture of wire fencing. Machinery is now being put in and they expect to be running in a few weeks' time.

Mr. H. R. Chillas, of H. S. Howland, Sons & Co., Toronto, has recovered from an attack of appendicitis. He has been absent from business for about a month and this week left for Montreal, where he will pay a short visit to his old home.

Mr. H. Clucas, manager of the Toronto branch of the Canada Paint Co., has been in Montreal this week attending the annual convention of the company's travelers. Others present from the Toronto branch were Ed. G. Fadden, W. H. Allan and W. G. Good.

Country merchants are very busy with their Christmas trade and plumbers are using every available day so long as open weather lasts in order to complete jobs in hand. Consequently the number of visitors at the various wholesalers' has been limited during the week.

The James Robertson Co. have closed up the Rat Portage branch of their Winnipeg house and Mr. George F. Clare, who has been manager at Rat Portage, has returned to Toronto. Mr. Clare brought with him as souvenirs of his residence in New Ontario some fine specimens of deer and moose heads, which now adorn the show rooms of the James Robertson Co. He also has some interesting stories to tell regarding the adventures he had in procuring the souvenirs of the hunt.

The Canada Cycle & Motor Co. have disposed of the retail branch of their automobile business to the Dominion Automobile Co., managed by Mr. M. A. Kennedy. The new company have secured a number of American and foreign agencies and in addition to operating the garage at Bay and Temperance streets, Toronto, they intend to establish warehouses at Ottawa, Montreal, Quebec, Winnipeg and other points. The Canada Cycle & Motor Co. will continue the sale of their bicycles and skates at their retail branches as heretofore.

Mr. G. A. Binns, hardware merchant, Newmarket, was a visitor at the Toronto office of Hardware and Metal on Thursday. Mr. Binns is one of the oldest subscribers to Hardware and Metal, having taken the paper since its first copy. Mr. Binns reports business in his district to be very satisfactory. The extension of the electric railway to Jackson's Point on Lake Simcoe is resulting in increased business for the straight line merchants in the larger towns, the general merchants in the smaller villages losing some trade because of the ease with which the farmer can reach the large centres. Of course some people in the large towns visit the cities for supplies, but this does not affect the hardware trade so much as other branches of business.

RETURNED
DEC 18 1905



T. L. Waldon,
Manager of Caverhill, Learmont & Co's. Winnipeg Office.

Western Canada.

The Great West Saddlery Co., Edmonton, have decided to enlarge their present quarters. An addition 25 by 75 solid brick is at present under construction.

Peter Lund, of the coal mining firm of Breckenbridge & Lund, is visiting the east. Mr. Lund reports everything as flourishing at the mine at Lundbreck, Alta. The new machinery is being installed rapidly.

A very pleasant affair took place at Ross Bros.' hardware establishment at Edmonton recently. Mr. Hugh McJannett, foreman of the tin shop and furnace department, was waited upon by his employers and fellow employes and presented with an address, and a handsome secretaire and chair to match, together with a large number of individual presents from employes of the firm. The occasion was the marriage of Mr. McJannett, the bride being Miss Margaret Livingstone.

Quebec.

F. R. Dalton, of Waterloo, Que., was in Montreal this week.

A. Archambault, plumber, of Hull, visited Montreal a few days ago.

Madame B. Lahaise, of St. Hilaire, spent a day in Montreal this week purchasing supplies.

Ferdinand Dorion, roofer and tinsmith, of St. Andrew's East, visited Montreal during the week.

Fred Sermon, of the Miller-Morse Company, wholesale hardware merchants, Winnipeg, was in Montreal this week.

Visitors to Montreal from the other parts of the province are few and far between this week. Dealers seem to be "sawing wood."

Mr. Raymond, of Raymond & Frere, wholesale hardware and grocery merchants, St. Hyacinthe, was in Montreal one day last week.

Geo. R. McClure, general manager of The Canada Smelting Company, Limited, Montreal, was in Ottawa this week, calling on the trade.

Chas. Leblanc, hardware merchant, of Joliette, was in Montreal recently and called on some of the wholesale firms with whom he has business connections.

N. A. Meyer, of the Meyer-Thomas Company, manufacturers of cigar and tobacco boxes, Granby, was in Montreal Wednesday buying hardware supplies.

Friends of J. H. Bell, hardware merchant, Mattawa, Ont., will regret to learn that he is confined to a hospital in Montreal, though his progress toward recovery is satisfactory.

The Sayer Electric Company, Montreal, are attracting the attention of passers-by on Beaver Hall Hill by their fine display of electric toys. The window is kept clear of frost by electric fans.

Mr. James Purvis, of the firm Purvis Bros., Sudbury, North Bay and Webbwood, Ont., who spent last week in Montreal, left on Saturday for Quebec, where he spent the week end, returning to North Bay on Monday morning of this week.

NORTHWEST TRAVELERS CONVENE.

The boys who sell the lines of Caverhill, Learmont & Co. in the great Canadian west, are at present enjoying themselves in Montreal, whither they were called to attend the annual conference of the Northwest traveling staff, held last week.

Thoroughly characteristic of western business men are these knights of the grip, and all of them are full of enthusiasm in speaking of the Empire's granary.

Owing to continued extensive building operations in the west, the hardware trade there is in a most flourishing condition, so that the boys are feeling particularly exuberant. Under the fatherly care of "Tom" Waldon, however, they are keeping out of the clutches of the law.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Sash Cord is now selling at 31c. per lb.

Shot has advanced to 5 discount off list.

Lead Pipe is now quoted at 20 discount off list.

Turpentine has declined to 93c. and 92c.

Machinery Iron Finish Steel is now $2.27½c.

Queen's Head Galvanized Sheets have advanced.

Summerlee and **Londonderry Pig Irons** have gone up in value.

Old Material—Several changes are noted.

Pig Lead has jumped up to $4.65 and $4.70.

Ingot Tin is up again, and we quote 39c. to 40c.

Hay Wire has advanced.

Brass and **Copper Wire** are quoted at 52½% off list.

Copper Rivets and **Burrs** have been advanced.

TORONTO.

Lead Pipe now quoted at 20% discount.

Iron Pipe—Further advances have been made.

Turpentine—Prices have fallen slightly.

Linseed Oil has advanced to 49c. and 52c.

Wire Nails—A 10c. advance has been made.

Shot—Another change makes the discount 5%.

Galvanized Tinware—Discount has been lowered.

Copper Goods—All Copper goods have advanced.

Elbows—Discount is now 40 .

Pig Iron—Londonderry has advanced again.

Ingot Tin—Price is now 40c.

Lead—Both Pig and Bar have advanced.

Copper—Ingot and Sheet have advanced 1c. per lb.

Old Material—Copper, Brass and Iron have advanced.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, December 15, 1905.

THE past week has been interesting because of the numerous advances in price which are noted at the head of this column. All have been occasioned by the most remarkable situation the metal market has known for years. As there is, as yet, no appearance of a weakening in metals, it is altogether likely that hardware prices will reach still higher figures before a check is put upon the present tendency.

Business is remarkably good for December, though, naturally, it has fallen off in the past few weeks. Orders are still coming in sufficiently to keep the staffs of local jobbing houses busy shipping them out, instead of taking stock, as is usual at this time of the year.

Axes—A good volume of business is being done in this line. Our prices are as follows: Chopping axes, unhandled, $6.00 to $9.50 per dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—We quote: No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Hay Wire—A big jump has been made within the past few days, and dealers who were holding off in anticipation of easier conditions, have been badly nipped. We quote: No. 13, $2.45; No. 14, $2.55; No. 15, $2.70; net cash, f.o.b., Montreal.

Sewing Machines—Prices remain unchanged, and the turnover is very satisfactory. We are quoting as follows: Hand-sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—We are still authorized to quote prices as follows: Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—This is one of the lines which have been advanced during the week. The strength in the copper market has been responsible for amended prices in copper rivets and burrs. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 40 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Orders coming in are of satisfactory size and number. We give prices: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—While not in such great demand as a few weeks ago, there is still a good turnover at these prices: 3-8 and smaller, 60 to 10; 7-16 and larger 55 and 5.

Horse Nails—There is nothing new to remark in connection with this trade, which still commands following prices: C brand, 40, 10 and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P.B. brand, 55 per cent

Wire Nails—Another of the advances made during the past week was in wire nails, which are now being sold at $2.15 per keg, f.o.b., Montreal.

Cut Nails—Trade is very quiet with but few inquiries for good-sized lots. Price remains at $2.20 per keg, f.o.b., Montreal.

Horseshoes—Fair quantities are being shipped. We are quoting the following prices: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M Co. latest improved pattern iron shoes, light and medium pattern No. 2 and larger, $3.65; No. 1 and smaller, $3.90; snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4, No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60 Toeweight, all sizes, No. 1 to 4, $6.85 Packing, up to three sizes in a keg, 10c. per 100 pounds. More than three sizes, 25c.

Sporting Goods—We are quoting as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.. American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred pounds; chilled, $7.00 per hundred pounds; buck and steel, $7.50 per hundred pounds; ball, $8.00 per hundred pounds. We quote discounts 10 per cent. on shot, f.o.b., Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Conditions are practically the same as at our last reports. The weather is unfavorable to building operations, a fact which acts against this branch of the trade. Prices are unchanged.

Cement and Firebrick—Firebrick is selling well, but with the exception of occasional small jobbing orders, there is very little doing in the cement trade. Our quotations are as follows: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch, $17.00 to $21.00: American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags, $2.05 in barrels in round lots.

Coil Chain—Our prices are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Skates—Medium priced lines in small sizes are very scarce. Demand is quite active. We quote from 25c. to $2.50, according to quality.

Sleigh Bells—We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape, $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Our prices are: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes — The supply is exhaust-

ed, with inquiries still coming in from all over the country. The leading jobbing interest here reports that there is only one grade now, which can be quoted on. Prices are from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, December 15, 1905.

ADVANCES in prices of many lines have been made during the past week and wise merchants throughout the country will move their retail quotations upward in order to keep pace with the many advances which have been made recently in not only raw materials, but in the finished products. Amongst the advances made this week are the following:

Wire nails have been advanced 10c. and are now firm at $2.25 base, with a 10c. rebate.

Galvanized ironware, including galvanized buckets, have been advanced from 50 per cent. to 45 per cent. discount.

Copper and copper nickeled plated goods have been moved upward from 50 per cent. to 45 per cent. discount. Copper pitts from 40 per cent. to 35 per cent. and tea kettles and boilers with copper bottoms from 40 per cent. to 35 per cent. discount.

Copper rivets, formerly 45 per cent. are now quoted at 40 per cent. discount, and copper burrs, formerly 45 per cent. and 10 per cent., are 30 per cent.

Elbows, formerly 45 per cent., are now 40 per cent.

Shot which was advanced from 15 per cent. to 10 per cent on Nov. 14th, has been advanced again and is now quoted at 5 per cent.

Business generally is reported to be exceptionally brisk and no let-up is expecte duntil after the holiday. While most hardwaremen have stocked up all the goods they are likely to require for the Christmas trade, there are some sorting orders being received by jobbers, and general merchants are also supplying considerable business. Cutlery and sporting goods continue in fair demand, as also does building supplies. Lumbering goods, such as saws, axes, etc., are in strong demand and shipments quite heavy. The coming of snow has also created a demand for sorting orders of horse blankets, sleigh bells; skates and snowshoes are having a run for the same reason. The shortage in these goods has been overcome and shipments are being made promptly.

Axes and Handles—Heavy shipments are being made to late buyers.

Cutlery and Silverware—The heavy holiday demand is causing a large movement of goods.

Sporting Goods—Shotguns and ammunition are having a fair sale.

Washing Machines— A seasonable trade is being done.

Chain—A satisfactory trade is reported. We quote: 1- inch, $6.50; 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Quotations continue as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Quotations continue unchanged and business fair. We still quote: $2.42 1-2 f.o.b. Cleveland.

Barb and Coil Spring Wire—A seasonable trade is being transacted.

Wire Nails—A 10c. advance has been made and the ruling price is now $2.25 with the usual 10c. rebate.

Cut Nails — A satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Orders are satisfactory and shipments large.

Horseshoes— Trade continues brisk; prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—The coming of snow and ice has created many sorting orders and shipments are large.

Screws—Advancing prices in metals make the market very firm, but prices are unchanged.

Rivets and Burrs—Copper rivets and burrs have advanced, but iron goods are unchanged.

Bolts and Nuts— Demand is active and prices very stiff.

Cordage—Sorting orders are plentiful. We still quote: Manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are unchanged and trade is seasonable. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick—Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Prices continue unchanged and a fair trade is being done.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 15, 1905.

IN spite of the near approach of the holiday season, local metal merchants say that they notice very little, if any, falling off in the quantity of orders received in the daily mail. This condition is no less surprising than it is satisfactory.

Another week of great strength in the metal markets is that which has just passed and several prices have been advanced, with prospects of further advances in other lines, even before this appears in print.

The chief change in price has been in tin and lead, the latter of which has made a phenomenal advance of 25 cents per hundred pounds. Ingot tin, too, is very much stronger and has advanced 2c. a pound over last week's prices, being extremely well held at our new figures.

After several weeks of an inactive market antimony has gained strength within the past few days and our figures which last week would have been shaded for quantities, now hold good for any quantity with prospects that the advance in the Old Country of from £1 to 2 will soon be followed in this country as well.

To sum up the week's business we may say local merchants have been astonished at the result considering the time of year. In fact, a tendency has been noticed of recent years to a diminished slack season in December and January. But things are particularly good this Winter, as may be seen from the gradually advancing prices in all lines of metals.

Canada Plates—The advance quoted last week is being rigidly maintained on the market here. We are now quoting as follows: 52's, $2.60; 60's, $2.65; 75's, $2.75; full polished, $3.75; galvanized, 52's, $4.10; 60's, $4.35.

Copper—Although we quote the same prices as last week, the market is admittedly much stronger and we are expecting another jump before we go to press. For the present we quote as follows: Ingot copper, 19 3-4c. to 20c. Sheet copper, base sizes, 25c.

Ingot Tin—As forecasted last week, there has been another advance in this metal and prices now are higher than they have been for 20 years. As the visible supply is constantly going behind the consumption it must not be expected that conditions will materially differ for a long time to come, except as a result of market manipulation and the situation now is by no means favorable for the operation of "bears." Prices now are 39c. to 40c. per pound.

Pig Lead—Another advance of 25c. per 100 lbs. is creating havoc in all kinds of lead products, which have been advanced in wholesale fashion to keep pace. We are now quoting from $4.65 to $4.70 per 100 lbs.

Boiler Tubes—There is no new feature to notice this week and we

still quote prices as follows: British and American tubes, 1 1-2 inch. 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—A couple of advances have been made this week, but conditions generally remain about as before. We quote:

"Dom.," No. 1.$19.50 to $20.00 delivered Montreal
Usual difference in price for lower grades.

Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19.00	"	"
" No. 3	18 50	"	"
" No. 4	18.00	"	"
Londonderry	20.50	"	"
Carron No. 1	23.00	"	"
" (special)	22.00	"	"
Summerlee No. 1	23.50	"	"
Clarence No. 1	20.00	"	"
" No. 3	19.50	"	"

Tool Steel— We quote: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Colver's, 10c. to 20c.; "Air Haradening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel—The strength of the metal market is here reflected by another rise in the price of machinery iron finish, which is quoted now at $2.27 1-2. We give the following prices: Sleigh shoe, $2.17 1-2; tire, $2.27 1-2; spring, $2.75; toecalk, $2.82 1-2: machinery iron finish, $2.27 1-2; ruled machinery steel, $2.75; mild, $2.17 1-2 and upwards; square harrow tooth, $2.27 1-2. Net cash 30 days. Rivet steel quoted on application.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch. $3.50 per 100 lbs.

Galvanized Iron—If spelter continues to advance, as it shows every indication of doing, the mills will have to materially increase their prices. For the present we are quoting: Queen's Head, 28 gauge, $4.25; 26 gauge, $4.00; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.50; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge. $3.40; Fleur-de-Lis, 28 gauge, $4.00; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.25; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge. $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10, "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—We are still quoting. 28 gauge, $2.40; 26 gauge, $2.35; 22-24 gauge, $2.30; 19-20 gauge, $2.30; 8-10 gauge, $2.45.

Antimony—Owing to a sharp advance in the Old Country our prices are very firm and will scarcely be shaded for any quantity. We quote: 14c. to 14 1-2c. for Cookson's.

Tin Plates—Last week's advance is well held and we are still quoting as follows: Cokes, base size, 1C, 14 x 20, $4.00; charcoal, base size, IC, 14 x 20, $4.25.

Terne Plates—Last week's price of $6.85 is still ruling the market.

Ingot Zinc—Prices are unchanged with the tone slightly higher and we are quoting from 7c. to 7 1-4c.

Sheet Zinc—Prices still are, in casks, 8c., less than casks, 8 1-4c.

Sheet Lead—We are quoting: 2 1-2 lbs., 5 1-2c. by the roll; 3 lbs. and heavier, 5 1-4c. by the roll; large quantities, 25c. per hundred pounds.

Bar Iron—Conditions remain the same as at our last report and the current price is still $1.97 12c., f.o.b., Montreal.

Old Material—The market in metals seems to be pretty well cleaned up and good prices are in order. Cast scrap iron is in particularly good demand, although stocks are light. Otherwise conditions are unchanged. Our quotations are as follows: Copper wire, 14 3-4c.; light copper, 13 3-4c.; heavy red brass, 12 1-2c.; yellow brass, 9 3-4c.; light brass, 7c.; lead, 3c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $11; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL
10 Front street east,
Toronto, December 15, 1905.

STILL more advances have been made in the prices of metals quoted and there seems to be no limit to the height to which quotations are to go before a reaction sets in. A scarcity of metals for spot delivery exists and this no doubt has its effects on the local market. Outside markets, however, are very firm and the situation locally is merely a reflex of conditions on the larger market.

During the week Londonderry pig iron has advanced to $22.00 and ingot tin has moved upwards from 38c. to 40c. Lead has made another jump and both pig and bar are now being quoted from 10c. to 20c. higher than a week ago. Copper also has advanced another cent on both ingot and sheet. These advances in new stock are having their effect on old material, and quotations on most lines of scrap have been advanced during the week.

Pig Iron—Londonderry has been advanced another half dollar and prices of other lines are very stiff. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	20 00
" No. 2, "	19 50
Midland, No. 1, "	20 00
" No. 2, "	19 50
Radnor, at furnace	31 50
Londonderry, f.o.b. Toronto	22 00

Bar Iron—Business is very satisfactory with prices very firm. We still quote: $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Ingot Tin—A 2c. advance has been made, the market being very active and goods scarce. We are now quoting 40c.

Tin Plates—Demand continues strong and prices stiff.

Galvanized Sheets—Prices are firm in the outside markets, the demand continuing active locally.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—Another advance in both pig and bar has been made, owing to the higher cost of stock. We now quote: Pig lead, $4.60 per 100 lbs., and bar lead, $5.00 per 100 lbs.

Zinc Spelter—The market continues active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Ingot and sheet copper have been advanced again and stocks are reported to be very scarce. We quote: as follows: Ingot copper, $20 per 100 lbs., and sheet copper, $24 per 100 lbs.

Antimony—A more active demand exists and prices are much firmer.

Old Material—High prices for new metals has resulted in sharp advances in old material. Dealers' buying prices are as follows: Heavy copper and wire, 14c. per lb.; light copper, 13c. per lb.; heavy red brass, 12 1-2c. per lb.; heavy yellow brass, 10c. per lb.; light brass, 8 1-2c. per lb.; tea lead, $3.00 per 100 lbs.; heavy lead, $3.25 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $10.50, No. 2 wrought $3 to $5; machinery cast scrap, $15; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—A scarcity of stock exists in many sections and prices are firmer in consequence. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N.P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, December 14, 1905.

THE Lake Superior ore market has furnished in the past week one of the most remarkable developments of this record-breaking year. At the end of the first week in December, with cargoes of 1905 ore still coming down the lakes, it was authoritatively estimated that nearly 90 per cent. of the merchant ores to be mined for 1906 had been sold. Careful computation also shows that counting in the ore of consumers having their own mines and of consumers receiving ore on long time contracts there has now been placed 96 per cent. of all the lake ore available for next year. An output of 36,000,000 to 37,000,000 tons is now figured on for 1906, and of this only about 1,000,000 tons is for sale.

Complete returns from the shipping ports show that the water shipments

this year aggregated 33,473,761 tons. Adding all-rail shipments this indicates total shipments for the current year of 34,100,000 gross tons, a record output, which compares with the maximum of 27,571,121 gross tons in 1902 and an average of 23,500,000 tons for the past four years.

Pig iron production is now on the basis of over 25,000,000 tons per annum. Our statistics for the month of November show that for that short month the production of anthracite and coke iron amounted to 2,014,021 gross tons, against 2,053,174 tons in October, a month of 31 days. Adding as a conservative estimate a monthly production of 30,000 tons of charcoal iron, the annual rate given above is reached. In November the steel companies contributed 1,334,644 tons to this total.

So far as can be learned there is no truth in the cabled reports from England of purchases there for American account of 25,000 tons of Bessemer pig for consumption here. The only steel maker in this country likely to handle such a quantity denies such a transaction, which, too, is unlikely, because the prices abroad are above the parity here. The report is regarded as a bull canard.

The steel situation is growing serious with increasing scarcity. Our Chicago correspondent reports that one large interest in that district estimates a shortage of 15,000 tons per month. The leading interest in the central west is unable to operate as much finishing capacity as desired because the supply of sheet and tin plate bars is inadequate. In the east mills which until now were running on $23 and $24 steel must face the question of buying new supplies at close to $30.

In the rail trade the only large transaction in the domestic market is a lot of 15,000 tons for Morgan's Louisiana & Texas Railroad. For the international markets and as possibly affecting our own mills there are two interesting orders at hand from Canada which aggregate about 85,000 tons. It is pretty certain that the Canadian mills will not be able to take any part of this business because they cannot meet the deliveries.

All reports agree that the volume of business coming to the wire mills is exceptionally heavy. Instead of beginning to stock up for the Spring trade, the mills are still forced to ship from stock. The tin plate and sheet mills, too, are very busy.

LONDON METAL MARKETS.

From Metal Market Report, December 13, 1905.

Pig Iron — Cleveland warrants are quoted at 53s. 3d, and Glasgow Standard warrants at 52s. 2d, making prices as compared with last week 3d higher for Cleveland warrants and 2d higher for Standard warrants.

Tin—Spot tin opened strong at £163 17s. 6d, futures at £162 5s, and after sales of 360 tons of spot and 240 tons of futures closed strong at $164 2s. 6d for spot and £162 15s. for futures, making price as compared with last week £3 7s. 6d higher on spot and £4 18s. higher on futures.

Copper—Spot copper opened strong at £80 5s., futures £79 12s. 6d, and after sales of 300 tons of spot and 900 tons of futures closed steady at £80 5s. for spot and £79 5s. for futures, making price as compared with last week £2 7s. 6d higher on spot and £2 2s. 6d higher on futures.

Lead—The market closed at £17 6s. 3d making price as compared with last week 6s. 3d higher.

Spelter—The market closed at £28 15s. making price as compared with last week 2s. 6d higher.

New Brunswick Trade News

St. John, N.B., Dec. 11, 1905.

ONE or two local stove men seem to be of the opinion that the stove trade this season is not up to that of other years. That, however, is not the opinion of Mr. J. E. Quinn of Messrs. Quinn & Co., the north end plumbers, stove dealers, etc. Speaking to the correspondent of Hardware and Metal to-day, Mr. Quinn expressed himself as well satisfied with the business his firm has done this season as regards stoves. As Mr. Quinn puts it, "if the stove business is 'off' with some of the dealers, it's decidedly 'on' with us." Stoves of all kinds have been in good demand among Mr. Quinn's customers and the staff of employes have been kept busy setting them up. In common with other plumbers, Messrs. Quinn & Co. are now making ready for the season of frozen pipes and disorganized water service.

Of late the price of graniteware has dropped somewhat here and the tendency seems to be toward further decrease The cause of the lowering of the prices of this ware is said to be the competition of a United States firm. This firm is putting goods on the market at such prices that a lowering of the figures asked for graniteware by dealers handling the product of other companies is a necessity. In some cases the decrease has been in the vicinity of ten per cent.

Mh. G. J. Capewell, of the Capewell company, which recently acquired the controlling interest in the Maritime Nail Works, is at present in the city. Mr. Capewell, though courteous to all who seek information from him for publication, is very uncommunicative. His visit, he says, is to enable him to attend a meeting of the new board of directors of the works, and he declines to give any information regarding the talked of changes in their management.

Engineers employed by the New Brunswick Co. at Lepreaux report the finding of magnetic iron ore of a high quality. They estimate that the company's property contains at least 18,000,000 tons of the ore. If all goes as hoped and expected by the directors, shafts will be sunk and a complete equipment for mining the ore will be installed. Blast furnaces and rolling mills may be erected.

The metal market continues to be characterized by a tone of firmness. Apparently the upward tendency previously referred to in this column is still to be in evidence. Galvanized iron has risen in price since the last letter. Dealers who have occasion to buy metals are naturally not particularly pleased at the turn things have taken.

British Columbia Trade News

Dec. 12, 1905.

CONSIDERATION of the freight rates issue is over-shadowing the immediate business of the day in the minds of all wholesale shippers in this province, and the hardware men are especially interested. There has been a great deal of discussion over the vexed question, from the time it was first taken up before the Railway Commission and the C.P.R. asked to file its answer to the demands of the coast shippers. The fact that the C.P.R. had been asked to do so has been taken advantage of by that company to temporize with the merchants of Vancouver, to the extent that the date which was set by the merchants for the C.P.R. to give them some assurance in the matter was allowed to pass with nothing more satisfactory than the evasion of a decision on the ground of propriety. In other words the railway company said it would not be the correct thing—"not good form," in short—to make a deal with the merchants direct while the matter was under advisement by the Railway Commission. As the same line of etiquette and procedure has not been observed by the railway company in connection with this very question, or rather the other side of it, the rates to Edmonton having been lowered, the Vancouver merchants failed to see the consistency of the railway company's position. It was, therefore, decided when Assistant General Freight Agent Greer could give no other answer, that the merchants would institute a boycott on the railway. This is now in force and being vigorously prosecuted. The merchants have sent a delegation to Seattle to confer with the Great Northern as to routing cars through from the east, and an effort is also being made to induce the retail trade which buys in the east and brings out distributing cars, to join the movement by routing their cars over the opposing lines.

The Vancouver Board of Trade is in sympathy with the movement, and one of the leaders of the fight, Mr. R. P. McLennan, a leading hardwareman, is president of the board. Through various means the merchants will appeal to the sympathy of the business public in the east, in their demands. Some members of the board think that the unfairness of the treatment being given Vancouver and Victoria in this matter is not understood even by the directors of the railway company.

Crawford Bay, on Kootenay Lake, the site of a former smelter proposition, is to be the scene of activity in the first development of the iron industry in the interior of B.C. A syndicate of Cleveland, Ohio, capitalists, headed by Matthias Horsling, has bought the iron mines owned by Nelson people, in that vicinity and a plant is to be built next

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Dec. 15, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

VALUES continue steady throughout the entire metal and hardware list, there being no change of importance to note this week. Business is fairly active in all lines, although the big Fall rush is now over. Collections are improving.

Game Traps—Still in some demand at following unchanged quotations.

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—Prices are quoted as follows in an "open" market:

Cold blast lanterns	$5 25 per doz.
Coppered cold blast lanterns	7 25 "
Cold blast dash "	7 75 "
Lift Lanterns	4 25 "

Bluestone—Price for 1906 delivery is $5.75 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb	$3 00
Plain galvanized 6 to 8	3 39
" 9 2 50	2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 00
Staples	3 50
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices have been steady since the recent advance in steel shoes. Quotations are as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—Prices are quoted as follows since the recent advance:

Pressed spikes, ¼ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅜ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.20
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz.	9.00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits— Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz	$8.75
Grass " per doz	1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—There was a typographical error under this heading last week. Prices are as follows:

Royal Canadian, per doz	$30.00
R. B., per doz	34.75

Files—Discounts are quoted as follows:

" Arcade "	75 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—There is a steady demand for all lines at firm prices. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—The price is steady since the recent advance. We quote as follows.

Kope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 75
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.
(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.
(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Vises—Prices are quoted as follows:

" Peter Wright," 30 to 34	4½c. per lb.
" " 35 to 39	14c. "
" " 40 and larger	13½c. "

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6. The "1904" sheep shearing machines are sold at $13.60.

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited
WINNIPEG, MAN NEW GLASGOW, N S.

ARTISTS' MATERIALS
AND ARCHITECTS' SUPPLIES, ETC.

We carry a complete line of WINSOR & NEWTON'S and other leading manufacturers' goods in stock. Ask for our new catalogue.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.
WINNIPEG, - MAN.

Ammunition, Etc.— Prices and discounts are quoted unchanged as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	20 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.

Loaded shells:

Dominion Eley's and Kynoch's soft, 12 gauge.	
black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 50
Chilled	7 00
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge,	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—Owing to a typographical error Canada plates, full polished, were quoted at 25c. last week. The price is of course $4.25. We quote:

Canada plate, 18 x 21, 18 x 24	3 50
Canada plate, 20 x 28	3 75
Canada plate, full polished	4 25

Sheet Zinc—The price is now $8.50 for cask lots, and $9.00 for broken lots.

Pig Lead—The price has been advanced to $4.75 per 100 lbs.

Iron Pipe—Prices are steady at the recent advance. We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 55

Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— Prices are quoted now as follows:

Silver Star, per gal	21c. ½
Sunlight "	22½c.
Eocene "	24½c.
Pennoline "	25½c.
Crystal Spray "	24½c.
Silver Light	22½c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints and Turpentine—Business is brisk in general lines. We quote as follows:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.05
26 to 40 "	2.20
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

BRITISH COLUMBIA TRADE NEWS.

(Continued from page 27.)

Spring. A mono-rail road is to be laid for carrying the ore to Crawford Bay from the mines.

* * *

The lime deposits of Texada Island, in the Gulf of Georgia, have been actively developed and kilns operated for some years, a good export as well as local trade being done. Most of the export has been by the Australian steamers, to Honolulu and Australia. Recently, however, a shipment of 1,000 barrels was sent to Tacoma. As the Tacoma Steel Co. is now operating the Marble Bay mines, and the Texada lime kilns—that is the probable explanation of the shipment. It is none the less noteworthy, as indicating what may be developed in this trade.

* * *

Three thousand tons of ore from the Britannia mine, Howe Sound, have already been shipped to the Britannia smelter, Osborne Bay, Vancouver Island. About half that amount has been sent to the Hodley mines smelter, Prince of Wales Island, in the north. A similar quantity of the Prince of Wales ore has been shipped to the Britannia, the two companies exchanging ores for fluxing purposes, in the smelting process.

Three hundred tons of ore per day are being taken from the Britannia, now that operations have been got down to full basis. The big concentrating plant is working 12 hours a day and all ore below 5 per cent. is put through.

While all the pig iron used in the various foundries of this coast has to be brought into the province, there is as a rule a very considerable stock on hand. The facility with which it can be obtained from the Old Country, and the competition in the United States has always had its influence in making pig iron cheap and easy to get in B.C. But the condition here just now is that there is no reserve stock, and the price has gone up from $1.50 to $2.00 per ton on the average. It is estimated that consumption in this province is some 300 tons per month, so that there is quite a field to supply. In pig lead, tin and tin plate, all articles which are largely consumed in manufactures in B.C., the price is also high in sympathy with conditions elsewhere.

The rise in lead has been so marked as to stop payments of the bounty given by the Dominion Government. It was paid on a sliding scale, which reduced the bounty as the price rose. Just now the price is so high that the bounty is nil. As salmon canners have to make preparation almost a year in advance for their supplies of lead, tin and tin plate, the belated ones are hit hard by the high prices.

Present quotations are: Lead, $4.50 per 100 lbs., against $3.15 early in the season; tin plate, $3.75 per box, against $3.30 earlier; pig tin, 36c. per lb., against 33 1-2c. early last month. At these prices the market is still rising.

* * *

In building material there is a constant and remarkable demand, though the season is well advanced into the rainy weather. Early rains had the effect of making it hard to finish work, and later the weather was extremely fine, so that not only were unfinished contracts carried out, but much new work begun, which would otherwise have been left over to next season. There are a great many men employed in the building trades in Vancouver at the present moment. The mills and factories are full of orders yet, and prospects for continuance are bright. While there has been some disturbance in the shingle mill trade, that is only natural, as their business is always slack this season, depending, as it does, largely on eastern orders.

* * *

For the first time in many years sailing vessels are now on charter to load in the Fraser River at New Westminster. The opening of the old Ross-McLaren Mills at Millside, above the Royal City, has been followed by the dredging out of the deep channel of the river through the Annacis Island bar, by the Government dredge King Edward VII, and to-day a lumber carrier, the Wethersfield, is berthed at the Ross-McLaren, or Fraser River, mill, as it is now called. She will load for Australia. The second ship under charter is the Artemus, which will load for South America.

The number of lumber charters already made is very satisfactory, the B. C. Mills T. & T. Co. having no less than eight already.

* * *

The next big freight steamer to arrive direct from Liverpool is the Ping Suey of the China Mutual line. She brings many hundreds of tons of steel, iron, plate and other metal manufactures for the wholesale trade here and Victoria. Besides Old Country freight she will also have cargo from Oriental ports. She arrives on Dec. 17.

rain water

"Metallic" Eavetrough and Conductor Pipe are made of firmer metal, are better galvanized and more ornamental than those of other makes. There are no flaws or weak spots in "Metallic" Eavetroughing caused by faulty rolling or bending.

Eavetroughs of any kind demand the utmost possible strength, and in this respect "Metallic" Eavetroughs are superior to anything made. Corners are provided for by accurate mitres.

When once put on they never sag or twist.

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We also manufacture:
- "Eastlake" Metallic Shingles
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- "Metallic" Cornices, Skylights and Ventilators
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- "Metallic" Siding, (Stone, Brick, etc.)
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- "Metallic" Corrugated Iron
- "Hayes" Metallic Lathing
- "Metallic" Pressed Zinc Ornaments
- "Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

415

CANADA'S METAL INDUSTRIES.

MILLIONAIRE SCHWAB'S VIEWS.

"In the next ten years," said Charles M. Schwab last Thursday to a Manhattan professional man whom he was anxious to serve in return for invaluable assistance, "the new big fortunes will be made in mines. My advice to you is to watch out carefully and to get aboard at the earliest possible moment. To-day you can buy for $1 what will cost $5 in two years. I admit all you say of the outlook for railroads; but you must bear in mind that the roads get their money by carrying the industrial output. The two are inseparable. If one is to prosper it is because the other does."

Thus said the first president of the United States Steel Corporation, as he sat in his private car and ejected financial philosophy between the whiffs from an expensive cigar. The present gigantic operations by the "Pittsburg interests" in Nevada gold lands reflect his carefully considered policy; and it is not an accurate description of his mental state to call it a recent change of view brought about by men like John McKane, who is a Canadian, Donald Gillies, Albert S. Watson, Uri Curtis, Chris Zabriskie and George S. Nixon—the picturesque pioneers of the Tonopah region. Mr. Schwab took the initiative in arranging the big combinations now accomplished because of his faith in mines as the "leading article" of the next decade.

* * *

A rich find of gold is reported from the Laurentian mine, near Wabigoon, Ont.

A nugget weighing 250 pounds of almost pure silver has been found at Cobalt.

The Dominion Iron & Steel Co. has set in motion a new 850 horse power unit, which is the largest of its type in the Maritime Provinces.

The Government Diamond Drill now working at Cobalt has reached a depth of 340 feet and it is found that the rock is still rich in native ore.

The C.P.R. is preparing to operate extensive coal fields near Hosmer, B.C. Owing to agreements productive work cannot be commenced until 1907.

Ten tons of magnetic iron have been shipped to the "Soo" by the B. C. Mills, Timber & Trading Co. from its mines on Redonda Island, eighty miles from Vancouver.

The Le Roi amalgamation scheme is not to go through according to cable reports of a meeting of the shareholders at London, Eng., last week. The decision means much to Rossland.

The Nova Scotia Steel & Coal Co is making preparation to open a new colliery at Sydney Mines, N.S. The company also intend to install an electrical plant to develop power for their mine.

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IRON FINISH
SINGLE OR DOUBLE REELED
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Large assortment in stock.

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BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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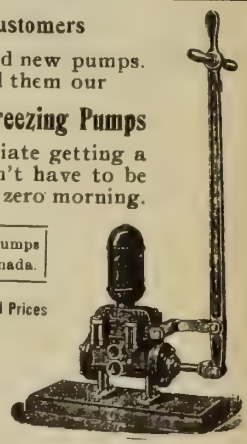
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Manufacturers of
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OPEN HEARTH STEEL

The 88th Annual Meeting of the Bank of Montreal

THE eighty-eighth annual general meeting of the shareholders of the Bank of Montreal was held in the board room of the institution at noon yesterday.

There were present: Hon. Sir George Drummond, K.C.M.G., vice-president; Hon. Robert Mackay, Messrs, R. B. Angus, E. B. Greenshields, A. T. Paterson, R. G. Reid, Hon. J. K. Ward, Dr. W. Gardner, Messrs. G. F. C. Smith, F. S. Lyman, K.C.; Angus Hooper, George Durnford, Richard White, A. Piddington, Henry Dobell, John Turnbull, B. A. Boas, C. R. Black, Henry Morton G. A. Greene, L. Sutherland W. H. Evans, M. S. Foley, W. Stanway, M. O'Shaughnessy, W. D. Gillean, D. Morrice, A. G. Watson, G. H. Matthews, P. F. McCaffrey, J. Scott, W. B. Blackader, James Tasker, Percy R. Gault, and John Morrison.

On the motion of Mr. R. G. Reid, Sir George Drummond, Vice-President, was unanimously voted to the chair, in the absence of the President, the Right Hon. Lord Strathcona and Mount Royal.

On the motion of Mr. A. Piddington, seconded by Mr. Henry Dobell, it was voted: "That the following gentlemen be appointed to act as scrutineers:—Messrs. F. S. Lyman, K.C., and G. F. C. Smith; and that Mr. James Aird be secretary of the meeting."

The General Manager.

The General Manager then spoke as follows:

I purpose confining my few remarks to the balance sheet submitted to you, and to one or two matters more closely connected with banking, leaving the general condition of business in the country to be dealt with by the Vice-President.

The principal feaures in the statement are the increase, since last year, of $2,000,000 in our circulation, an indication of the universal activity in business, and of $7,750,000 in deposits not bearing interest; but of this latter a considerable proportion was a temporary deposit made at the end of our fiscal year, and since withdrawn. Our deposits bearing interest show a satisfactory increase of $16,600,000. Our immediately available assets stand at $68,000,000, a greater amount than, as a rule, we consider necessary, but in view of the rather uncertain future of Continental finance, owing to the state of affairs in Russia and the somewhat boom condition in this continent, it is well to be strong, and in any case we are in a good position to take advantage of any desirable business offering. Our loans and discounts have increased $7,000,000, accounted for partly by the increased demands of the commercial community, and partly by the absorption of the People's Bank of Halifax.

The low rate ruling for call money in England and the United States during our fiscal year affected our profits adversely, as we are obliged to carry a large portion of our reserve in those markets; but of late there has been a decided improvement, which may be maintained during the winter.

Owing to the magnificent crop and the general activity in business, an unusual strain was placed on the circulation, but at the highest point attained by all the banks, about $79,000,000, there was still a margin of $4,500,000; and with the addition of new banking capital and the increase of branches, it seems as if, for some time to come, the circulation provided will be sufficient for the needs of the country. The advantage of the Canadian system has been amply demonstrated during the late pressure for money. Notwithstanding the heavy demands to move the largest crop in our history, the interest rate to our people has remained normal. We have only to glance at the condition of affairs across

The Directors' Report.

The report of the Directors to the Shareholders at their eighty-eighth annual general meeting was then read by Mr. E. S. Clouston, General Manager, as follows:—

The Directors have pleasure in presenting the Report, shewing the result of the Bank's Business for the year ended 31st October, 1905:

Balance of Profit and Loss Account, 31st October, 1904		$ 583,196 01
Profits for the year ended 31st October, 1905, after deducting charges of management, and making full provision for all bad and doubtful debts		1,638,659 40
		$2,221,855 41
Dividend, 5 per cent., paid 1st June, 1905	$700,000 00	
Dividend, 5 per cent., payable 1st December, 1905	720,000 00	
		1,420,000 00
Balance of Profit and Loss carried forward		$ 801,855 41

Since the last annual meeting of the Shareholders, the Bank has acquired the Assets and Business of the People's Bank of Halifax, with twenty-six branches. The Bank has also established since the last Annual Meeting, Sub-Agencies at the following points, viz.: Altona, Oakville and Logan Avenue (Winnipeg), in Manitoba; Enderby and Nicola in British Columbia, and Hochelaga (Montreal), and is about to establish Sub-Agencies at Fort Rouge (Winnipeg), and Ste. Anne de Bellevue.

The headquarters building on St. James Street is now completed and in occupation.

In response to the desire expressed by a number of our Shareholders, the Directors propose that the dividend should be paid quarterly, instead of half-yearly, viz.: on the first day of March, June, September and December.

All the Offices of the Bank, including the Head Office, have been inspected during the past year.

STRATHCONA AND MOUNT ROYAL,
President.

The General Statement.

The General Statement at 31st October, 1905, is as follows:—

LIABILITIES.

Capital Stock		$14,400,000 00
Rest	$10,000,000 00	
Balance of Profits carried forward	801,855 41	
	$10,801,855 41	
Unclaimed Dividends	701 57	
Half-yearly Dividend, payable 1st December, 1905	720,000 00	
		11,522,556 98
		$25,922,556 98
Notes of the Bank in circulation	$12,996,181 00	
Deposits not bearing interest	31,438 001 32	
Deposits bearing interest	87,725,211 07	
Balances due to other Banks in Canada	150,459 14	
		132,309,852 53
		$158,232,409 51

ASSETS.

Gold and silver coin current		$ 5,089,152 36	
Government demand notes		7,221,980 75	
Deposit with Dominion Government required by Act of Parliament for security of general bank note circulation		507,000 00	
Due by agencies of this bank and other banks in Great Britain	$ 3,745,653 32		
Due by agencies of this bank and other banks in foreign countries	2,293,384 18		
Call and short loans in Great Britain and United States	37,961,908 00		
		44,000,945 50	
Dominion and Provincial Government securities		432,244 56	
Railway and other bonds, debentures and stocks		7,849,207 04	
Notes and cheques of other banks		3,532,500 32	
			$ 68,633,030 53
Bank premises at Montreal and branches			600,000 00
Current loans and discounts in Canada and elsewhere (rebate interest reserved) and other assets		$88,591,793 90	
Debts secured by mortgage or otherwise		289,340 03	
Overdue debts not specially secured (loss provided for)		118,245 05	
			$ 88,999,378 98
			$158,232,409 51

Bank of Montreal,
Montreal, 31st October, 1905.

E. S. CLOUSTON,
General Manager.

the line to see what fluctuations in rates for money the public are subjected to under the system there in vogue.

In March last, the Bank of Yarmouth failed under circumstances reflecting much discredit upon those responsible for its condition, and, for the first time since the incorporation of the Canadian Bankers' Association, that body had to exercise the power conferred upon it by Parliament in 1900, of assuming supervision of the affairs of a suspended bank.

A liquidator chosen by the Canadian Bankers' Association was subsequently appointed by the court sole liquidator. The results have been highly satisfactory, particularly when viewed in the light of what has followed former failures of Canadian banks. The winding up of the defunct bank has been conducted with remarkable expedition and economy, and the rights and interests of the creditors so well looked after that the liquidator has been able, in nine months, to pay all of their claims, with interest added thereto. That no loss to the depositors and other creditors of the Bank of Yarmouth has resulted from this failure is, it must be admitted, largely due to the prompt and creditable recognition by its unfortunate shareholders of their liability for the utter insufficiency of assets to pay the debts of the bank in question.

An interesting event in financial circles was the offering here of a portion of the Japanese loan, the first time in the history of Canada of any foreign loan being issued locally, and, considering the short time at our disposal, the success was surprising.

In conclusion, I may say that the one word written large in the records of Canada this year is "Prosperity." Railways, manufacturing industries, merchants, farmers, all are prosperous. Immigration grows steadily; labor has full employment, and is well remunerated. Probably never before have we had a twelvemonth of such universal prosperity, and it is during a year like this that everyone should set his house in order. Collections should be pressed, and manufacturers should husband their resources and strengthen themselves in every way; for they are to a great extent prosperous by the grace of their neighbors, and when adversity comes to other countries, the American bargain counter will be opened in Canada, and our manufacturers and their employees will surely suffer.

Vice-President's Remarks.

The Vice-President, in moving the adoption of the Directors' report, said:

The position of the Bank is fully exhibited in the statements laid before you and the remarks of the General Manager. Following, however, the practice of many years' standing, I venture to offer a few observations.

The remark has been made before, and is now repeated, that the profits of banking, and consequently the cost to the public of the use of money, are steadily decreasing. This is due mainly, I think, to the accumulation of wealth in the country, the consequent increase of the number of banking companies and of their capital, and the resulting keenness of competition. Proof of this is to be found in the following figures:

1st. As to the accumulation of wealth. The deposits in all the chartered banks in the Dominion, in 1870, were 49 millions of dollars, in round figures, omitting fractions of a million; in 1880, were 85 millions; in 1890, were 136 millions; in 1900, were 305 millions; in 1904, were 470 millions.

The Dominion Government Savings Bank held in the same year (1904), nearly 62 millions, making bank and Government deposits 532 millions.

2nd. As regards banking facilities. Five new banks have gone into operation since 1900, with an authorized capital of $9,000,000. Five have been absorbed into other banks, but their capital presumably remains under other control, and one bank, referred to by the General Manager, with a capital of $300,000, has failed. It may also be mentioned that charters have been obtained from Parliament during the last three years of eleven new banks, with a capital of $19,000,000.

As regards our own Bank, it has been the care of the Directors to advance with the times, and I give you a few figures to show the progress which it has made.

In 1863 the capital was $6,000,000; assets, $15,252,000.

In 1873 the capital was $11,296,831; assets, $34,252,000.

In 1879 the capital was $11,999,000; assets, $36,221,000.

In 1887 the capital was $12,000,000; assets, $42,000,000.

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WIRE NAILS
TACKS
WIRE
Prompt Shipment
The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

In 1890 the capital was $12,000,000; assets, $46,166,000.

In 1905 the capital was $14,400,000; assets, $158,470,000.

Our branches, which in 1863 numbered 29, are now 100.

General Trade of the Country.

A review in detail of the various trade and manufacturing industries may be summed up in the general report of almost unbroken prosperity. Probably never in Canada and the United States have crops of all kinds been better in quantity and quality.

In regard to one of our staple industries, the lumber trade, I am tempted to express the conviction that we are using up our resources in a most reckless fashion, certain to end disastrously unless we take prompt steps to treat it as other crops, and replant on an adequate scale.

The increase of manufactories, thereby creating a home market for produce of every kind, is most marked. In this city and neighborhood a great number of large factories are springing up, and whatever may be said of our tariff, it unquestionably has had the effect of inducing the manufacture in this country of goods previously imported, with all the advantages of increased employment and circulation of money in this country. A number of these manufactories are branches, or offshoots, of industrial organizations in the United States.

The value of the home market is not sufficiently appreciated, if the statistics published by a recent writer be true, that "Western Canada produced two and a half times as much wheat, twenty-five times as much oats, and thirty-four times as much barley as Canada exported."

The failures in Canada are considerably smaller this year than last, being. 1904, $11,189,223; 1905, $9,511,472.

The feature of the year, however, is the splendid crop which has just been harvested in the Northwest Provinces and in Ontario. As regards the former, the most sanguine anticipations have been realized, and it seems beyond doubt that the following estimates of this season's crop in Manitoba and the Northwestern Provinces are conservative:

Wheat, 90 million bushels, worth on the spot, say, 65c.; oats, 65 million bushels, worth on the spot, say, 25c.; barley, 13 million bushels, worth on the spot, say, 30c.; flax, 1-2 million bushels, worth on the spot, say, 80c.; rye, 1-3 million bushels, worth on the spot, say, 35c. In all, 169 million bushels of grain.

Of course, a proportion of these crops will be consumed by the farmer, as no doubt will all the root crops—of which potatoes alone are estimated at 8,000,000 bushels—as well as hay, but of these I take no account.

At the prices set down, it is not difficult to reach an approximate sum of 75 millions of dollars, or 15 million pounds sterling, to be distributed among a comparatively small population, and won from a soil which was considered barren, and surrendered to the wilderness only a few years ago.



In addition to the foregoing, and not included in the above estimate, 70,000 cattle were disposed of during the year in the Northwest.

Incidentally, I may mention that I am informed by expert millers, that this year's wheat is so good in quality that 7 per cent. less of it is required to produce a given quantity of flour than an average.

It is asserted that the area so far brought under cultivation does not, from the most accurate information obtainable, much exceed 5 per cent., and certainly it is well under 10 per cent. of the area available, and waiting for occupants.

In this connection I may quote here a sentence from an able and well qualified Government officer, who has just completed a wide survey of the Territories. He says:

"The immense wealth so long stored in the virgin soil of the great western country will be gradually developed, and the fact that Canada is destined to rapidly become one of the greatest food producing nations in the world will soon become apparent to all, in the volume of her exports."

The great extensions of the railway systems operating in this country must not be passed over. The Canadian Pacific company is spending vast sums in improvements and extensions. The Canadian Northern is pushing westward, while the Grand Trunk Pacific is preparing for an extension to the Pacific, and the Government of Canada has the necessary powers to duplicate the railway connection between Quebec and Winnipeg, and is now surveying the line.

With general political events we have nothing to do, except as regards their effect on our financial institutions. A note of thankfulness was heard when an end was put to the mighty war in the Farther East.

It was specially grateful to this community when a friendly understanding was reached between England and France, and we trust that the portentious cloud overhanging Russia may be dissipated by wise and liberal measures. Meanwhile, it remains an ominous factor, exciting the liveliest apprehensions among Russia's creditors, and the deepest interest in the whole civilized world.

I can only, in conclusion, echo the General Manager's advice, that the abounding prosperity of our country should be prudently accepted and used.

I move: "That the report of the Directors, now read, be adopted and printed for distribution among the Shareholders."

The motion was seconded by Mr. A. T. Paterson, and after some appreciative remarks by Mr. John Morrison, it was unanimously adopted.

Amendments to By-laws.

The Vice-President then remarked: I have now to ask you to consider amendments to the by-laws, which the Directors deem advisable. The first is an amendment to by-law No. 3, the alteration being to make the number of direc-

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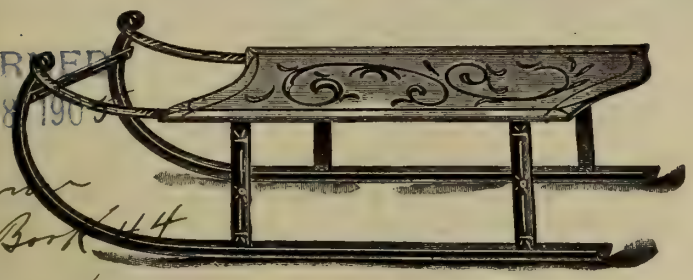
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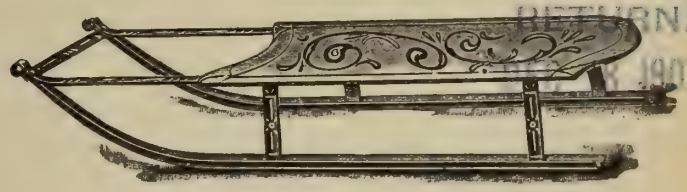
"STAR" STEEL SLEDS AND COASTERS



Steel Sled

No.	Length	Width	Height	Knees	Per dozen
00.	27 inch	9 inch	6 inch	2	.... 16 20

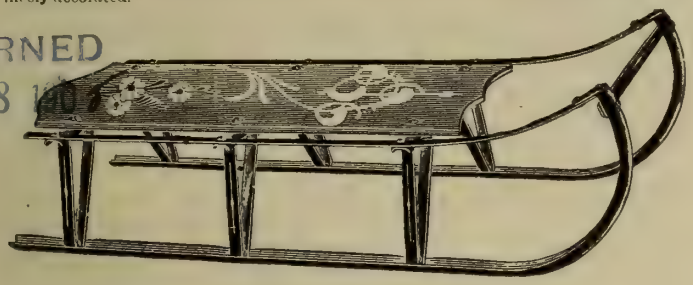
It is all steel except the top. The runners are made of the celebrated round back angle steel used on all Star Steel Sleds. It has wood top, well painted, varnished and nicely decorated.



Coaster

No.	Length	Width	Height	Knees	Per dozen
1.	32 inch	9 inch	4½ inch	2	.... 16 20

This is the best steel coaster ever put on the ma ket for the money. All steel except the top. The runners are made of the celebrated round back angle steel used on all Star Steel Sleds. It has wood top, well painted, varnished and nicely decorated.



Steel Sleds

No.	Length	Width	Height	Knees	Per dozen
0.	28 inch	10½ inch	7 inch	2	.. 18 25
10.	30 "	12 "	7½ "	2	.... 21.60
20.	33 "	12 "	7½ "	2	.... 24.30
30.	36 "	12 "	7½ "	2	.... 29.70

They are constructed with raves the same as the most expensive sled. All tops are handsomely hand-decorated. The running gears are finished in assorted colors, artistically st iped.



Steel Sled

No.	Length	Width	Height	Knees	Per dozen
110.	30 inch	12 inch	7½ inch	2	.... 27.00
120.	33 "	12 "	7½ "	2	.... 29.70
130.	36 "	12 "	7½ "	3	.... 35 10

The Goose-necks are made of malleable Iron and tinned, and make a most attractive appearance in connection with the handsome body colors. The running gears are painted in assorted colors and artistically striped.



Coaster

No.	Length	Width	Height		Per dozen
1.	34 inch	10½ inch	4½ inch	.....	20.25
2.	37 "	11½ "	4½ "	.....	22.95
3.	40 "	12 "	4½ "	.....	25 65
4.	43 "	12 "	4½ "	.....	32.40

They are attractive. The runners are made of special round back angle steel, and this makes the fastest coaster that ever sl'd on snow. Running gears finished in assorted colors, artistically striped.



American Boys' Bobs

No.	Length	Width	Height		Per dozen
202.	44 inch	11 inch	5½ inch	.....	48 60
203.	48 "	11½ "	5½ "	.....	54.00

They ride easier than other bob-sleds, because both forward and rear runners are made to oscillate, thereby going over uneven ground more smoothly The runners are made of special round back angle steel, which gives all Star Steel Sleds such speed. The knees are constructed according to the patented bridge truss principle, which makes the sleds so strong. The runners are fin shed in assorted colors, artistically striped The top are handsomely hand-decorated.

LIBERAL DISCOUNT GIVEN TO THE TRADE

For Cross-cut Saws, Chopping Axes, Axe Handles, see our Catalogue.

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tors ten instead of nine, as at present. Perhaps you are aware that up to the last session of Parliament, the General Banking Act only permitted the election of nine directors to any bank. They were not to be fewer than a certain number, and not more than nine. That has now been changed, and practically the number of directors is unlimited, if the shareholders so desire. The proposal of the Directors now going out, is that the number be made ten, instead of nine; and the reason will appear a little later in the proceedings. I would, therefore, move:

"That, whereas it is advisable to increase the present board of nine directors to ten, by-law No. 3 is hereby amended by striking out the word 'nine,' as appearing in said by-law, and inserting in its place the word 'ten.'"

This was seconded by Mr. A. T. Paterson, and was unanimously agreed to.

The Vice-President—The next alteration is:

"Whereas it is advisable that power be given to the Shareholders to elect an honorary president, by-law No. 6 is hereby amended by adding to it the following words:

"'The Directors may also, at their said first meeting, elect by ballot one of their number to be honorary president.'"

It is due to you to say that this has special reference to Lord Strathcona. He has occupied the post of President for eighteen years, and last year he expressed a desire to be relieved of it. The Directors were unwilling to have his name severed from the Bank which he had so long and usefully served. The creation of an honorary president was authorized in the amendment of the Banking Act, and under that authority this can now be done. I will, therefore, move that the resolution which I have just read be adopted.

This was seconded by Mr. A. T. Paterson, and was concurred in unanimously.

The Vice-President—It seems proper at this stage that the long and valued services of Lord Strathcona, in connection with this Bank, should be acknowledged by the Shareholders, and I have the honor and pleasure of moving, seconded by Mr. E. B. Greenshields, that a cordial recognition, in suitable terms, be sent to Lord Strathcona expressing the appreciation in which the Shareholders—and they include the Directors—hold him and his services to the Bank.

Mr. E. B. Greenshields—I have very much pleasure in seconding the resolution just proposed. We all feel that the Bank has been honored in the past by having Lord Strathcona as its president. When he first went to London as Canadian Commissioner, he hoped to be frequently on this side of the Atlantic and at our meetings; and it was with much regret that he found himself unable to be here as often as he had expected. Not only should his great services to the Bank be noted; but we also wish to put on record as shareholders of the Bank and as citizens of Montreal and the Dominion of Canada, our very high opinion of him as a man. We feel proud of having had him as president of this Bank, and it is with very great regret that we hear that the connection is to be to a certain extent severed. But we are all pleased that he is to remain with us as the Honorary President of the Bank, and that his name will still be associated with this institution. I know I express the feelings of every shareholder when I say that we all have the greatest admiration for him in his public capacity as High Commissioner for Canada, and appreciate all he has done for this country, but besides this we would like to assure him that we have a very warm feeling of personal regard for himself.

Mr. John Morrison—I give my cordial assent to the motion, for a more deserving gentleman it would be hard to find.

The motion was unanimously and cordially adopted.

Thanks Are Tendered.

Mr. B. A. Boas then moved:

"That the thanks of the meeting be presented to the President, Vice-President and Directors for their attention to the interests of the Bank."

This was seconded by Mr. W. Stanway, and was carried unanimously.

Mr. E. B. Greenshields moved:

"That the thanks of this meeting be given to the General Manager, the Assistant General Manager, the Inspector, the Managers and other Officers of the Bank, for their services during the past year."

In making the motion Mr. Greenshields remarked:

I wish to say that the opinion of the Directors is unanimous that in the General Manager, the Assistant General Manager, the Inspectors, the Managers and the other officers of the Bank we have a thoroughly efficient and reliable staff to carry on the work. I had the pleasure last year of meeting a number of the Managers, from Winnipeg to Victoria, and I also know many of those nearer Montreal. I am very much pleased always to see among them a fine "esprit de corps," that inspires the feeling that the Bank of Montreal is the institution to work for, and that ability and conscientious work will always be recognized and rewarded.

Hon. Robert Mackay seconded the motion, which was unanimously adopted.

Mr. C. R. Black suggested that it would be in the interests of the Shareholders generally if the management would consider the mailing of cheques for dividends, as other banks did, now that the dividend was to be quarterly, instead of the Shareholders having to go to the Bank.

The General Manager—I will take that into consideration, and see if it cannot be carried out. I also beg to thank the Shareholders on behalf of the staff for the very kind way they have spoken of us.

The Vice-President—The suggestion of Mr. Black will be referred to the Board.

Mr. John Turnbull moved, seconded by Mr. George Durnford:

"That the ballot now open for the election of Directors, be kept open until 2 o'clock, unless 15 minutes elapse without a vote being cast, when it shall be closed, and until that time, and for that purpose only, this meeting be continued."

This was unanimously concurred in, and a very cordial vote of thanks was accorded the Chairman, who acknowledged the same.

The Directors.

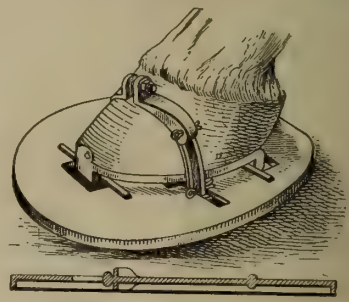
The ballot resulted in the election of the following Directors:

R. B. ANGUS.
E. S. CLOUSTON.
HON. SIR GEORGE DRUMMOND, K.C.M.G.
EDWARD B. GREENSHIELDS.
SIR WILLIAM MACDONALD.
HON. ROBERT MACKAY.
ALEXANDER T. PATERSON.
ROBERT G. REID.
JAMES ROSS.
RIGHT HON. LORD STRATHCONA AND MOUNT ROYAL, G.C.M.G.

At a meeting of the Board of Directors held the following day. Sir George A. Drummond was elected President, succeeding Lord Strathcona, and Mr. E. S. Clouston was elected Vice-President and General Manager.

A SOFT GROUND HORSESHOE.

QUITE a demand has recently arisen for soft-ground horseshoes, that is, broad, flat shoes which, owing to their large area, will prevent the feet of horses from sinking unduly into the ground. A simple shoe of this type has recently been invented, which is so designed that it can be easily reversed. The advantage of this design will be particularly felt in Winter time, as the shoe is prevented from balling up with snow. As the reversible shoe is smooth



Soft Ground Horseshoe.

at one side, it will be found advantageous for use on horses when mowing lawns. It consists of a plate with a flange projecting from one face along the periphery and formed with slots to admit the calks of a horseshoe. Ribs on the plate prevent the calks from sliding back and forth on the plate. At each side a T-slot is formed to admit the head of a clamping strap. The two straps are bolted together over the hoof of the horse, as shown. One of the straps is formed of two members which are adjustably connected by means of a pin. This permits of adapting the shoe to different sizes of hoofs.

McArthur, Corneille & Co.

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Glue and Gelatine

An extensive assortment, to suit all requirements.
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English Varnishes
of CHAS. TURNER & SON,
LONDON.

Please mention HARDWARE AND METAL when writing.

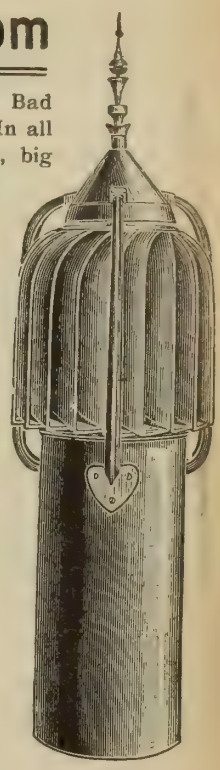
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is more deadly than desease itself. Bad air is the curse of crowded living. In all public places such as asylums, clubs, big offices, schools and theatres, PURE AIR CAN BE OBTAINED ONLY BY OUR SYSTEM OF VENTILATION.

It has stood the tests of scientific experts.

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Its price is reasonable and its benefits lasting.



Testimony

Montreal, June 7th, 1901
Messrs. J. W. Harris Co., Limited
Montreal

Dear Sirs,
I have been using your "AEOLIAN" Ventilators on several houses in this city with the best results. The tenants of these houses declared that your Ventilators are of great advantage to them. I also installed two (2) 18" on my stable and I can say that your Ventilator cannot be surpassed by any to take out the sweating or the bad smell in any room.
F. D. MONK

Ask for booklet re Aeolian and Zephyr Ventilators, also booklet on Filter, etc.

The J. W. HARRIS CO., Limited
Successors to LESSARD & HARRIS
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TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

PAINT, OIL AND BRUSH TRADES

CANADA PAINT CONVENTION.

IN the board room of the general office building, Montreal, the travelers and officials of the Canada Paint Co. are met this week, in their 13th annual convention, to discuss the various problems which arise in connection with their work. A fine, intelligent lot of men, and the entire freedom from levity which characterizes the proceedings of the convention, shows that it is taken seriously.

Hardware stores, generally, have stopped selling paints for the season, and are booming the Christmas present end of their business, so that these "knights of the grip," with their year's work ended, are, at the same time, resting from their labors, enjoying themselves in Canada's metropolis, and taking on cargoes of confidence and enthusiasm for the coming year. Under the chairmanship of Mr. W. H. Evans, the following travelers and officials are gathered around the table: H. W. Aird, W. H. Allison, Ed. Barry, Frank Bell, R. Bremner, G. Brown, W. Brown, H. Clucas, N. Coleman, J. Cox, J. Craig, F. Curran, Mr. Day, L. N. Dansereau, H. H. Ellis, W. J. Good, W. D. Hamilton, A. Hellems, J. Kyle, A. S. LeBlanc, S. H. Lewis, C. Little, A. J. Munro, W. H. Newton, G. R. Nimmo, C. O'Connor, C. O'Flaherty, E. Paddon, H. Stubbs, John Thomson, S. Ward, G. Wood.

VARNISH TROUBLES.

THERE is probably no trouble with varnish that is more difficult to account for than pitting, that is, the appearance of holes or depressions upon the newly varnished surface. Pitting is even sometimes difficult to recognize, as often pin holes will be the only evidence of trouble, and again the depressions will be of some size.

The most frequent causes of the trouble are lack of preparation of the surface to be varnished. Grease or smoke almost invisible to the naked eye will accumulate on a varnished surface, and if not carefully removed will cause pitting.

Extreme heat and humidity, with lack of proper ventilation, will also cause varnish to pit. Sometimes a condition of the atmosphere will cause varnish to pit for a short time and later on in the same day, the same varnish will give no further trouble.

Where the pitting is of a very serious nature the only remedy to be found will be a removal of the varnish coat. In slight cases the trouble can be overcome by allowing the surface to become thoroughly dry, when it can be rubbed with powdered pumice and water and re-varnished.

Varnish troubles in nearly every instance come from a lack of knowledge of proper preparation of the sarface to be varnished. Coal smoke, grease from handling and grease from fumes, will all combine to make trouble. Where a surface is left too long between coats an almost invisible fog settles and the surface should be cleaned with water and chamoised before applying further coats. Another serious cause of trouble is the use by the painter of a chamois which he occasionally uses upon his face or hands to wipe them off; for cleaning the surface to be varnished.

The best results can be obtained when varnish is applied early in the day — when possible it should never be applied after 4 p.m. A room should never be under 60 degrees or over 70 to 75 degrees when varnish is applied.

ENGLISH OIL MARKETS.

The feature in the English linseed oil market has been a rather large import of seed, which seems to have checked a rising tendency. A further cause for hesitation on the part of buyers was the diminution of the export trade, which shows very little life just now, and possibly another feature led some dealers to suspend operations—namely, the fact that after a cessation of supplies of seed from the United States, lasting from early in 1904 until last month, shipments from that quarter have been resumed. The quantity of seed from this source was under 3,000 qrs.—and the fact of resumption of shipments may mean little or nothing, but it may also mean that America will not be competing so keenly for Argentine seed in the near future. The imports for ten months of the year are still more than half-a million quarters short of the 1904 figures, and the year's total must remain substantially behind that of last year.

KEEP STOCKS IN GOOD ORDER.

A paint stock in good condition is worth fifty per cent. more to a retailer than a stock that shows the worse of wear and looks shabby. Handing out to prospective paint buyers soiled, dusty sample cards never creates a very favorable impression.

Paint does not cease to sell as soon as cold weather comes. To be sure there is little outside work done after that, but think of all the inside work. Furniture stains, floor paints, enamels, and all those lines should sell just as well now as in the Summer—in fact, better. There is much repairing of furniture and fixing up generally done in the early Winter.

This Journal has three classes of readers. First, those who are already customers of ours; second, those who are not our customers but should be; third, the few left over from the above.

To you all we extend a hearty Christmas Greeting, and may the year 1906 be the most successful that has ever been.

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

Straith's Air-Drying Cycle Enamel

Put up in Penny Lever Cans to meet the requirements of owners of bicycles whose "wheels" have been scratched, consequently the enamel finish defaced. Dries hard quickly and with a beautiful lustre. Can be applied by any person.

Dealers: Make mention of this enamel in your next order.

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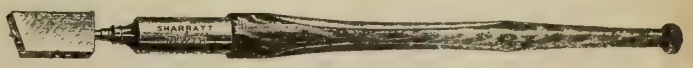
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Sharratt & Newth's Glaziers' Diamonds

are unequalled for cutting and wearing qualities.

To be obtained from the principal Hardware Dealers and Glass Merchants.



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paints and varnishes rests on the absolute assurance of their first-rate make-up. Our eight-hour drying house and floor paints, guaranteed not to crack nor blister, are now just about generally recognized as "the paints." Add to that ***"Island City"*** terms and the opportunities for ***"Island City" trade—and why should you not get in line?*** Send us your name and address and we will send you prices with pleasure.

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Paint economy, like economy in other lines, depends upon getting good value for your money.

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we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers, and the world's best white lead—BRANDRAM'S B. B. GENUINE

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HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 15, 1905.

CONDITIONS locally are extremely quiet this week, as is to be expected at this time of the year. Nearly all travelers are assisting the staff at headquarters to take stock .

The only change in price to occur during the week was in turpentine, which has declined again to 93c.

Linseed Oil—Last week's advance is well held. We quote as follows: Raw, one to four barrels, 46c.; five to nine barrels, 45c.; boiled, one to four barrels, 49c.; five to nine barrels, 48c., f.o.b. Montreal. Net 30 days.

Turpentine—A further decline during the week of 3c. leaves prices as follows. Single barrel, 93c. per gallon. Two barrels or over, 92c. For smaller quantities than barrel, 5c. extra per gallon is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Ground White Lead—Our quotations are as follows: Best brand Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—Prices are: Barrels, $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—We quote as follows: Pure dry in casks, 7 1-2c.; in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.; in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We quote: 25-lb. irons, 8c. to 10 1-2c.; No. 1, 6 3-4c.; No. 2, 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Conditions are steady at the following prices: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—We quote: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs. $4.75; and smaller quantities, $5.50.

Gum Shellac — We still quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish — Our prices are: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—We are still quoting from $1.20 to $1.40 per gallon.

Castor Oil—Advances have been made for forward shipments, but we still give the following prices: 7 1-2c. to 8 1-2c., according to lots.

Refined Petroleum—The demand locally continues very good and prices are unchanged. We quote as follows: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—The market is still very firm. Bookings for Spring shipments are being placed in good quantities. We quote: First break, 50 feet, $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto December, 15, 1905.

LINSEED oil has been advanced owing to a stiffening of prices in England. Rumors of another drouth in India with probable higher prices for seed and slight advances in the United States have also been factors tending to increase prices on the local market.

Turpentine has become stronger on the southern markets, but the low prices which prevailed there recently have had the effect of bringing prices down here. The ruling figure is now 95c., some having been selling above that figure.

Business is keeping up well, but shows a falling off.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75; ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V., M., in casks,

$6.50; in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gallon lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Paris Green (for 1906)—We quote. Barrels, 600 lbs., 15 1-4c. to 15 3-4c.; kegs, 250 lbs., 15 12c. to 16c.; drums, 25 lbs., 16 1-2c. to 17c.; drums, 50 and 100 lbs., 16c. to 16 1-2c.; 1 lb. packets, 17c. to 17 1-2c.; 1 lb. tins, 18c. to 18 1-2c.; 1-2 lb. packages, 19c. to 20 1-2c. per pound.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 49c.; boiled 52c.; 5 to 9 barrels, raw, 48c.; boiled, 51c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, 95c. f.o.b., point of shipment, net thirty days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Trade continues normal. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

FLOOR FINISHES GOOD SELLERS.

Floor finishes have become one of the most marketable lines for the paint dealer to handle. Painted and varnished floors are coming into more general use each year in all classes of homes. The change from carpeted floors is not a matter of taste and fashion alone. Cleanliness and healthfulness and economy have had probably more to do with it than anything else. The dusty, germ-collecting carpet, so hard to keep clean, was doomed to be supplanted as soon as reputable manufacturers began to place floor finishes on the market.

RAILWAYS HAMPER TRADE.

THE Railway Commission sitting in Toronto on Tuesday heard a deputation from the board of trade in connection with the complaints of the Canadian Manufacturers' Association against certain freight rates and regulations. The deputation consisted of Messrs. Peleg Howland, R. C. Steele, Joseph Oliver and Hugh Blain.

"We cannot see why conditions that apply here should not apply beyond Port Arthur," said Mr. Howland, in discussing the question of the restoration of the old rule regarding mixed carloads of freight. "The necessity for greater latitude in mixed carloads beyond Port Arthur is greater than it is here. We contend that the railways should not be arbitrary in applying the owners' risk clause on shipments. The clause should be abolished altogether. The rates are high enough to enable the companies to assume all risk. The effect of the present 'smalls' rate, or rate upon small parcels or boxes, is to make wholesale merchants in one trade the shipping agents of others. The situation has become almost intolerable. If the charges were reduced, and there was better classification, the shipments would be direct, and not bunched, a more satisfactory arrangement for everyone. If there is any charge to customers for detention the railway companies should also pay for delay. There should be a reciprocal arrangement. There should also be a time limit imposed upon railway companies for moving freight between certain points."

"I would like to emphasize that owners' risk clause," said Mr. Blain. "It should be entirely abolished. It gives a reckless trader a chance to do business in ordinary channels upon an advantageous basis because he has secured lower freight rate, because he accepts his goods at his own risk.

Mr. Blain wanted the special damage concessions upon coal, coke and lumber also applied to sugar and beets, but the objection was raised that this was specializing clauses which were intended only to apply to commodities handled all over the country.

Mr. Joseph Oliver gave several instances of delay to shipments due to red tape and procrastination on the part of the railroad companies.

Chairman Killam said that he hoped that when the draft car regulations were finally adopted they would remain undisturbed for several years. Additional arguments will be heard when the board sits in Montreal.

MEETING OF BRANCH MANAGERS.

The second annual convention of the Canadian Rubber Co.'s branch managers was held at the head office, Montreal, from November 29th to December 7th, inclusive. The managers present were: Chas. Holden, Winnipeg; R. E. Jamieson, Vancouver, B.C.; Lloyd L. Libby, Halifax, N.S.; J. C. Nicholson, Toronto; Paul R. Hanson, Montreal.



RETURNED DEC 27 1905



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and thereby to handle a range that will yield you a handsome profit, and, at the same time build up a satisfied list of patrons. People who purchase a satisfactory stove from you will come back for their hardware purchases. Your duty is plain. **THE EMPIRE QUEEN RANGE** should be considered in your next stove order.

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OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.

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ARK-EL-ITE ASBESTOS STOVE LINING

forms a more durable and economical lining for Cooking and Heating Stoves, Grates, Ranges, Hot Air Furnaces, than fire-brick, and is especially adapted for Grates, Ranges, etc., where natural gas is used; also for lining fire doors of Boiler Furnaces, Coating over Hot Water Boilers, and for repairing broken fire-brick, iron linings and other surfaces exposed to heat. Fits any stove.

Packed in heavy cardboard cases,
10-six-lb. pkges. in case, price $1.50
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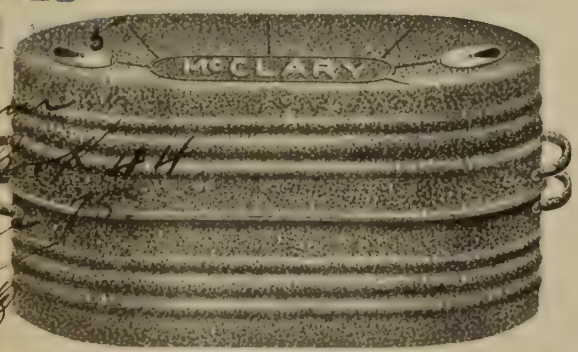
MANUFACTURED BY

THE FRANCIS-FROST CO. LIMITED
TORONTO

Makers of the Celebrated "Ark" Brand Paints.

McClary Self-Basting Roast Pan

RETURNED DEC 21 1905



No Basting, No Waste, and Nothing to Watch But the Clock.



Do you realize what this means to **you**?

It means that no matter what you roast—meat or fowl—all you need do is to put in the roast, with a little water in the bottom of the pan, and take it out when done—crisp, juicy, and roasted to a turn.

The reason why this Roaster roasts so much **better**, and **bastes itself**, is that all the steam which arises and bastes the **bottom** of the roast is made to **drop down** again on the **top** of the roast, because of the special **construction** of the top. (See picture.)

But that is not all.

The **ordinary** Roasting Pan not only requires a lot of basting and watching, but **it also wastes a lot of the roast itself**, as most women know from experience. Actual test shows that a 10 pound piece of roast beef will only weigh 8 pounds, or less, when roasted in the ordinary pan—a clear loss of 2 pounds, or one-fifth of the weight; at this rate you do not need to have "roasts" **very often** before this waste amounts to $3 or $4 a month!

This big item of waste, as well as the necessity of basting and watching, are all **entirely eliminated** in the **McCLARY SELF-BASTING ROAST PAN.**

It takes up no more room, and it can be used on the **top** of the stove as **well** as in the oven.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Kitchen."

STOVES AND TINWARE

MORRISBURG'S REEVE DISCUSSES PERSONALITIES

Editor Hardware and Metal: The attention of the council and ratepayers of the village of Morrisburg has been called to an article appearing in Hardware and Metal, dated November 25, signed "Citizen," and purporting to come from the village of Morrisburg. As you say your columns are open for discussing this matter, I will ask you to publish this article together with the resolution passed by the council of the village of Morrisburg on December 4, as follows:

Moved by Geo. Emmett, seconded by W. C. Coir: That the attention of this council has been called to a grossly false article contained in Hardware and Metal of November 25, 1905, signed by "Citizen." That the said article is false from beginning to end, and not a statement or figure contained therein but what is entirely untrue and intended to injure the credit of this municipality, and this council does hereby demand from the said journal the proper name of its author called "Citizen." Carried.

The above resolution is my authority as Reeve of Morrisburg to demand of you the name of the author calling himself "Citizen," which I will expect you to furnish me without delay.

I might say here in the way of contradicting the statements made by "Citizen," that there is probably not another municipality in the province of Ontario in any better financial position than the village of Morrisburg. We own our own electric lighting system and waterworks system, and less than fifty thousand dollars would pay the cash value of every debenture we have outstanding at the present time. Our electric light and waterworks systems are self-sustaining. The revenue obtained from them is more than what is required to meet the annual debentures and pay all running expenses, including wear and tear, and will be a present to the municipality when the last debenture is paid. All this is being accomplished on a revenue of one dollar each for domestic and two dollars each for business lights of 16 c.p., per annum, and water for domestic use of householders for five dollars per year. The above we consider the cheapest and best service in Canada, and the plants are not, as "Citizen" says, taxed to their capacity, nor much more than one-half their capacity. We could sell these two systems any day at from $100,000 to $125,000, if we were to put them on the market, which we have no intention of doing as we are perfectly well satisfied with them as they are. Does this look much like being $80,000 in debt, as "Citizen" says we are? There is no such proposition from the Government as $17,000 for opening up the head of the canal to let in water; the amount $13,000 for cutting the bank has never been heard of before, nor did it appear in the lease sent by the Government to this municipality; as to a definite amount of $30,000, this likewise does not appear anywhere in the proposition; as to the estimate of $46,000, this has evidently been a dream of "Citizen," as no such estimate has been made; as to the $3,500 already expended, this is entirely untrue; there has not been one foot of water mains laid yet; as to the careful estimates placing the cost at $100,000 to $125,000, this is absolutely false and has likely been made by "Citizen" in the same careful false manner as the rest of his statements. The assessed value, according to the last assessment roll of the village of Morrisburg, is $563,750, instead of $500,000. As to what the Government will do for Morrisburg, I must say with all due respect that they have treated us perfectly fair and are still willing to do so; they are not making a single unjust demand from Morrisburg, notwithstanding the desperate effort made by ———, the fifteen who voted against the by-law, to try, if possible, to stop us from getting a lease. As to articles which have appeared in your journal, they have had no effect whatever on the ratepayers of Morrisburg, and if the by-law came up to be voted on again every ratepayer would record his vote as he did before. I do not know of one voter who has changed his opinion. I wish to have it distinctly understood that a selfish motive can be attributed to every vote that was polled against the by-law, every one of them are well known. I will give one for instance in that of Wm. Eager, as his name appears to his article in your journal of the same date as "Citizen" (who is probably just as ashamed of his principles as he is of his name). As to Mr. Eager, he deserves the credit of not being ashamed of his name, but to show you the selfishness of Mr. Eager, it is only a short time ago that he wanted this village to vote him a $10,000 cash bonus to assist him to start what he called a pork factory, presumably in an old out-of-date cold storage he then controlled. Failing in that, he then tried to get this municipality to run an electric line from here to Winchester (17 miles) to furnish his brother with electricity to run a flour mill and electric light plant he was controlling in that place, which was a financial failure and has since come into the hands of a liquidator. Failing in this, he did finally succeed in getting a former council to grant him free water for his use in a little cheese factory, employing one man, and located inside the corporation, an action which should never have been done by any council. Cheese factories are an offensive smelling thing and should not be allowed inside a corporation, much less bonusing them. Mr. Eager served a term on the school board here as trustee, and while holding that position and at one of the trustee meetings he said it would be better for the country if collegiate institutes were all done away with, presumably to keep the poor man poor by keeping him ignorant. This is but a short history of a part of the selfishness of Mr. Eager, and if your other correspondents against our by-law will give their names, I think about the same, and in some cases a worse, state of selfishness can be shown up. Other writing in your journal and other newspapers and journals against the possibility of producing tin plate in Canada is utter nonsense, and is plainly traceable to a selfish interest. It may not be generally known that the wholesale trade of Canada is probably one of the most gigantic monopolies we have in the country. I am creditably informed that on some lines of tin they make as much as two hundred per cent. profit. No wonder these wholesale interests are kicking against tin plate being made in Canada, which would bring the consumers of tin in direct contact with the manufacturers, and do away with those middlemen or wholesale importers. Those men will undoubtedly deny these exorbitant profits, but I appeal to the consumers and workers of tin in Canada not to be led astray by such selfish appeals, but look carefully into the wealth of these wholesale importers and ask yourselves the question, where did these men make their millions of dollars, which some of them are reported to be worth? Why are some of them putting up such a desperate fight against tin plate being made in Canada? They are not obliged to put any cash into the industry. Why do they appear before the Tariff Commission and fight against any duty being put on tin plate? Would it not be better even if the consumer had to pay 15 per cent. than to pay those gigantic monopolists 200 per cent.? Since our Government has wisely undertaken the task of investigating the methods used by these monopolists, it would be well for every consumer of tin in Canada to put forth every effort to bring those criminals of industry to justice, and assist the Commissioners in every way possible to unearth these groundhogs who are boring into the heart and sapping the life-blood out of our Canadian industries and laboring people.

A. A. LOGAN,
Reeve of Morrisburg.
Morrisburg, December 5, 1905.

Mr. Logan's Letter.

In reply to the request that Hardware and Metal furnish the name of "Citizen," Reeve Logan has been informed that this will not be done. The writer is one of the most reputable citizens of Morrisburg and his years of experience in municipal and business life fully quality him to discuss the finances of the town. It is interesting to know also that "Citizen" repeats the figures given in his letter and his statements have been verified by one of the largest property owners and leading public men in Morrisburg.

The discussion of personalities indulged in by Reeve Logan, who is a relative of J. Wesley Allison, does not strengthen his case. Now that the door has been opened for discussion in the Morrisburg papers it is likely that the townspeople will consider the proposition in a more rational manner.

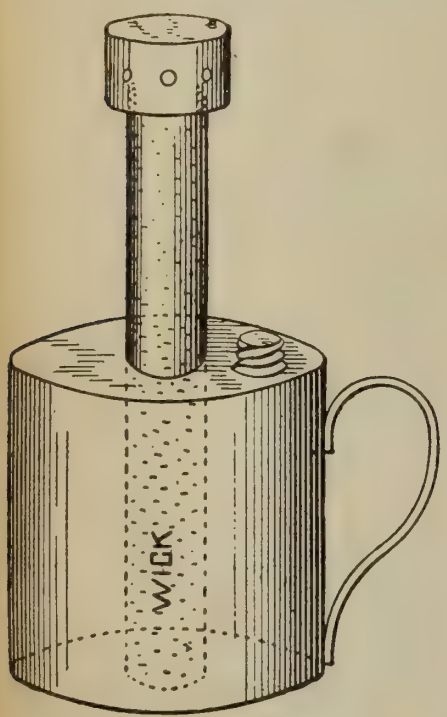
We are informed that the works under construction are at the extreme end of the town and in order to supply the unmentioned number of electric lights and unlimited amount of water offered the company a distance of three-quarters of a mile must be covered. This will entail a large expenditure and the tax rate is not likely to continue at the 22 mills charged in 1904. Of the 200 acres turned over to the promoters only 8 acres are given to the tin plate company, the

remainder being held by the promoters for speculative purposes.

Granted that the promoters are not selling stock in a concern which they never expect to see running, the agreement entered into binds the town far more than the company, but everything is problematical upon the acceptance of certain conditions by the Dominion Government—a most unlikely probability.

GASOLINE TORCH.

POPULAR MECHANICS describes a home-made gasoline torch which contains the essentials of economy and practicability. The description follows: Procure an old tin can, pint size, with a screw top, for holding the gasoline. Punch a hole in the centre of the top and insert a piece of 1-4 inch gas pipe to within 1-8 inch of the bottom of the can, letting the pipe extend out of the can four or five inches, soldering it in position. Screw a common cap



Home-made Gasoline Torch.

on top of the pipe and drill eight or ten holes around the cap. Fill the pipe with wicking or asbestos.

When ready to light the burner, heat the can on the top and hot gas will flow from the holes. When lighted it will burn as steadily and brightly as gas light. This is a handy torch for use around the shop or outside, as it takes a very strong wind to blow it out.

PUSHING FURNACE SALES.

HERE is another form of letter which a western firm use in their heating business. They sell a large percentage of the furnaces and other heating apparatus used in their section, and the following form of mimeograph letter has brought good results:

"Dear Sir,—Are you thinking of putting in a heating plant this season? If so we would like to see you and explain our system of heating. Enclosed find pamphlet of what a few of our patrons say of our method, and as they live in this district some of them may be well known to you. In dealing with us you run absolutely no risk, as we guarantee to heat your entire building, or no payment. Don't condemn warm air heating because someone has an improperly installed furnace, one that will not heat or burns too much fuel, or is dirty, for it is not the fault of the furnace but of the person who put it in, and all of these faults can be remedied; and they would not exist if the furnace was properly installed in the first place. We are installing at this time heating plants for Mrs. L. Johns, Messrs. J. D. Barge, E. L. Priestly and Fred Howell and all of these parties selected warm air after a most thorough investigation of the different methods of heating. We would like an opportunity of figuring with you as we feel certain that after you fully investigated our system of heating we will have no trouble in arranging satisfactory terms for a heating plant. Let us hear from you.

Yours truly,

....."

WESTERN HEATING CONTRACT.

The C.P.R. have recently awarded the contract for heating their new station at Pilot Mound, Man., with a Torrid Zone steel hot air furnace.

Hamelin Bros., of Arcola, Sask., are heating their departmental store with two Torrid Zone furnaces and they are putting one in their store at Reston.

Sales have recently been made of this furnace to the Manitoba Hardware & Lumber Co., who are installing them in their stores at Virden and Reston.

The Souris Coal Mining Co. are installing three of these furnaces in their stores at the mines. They find the furnace well adapted for burning Souris coal as the powerful hot air blast enables any kind of soft coal to be burnt.

HARDWARE TRADE ITEMS.

It was never truer than it is now that the man who goes after the stove business is the one that gets it. Some dealers depend on their personal acquaintance and their generally good trade to sell stoves for them. This will help, but something else is needed. It is push.

In the rush to sell base burners, oil heaters should not be overlooked. They are often used to supplement the heat of the furnace in cold weather in rooms that have not sufficient radiation or that have an unusually cold exposure. Then an oil heater will do for heating a small room in almost any weather. Keep them at the front.

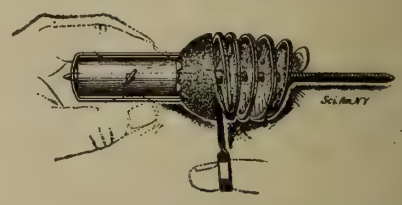
Make arrangements with your neighboring grocer to have a joint demonstration. He can furnish the coffee, pancake flour, etc., while you contribute the range and the fuel. Get some famous local cook to do the work if there is no professional demonstrator at hand. It will help business for both of you.

Keep yourself posted on where to get stove repairs. When a man comes into the store with the remnants of a grate or fireback, he wants a new one right away. If you have to send to two or three places before you get it, you try his temper and perhaps lose his trade.

Advertising stoves is a different proposition from advertising a general hardware line, and principally for this reason: One sale of a stove at the right price will pay for a good sized ad several times over. Therefore, it pays to go into stove advertising more fully. You might make a dozen sales of coffee pots as the result of a five dollar ad, perhaps, but you would not then have your money back. But two sales of stoves on a five dollar ad will give you your money back and an excellent profit besides. See the point?

AN INGENIOUS FRUIT SLICER.

THE accompanying engraving illustrates a rather ingenious device for slicing vegetables or fruit. It comprises a threaded rod or pin on which the vegetable or fruit is impaled, and a knife adapted to be revolved spirally around the rod. The handle which carries the rod is formed with prongs which pierce the end of the fruit and prevent it from turning on the rod while it is being sliced. In addition to the prongs the handle carries a pair of spring arms formed with jaws at their outer ends which assist in holding the fruit during the slicing operation. A nut is threaded onto the rod and carries the knife. In use the device is held as illustrated by dotted lines, and by pressing the finger against the finger piece at the outer end of the knife, the latter is re-



An Ingenious Fruit Slicer.

volved about the rod; but owing to the thread on the nut and rod, the knife is advanced in spiral direction, cutting the fruit into a continuous spiral ribbon. Then, on cutting through the fruit from the circumference to the centre, it will be divided into a number of separate slices, all of a uniform thickness. The rod is adjustably held in the handle so that it can be lengthened or shortened for different sizes of fruit. It may also be replaced by a rod with a different thread for slices of a different thickness.

AN EFFECTIVE ADVERTISEMENT.

One of the most effective advertisements seen lately was a range displayed in the show window of the Miles Hardware Company at Mason City, Ia. The range was a total wreck, not only as to linings and top, but the body was burned clear through so that a kitten could easily crawl into the flue under the oven. On a large placard which hung over the range was the following:

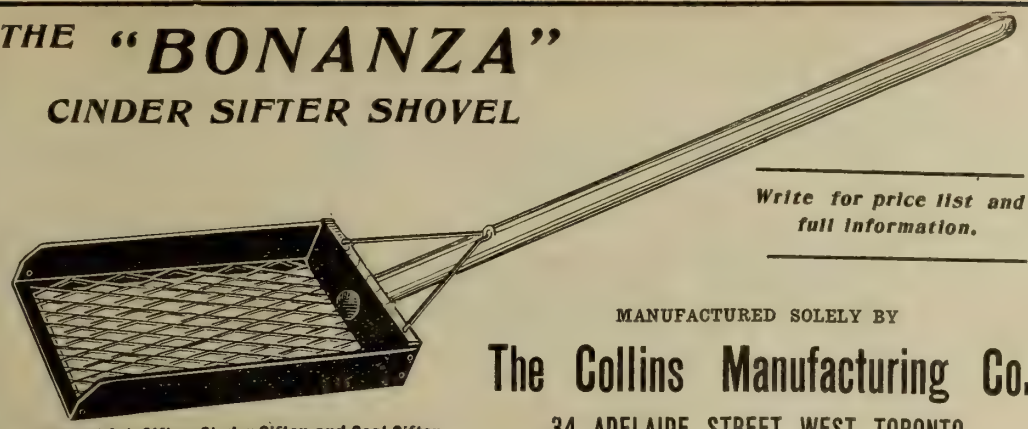
Cost	$27.48
Freight	2.15
Set of new linings	2.50
Total	$32.13

Used 2 years, 4 months.
Did it pay?

On the oven door panel (which was about the only thing left in good preservation) was the name: "Sears, Roebuck & Co."

It is unnecessary to explain that Sears, Roebuck & Co. is a Chicago departmental store.

THE "BONANZA"
CINDER SIFTER SHOVEL



Combined Ash Sifter, Cinder Sifter and Coal Sifter.
(PATENT PENDING.)

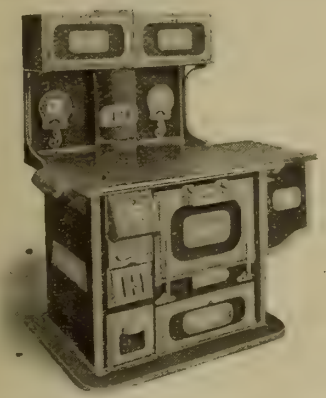
Write for price list and full information.

MANUFACTURED SOLELY BY

The Collins Manufacturing Co.

34 ADELAIDE STREET WEST, TORONTO

Also Ash, Coal and Snow Shovel. No dust, no dirt. Ashes sifted right inside furnace pit, and cinders thrown directly back in furnace. Same shovel picks up the ashes and deposits them in ash receptacle. Substantially made of extra heavy 18 gauge expanded metal; will last for years. Universally acknowledged to be the best thing ever made for the purpose. No order too large. Prompt shipment.



"See that Frame that the Oven Door shuts against?"

That's made of malleable iron. One in the back just like it. These are riveted to both the **Polished Steel Body** and the oven, with Norway iron rivets; result, always tight, never give, never break. No other Steel Range on the market has those frames but

The Joy Malleable and Steel Range

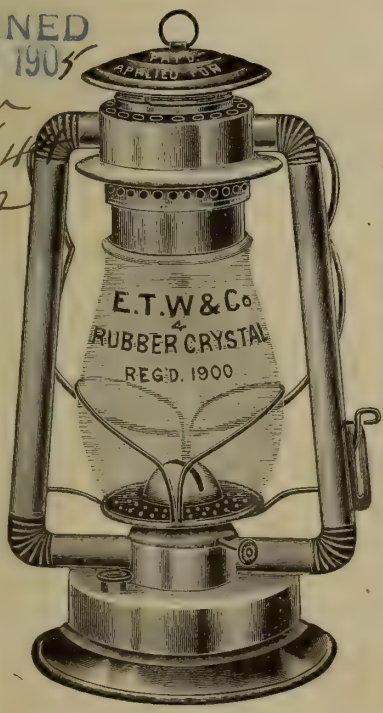
Sold only through Dealers.
The Agency is Valuable.

THE JOY MANUFACTURING CO.

32 William Ave., - - TORONTO

New Style Cold Blast Lantern

(Patented)



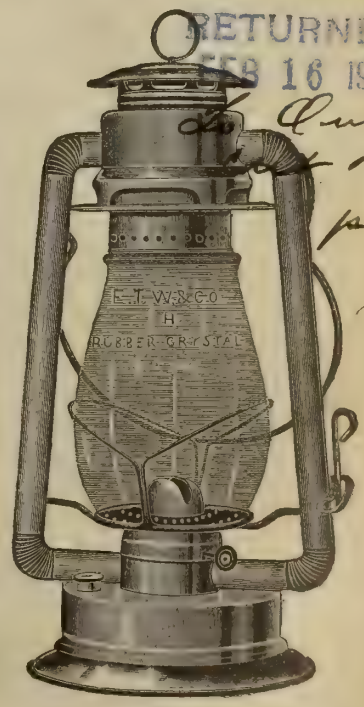
We beg to draw your attention to the cut herewith, which is an improvement of great value. You will notice by the annexed cut of the old style Cold Blast, and by this cut that the difference is in the top. This improvement makes it utterly impossible for the Lantern to be blown out by any ordinary means.

Made with Side Lift as shown in cut, or Bottom Lift.

Plain or Japanned.

Old Style Cold Blast Lantern

This cut shows our old style Cold Blast Lantern, which was and even is now the best Lantern of the Cold Blast. However, we have discontinued the manufacture of this style owing to our latest improved Patent—see cut annexed.

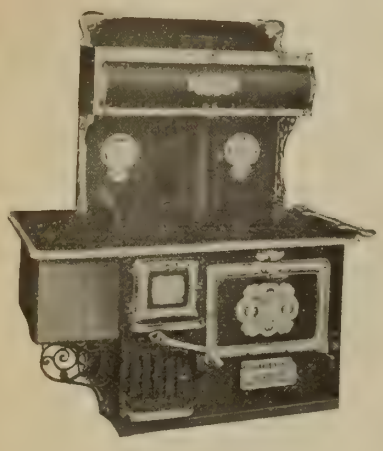


E. T. WRIGHT & CO., - Hamilton, Canada

DURABILITY and EFFICIENCY

must be characteristics of your wares. Buyers may overlook other points. These points they will not overlook.

Does it pay you to handle ordinary wares when the Oxford lines yield as big a margin of profit? Why take risks when you can place the



Oxford Chancellor Range

on your floor with the absolute assurance that it will be an easy seller, a trade winner and a big profit producer.

The body of this range is built of the best quality of rolled steel sheets with an interlining of asbestos mill board throughout.

The oven is very roomy—designed to meet the requirements of a big family. Our patented spring drop door makes a convenient shelf for basting.

The Oxford Chancellor burns hard or soft coal or wood. Fire-box fittings are furnished for either or both, as desired.

Our strong, aggressive advertising has created a big demand for the Oxford Chancellor. The A1 quality of this range as an economic, durable and efficient cooking apparatus is widely recognized.

The demand for the Oxford Chancellor is constantly increasing.

Our terms to the trade are liberal.

Write for Catalogue 61.

WE also manufacture Cast Iron Ranges, Gas Stoves, Gas Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER** 79

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta.

If you are in business to make money and are desirous of selling an article that will make satisfied customers for you and attract their trade in other lines, get the agency for

Walker Stoves and Ranges

"SUCCESSFUL EVERYWHERE"

About our Walker Pilot Range. An enamelledware tank in a solid cast casing—duplex grates for coal or wood, removable without disturbing the linings—oven thermometer—Seymour Patent slide draft along the entire length of the grate—cast iron flue back—and a large square oven, are a few features that make

Easy Sales and Satisfied Customers.

GET OUR CATALOGUE AND PRICES ON MONDAY.

The Walker Steel Range Company, Limited

Grimsby, Ont.

Shawinigan Falls

is one of the **wonders** of Canada. It furnishes the power for the manufacture of the Shawinigan brand of calcium carbide. If you burn Acetylene it will pay you to use this brand.

THE CONTINENTAL HEAT & LIGHT CO.

Sole Agents **MONTREAL**



IRON WILL MELT

WHERE

Sterne's Asbestos Stove and Furnace Cement

will stand. It is the strongest, most durable cement in use for setting up and repairing Broken Joints in Furnaces, Ranges, Heaters, Stoves, etc. It is prepared ready for use, adheres to castings, tin, etc., readily and sets in a few hours. Every bit of it is guaranteed.

Get prices from

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

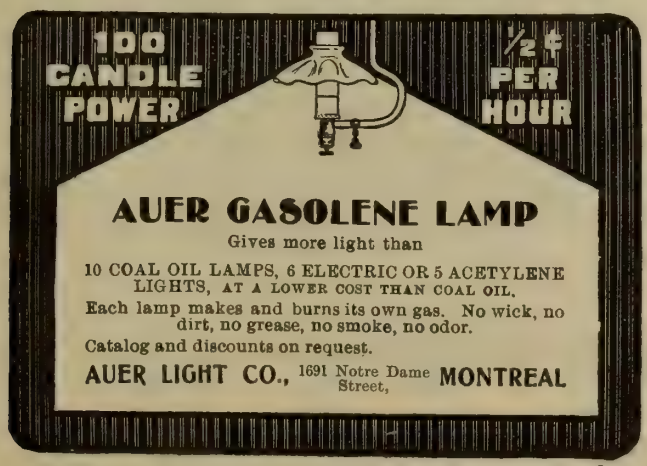
Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

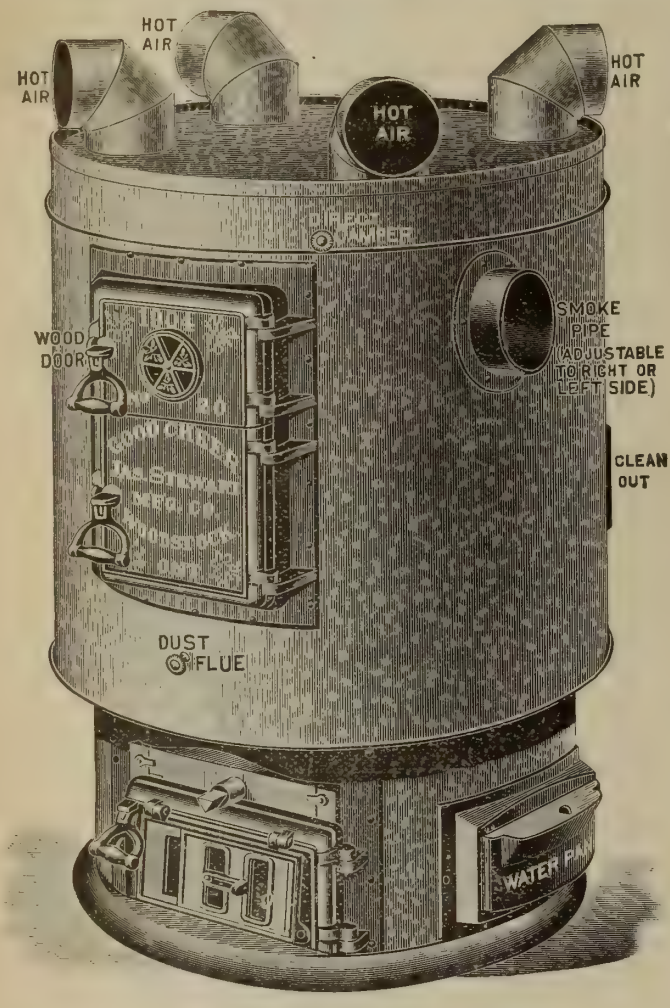
THE "GOOD CHEER" FURNACE

PATENTED

A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

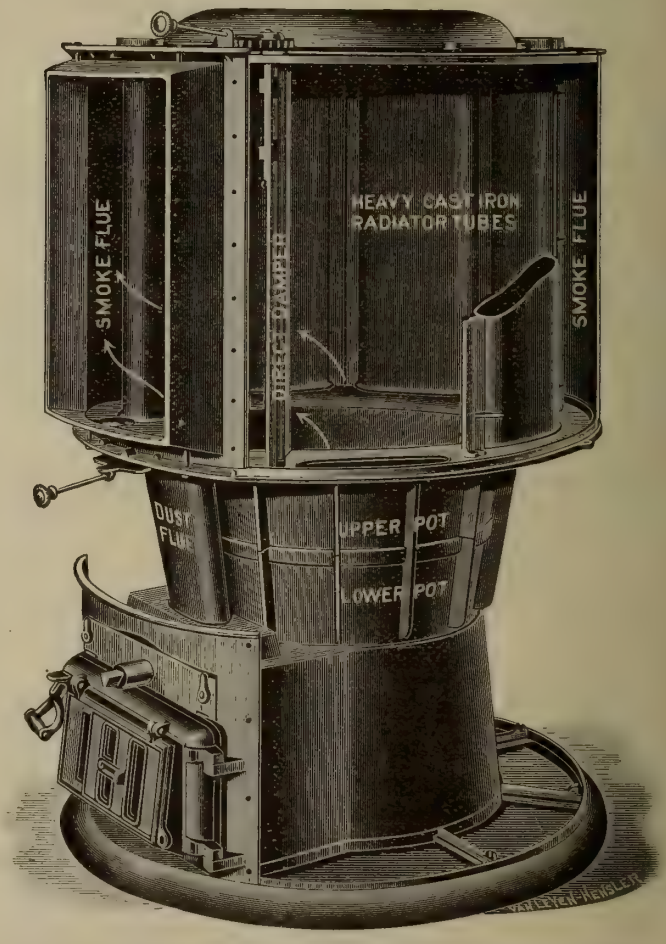
BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.



Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.



The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

CONDENSED OR "WANT" ADVERTISEMENTS.

WANTED.

WANTED—A representative stove or other manufacturing company, to manufacture and sell under our Canadian patent, our wonderful Cosby Patent Air Tight Bakers and Heaters. These stoves are the most novel, useful and salable stoves ever built; will make an excellent line for any hustling company, and are easily and quickly introduced; sell well the entire year, and bring in a good steady profit; full information on request. In writing, please give full information regarding your plant and facilities for pushing a good thing. Address Wm. H. Hefner, P.O. Box 542, Richmond, Va., U.S.A. [50]

SITUATION WANTED.

WANTED—Position as salesman by hardware man; five years' experience; strictly temperate; A1 references. Address Drawer E, St. Marys, On.

FOR SALE.

HARDWARE business, stock practically new, good paying business; liveliest town in Ontario with prospects of a boom; good reasons for selling. Address, Box 230, HARDWARE AND METAL. [52]

HARDWARE and Stoves in good manufacturing town; population 3,900; one opposition; stock $5,000. Box 298, HARDWARE AND METAL, Toronto. [52]

AGENCIES WANTED.

ENERGETIC and first-class business man wanted to push the sale of Machine-made Kettle Spouts; state commission required ground covered, what connection amongst buyers of this article, and full particulars. Apply, Ernest Stevens, Stour Works, Cradley Heath, England. [52]

SITUATIONS VACANT.

WANTED—Two first-class tinners for furnace work; $3.25 per day, eight hours; steady employment. Apply The Wm. Ralph Co., Vancouver, B.C. [51]

WANTED—Traveler for the North-West; experienced in Hardware, Stoves and Tinware; about 30 years of age preferred and an A1 man; no other need apply. Write, stating experience, salary expected, etc., Box 231, HARDWARE AND METAL, Toronto. [51]

WANTED—Hardware buyer; must be experienced and be able to furnish first-class references. Apply, stating salary expected, to Ross Bros, Limited, Edmonton, Alberta. [50]

WELLAND CANAL.

Tenders for Supplies for the year 1906.

SEALED TENDERS for Supplies addressed to the Superintending Engineer, Welland Canal, St. Catharines, will be received until 16 o'clock, on Tuesday, the 2nd of January, 1906, for the supply and delivery of various articles of Timber, Hardware, Castings, Fuel, Paints, Oils, etc., for use on the Welland Canal and its branches for the year 1906.

Specifications, forms of tender and other information may be obtained at the Superintending Engineer's Office, St. Catharines, on and after Monday, the 11th December, 1905.

The lowest or any tender not necessarily accepted.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 11th December, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (721)

Important to Babbitt Users

Why pay for a name? Be up-to-date and have your babbitt made according to your own Formula, or if you have no formula send a sample of what you are using and we will quote you price on same quality. All formulas made to order.

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CANADA SMELTING CO.
Limited

STANDARD *Babbitt Metal, Phosphor Tin, Needle Metal, Type Metal, Etc.*

Cor. Brennan and Ann Sts., MONTREAL

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A strong, steady, preferably experienced, advertising writer to look after the publicity end of wholesale and retail concern in the Province of Quebec. Good salary. Apply by letter only: Advertiser, care of Manager MacLean Publishing Company, Toronto.

The Best South Wales Produces

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FRANKLIN SAUNDERS & CO.
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Wholesale Trade Only Supplied

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
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Walter Mills, General Manager

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

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Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables— "Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND



COVERT MFG. CO.
Troy, N.Y.

Steel Carriage and Wagon Jacks

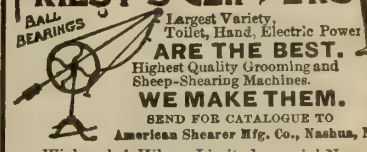
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PORTLAND CEMENT
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THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
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THE IMPERIAL CEMENT CO., Limited
Makers of the Celebrated Brand
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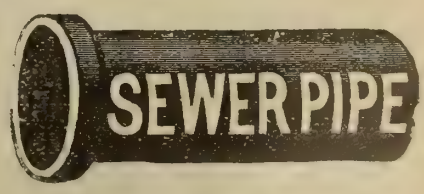


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Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
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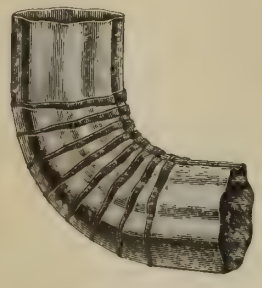
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6 Materials.

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1,225 Varieties.



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CINCINNATI, O., U.S.A.

BUILDING AND INDUSTRIAL NEWS

HARDWARE AND METAL would be pleased to receive from any authoritive source building and industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

PREPARATIONS for the electric smelting experiment at Sault Ste. Marie are all but complete, and the electric current will be turned on in about a week. A good deal of delay has been caused by the fact that the apparatus needed is of types hitherto not made on this side of the Atlantic, and consequently has had to be specially manufactured. This has involved all the more delay because of the great amount of work which has kept electric manufacturing establishments very busy.

A new stave mill has been established at Brigden, Ont.

The Brantford Malleable Iron Works are to enlarge their works.

Calgary, Alta., has opened its new municipal electric light plant.

The town of Bracebridge has passed a by-law to spend $14,000 in extending its power plant.

The Nipissing Foundry Co., of North Bay, have installed a dynamo to light their own plant.

A. C. Thompson's iron foundry at Bridgewater, N.S., suffered damage by fire last week estimated at $23,000.

The town of Saskatoon is likely to be incorporated as a city and to install waterworks and electric lighting systems.

American capitalists have been looking for a manufacturing site for an iron industry, which may be established at Cobourg.

Victoria, B.C., is procuring estimates regarding the cost of a power house and machinery capable of generating 1,000 horse power.

The Welland Board of Trade has endorsed the proposition that the town council purchase and operate an electric light plant and sell electric power to manufacturers.

A new nail works is to be established at St. John by Mr. Even Perkins, recently manager of the Maritime Nail Works, now controlled by the Capewell Horse Nail Co.

The Peacock File Co. have definitely decided to locate in Welland. The company have $5,000 worth of machinery at Buffalo which they desire to bring into Canada free of duty.

Many mineral discoveries have been made in the Lake St. John district in Northern Quebec. Gold, copper, asbestos and nickel have all been discovered in considerable quantities, and a United States steel corporation has acquired several properties which they intend to develop later on.

Several industrial concerns are negotiating with the town of Fort William regarding establishing factories at that place. Amongst these are a wagon manufacturing company, a cast iron pipe foundry, a nail mill, large iron works for manufacture of bar and rod iron and a rolling mill for rails.

The Dominion Iron & Steel Company will add two Bessemer converters to their plant so as to increase their steel output sufficiently to meet demand for rails. This means an increase of 35 to 50 per cent. in the company's present output of steel, and it is expected the monthly output will be 20,000 tons next year.

The Collingwood Shipbuilding Co. has closed contract for the construction of two steel steamers. The contract price for the two is about $400,000. One is to be built for James Playfair, Midland, being 486 feet in length and having a carrying capacity of 323,000 bushels of wheat. The other is for the Montreal Transportation Co., it being for a barge 206 feet in length. About 700 men will be employed building the boats.

Toronto capitalists have acquired the Brantford Street Railway, the Grand Valley Railway between Paris and Brantford, and the Woodstock, Thames Valley & Ingersoll Railway running between Woodstock and Ingersoll. Among those interested in the purchase are A. J. Pattison, W. S. Dinnick and John Firstbrook. Some of the stock will still be retained by people in Brantford. The roads will be greatly improved and the lines extended.

Reports from various parts of the country indicate a serious shortage of steam coal. There is also said to be a shortage of fuel at the upper lake ports and navigation may be somewhat handicapped in the Spring in prospect.

The Wolverine Reed Co., manufacturers of rattan chairs, has closed its factory at Detroit and under the name of the Imperial Rattan Co. will manufacture at Walkerville after the new year. About eighty persons will be employed.

Coal shipments to the St. Lawrence from Cape Breton this year are the largest on record, 1,121,008 tons having been shipped by the Dominion Coal Company alone from Sydney. A few years ago the entire Cape Breton output was little more than this. It is expected that the Dominion Coal Company's output for the year will amount to well over three million tons, while the output from the other mines will bring the Cape Breton total up to 4,000,000.

It is understood that the Grand Trunk has let the contract for the equipment of the Port Huron-Sarnia tunnel with electric power for the operation of trains. The contract involves the building of large power houses in Port Huron and Sarnia, and the total cost is said to be nearly $700,000. The third rail system and powerful electric locomotives will be used. The adoption of electricity will remove all danger from gas in the tunnel. The company has been working on plans for this improvement for three years.

Companies Incorporated.

The surrender of the charter of the W. G. Nott Bicycle Co., of Brantford, has been accepted.

Manitoba Peat Co., of Winnipeg, has been authorized to manufacture, sell and deal in peat and all kinds of fuel.

Rhodes Metallic Packing Co., Toronto, share capital $40,000, purpose to deal in engineers' supplies. The directors are: J. M. Rhodes, J. S. Dawson and R. L. McAfee, all of Toronto.

St. Mary's Hardware, St. Mary's, share capital $40,000, purpose to carry on a wholesale and retail hardware business. Directors: J. W. Peart, W. H. Bartlett and N. Mulloy, all of St. Mary's.

The Stephenson Belting Co., Toronto, share capital $40,000, purpose to deal in machinery, etc. The directors are: J. E. Stephenson, W. Stephenson, B. G. Stephenson, W. Gillespie and Mary Stephenson, all of Toronto.

Majestic Polishes, Toronto, share capital $40,000, purpose to manufacture, buy and sell oils, varnishes, paints, etc. The directors are: C. G. Armstrong, J. Hawken, D. R. Roy, T. H. Wilson and G. R. Brady, all of Toronto.

Western Machine Co., Toronto, share capital $40,000, purpose to deal in all kinds of machinery. The directors to be: G. McLachlan, B. Thompson and W. T. Folliott, all of Toronto.

Toronto-Cobalt Mining, Toronto, share capital $300,000. purpose to carry on the operations of a mining, milling and development company. The directors are: H. B. Wills, W. Vandusen and J. S. Humberstone, all of Toronto.

Sovereign Cobalt Mining Co., Toronto. share capital $200,000, purpose to carry on the operations of a mining, milling and development company. The directors are: P. M. Horrocks, W. A. Smiley and F. J. Stanley, all of Toronto.

Petrolia Gas Co., Petrolia, share capital $40,000, purpose to manufacture and sell artificial and natural gas for all purposes. Directors: W. C. Noxon, E. Noxon and C. Swabey, of Toronto, and J. W. McCutcheon and B. McCutcheon, of Petrolia.

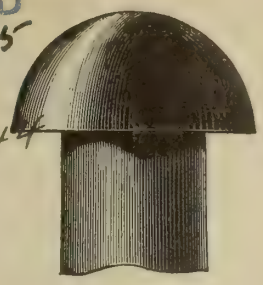
Schaake Machine Works, New Westminster, B.C., share capital $1,000,000, purpose to do general machine construction work. The directors are: Alex. Ewan, Henry Schaake, Dr. A. J. Holmes, Nels Nelson, and E. J. Fader, of New Westminster.

Canadian Forty-Mile Dredging Co., Toronto, share capital $600,000, purpose to build, acquire, own, charter, navigate and use steam and other vessels. The incorporators are: J. S. Lowell, W. Bain, R. Gowans, E. W. McNeil, S. G. Crowell, W. F. Ralph, all of Toronto.

Imperial Electric Motor Co., Toronto, share capital $200,000, purpose to manufacture, sell, lease and dispose of power machinery and automobiles, etc. The directors are: A. Dods, R. McKay, G. Grant, Winnifred F. McIntosh, Agnes Elliott, A. E. Lyon and A. L. Bitzer, all of Toronto.

Stinson-Reeb Builders' Supply Co., Montreal, share capital $20,000, purpose to manufacture and deal in cement, lime, brick, stone, etc. The incorporators are: J. K. Stinson, F. J. Curran, and E. H. Stinson, of Montreal, J. A. Reeb, Port Colborne, and H. W. Macoomb, of Welland.

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To Owner
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page 60



Boiler Rivets

We can furnish all sizes in any style head, also

Coopers' Rivets
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Carriage and Wagon Box Rivets
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also Bridge and Roof Bolts.

SPECIFY
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The Montreal Rolling Mills Co.



MODEL "1905"

Still Another New Revolver

"H. & R. DOUBLE ACTION MODEL 1905"

Small Frame—32 Caliber—5 Shot

Following the announcement of our Model "1904" we are now ready to supply this new revolver, conforming closely in frame and stock to the lines of our well known "H. & R. Premier."

Harrington & Richardson Arms Co.,
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Catalog on Request

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

Consolidated
Plate
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WINDOW
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PLATE
GLASS

TORONTO
MONTREAL
OTTAWA
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WINNIPEG

PEDLAR PEOPLE FOR WINNIPEG.

THE Pedlar People, of Oshawa, realizing the great possibilities of expansion of trade in our Canadian northwest, have decided, after serious consideration of all existing conditions, to erect an extensive factory for the manufacture of their different lines of sheet metal and fire-proof building materials, in the city of Winnipeg.

It is their intention to separate the different classes of their product, so that each branch of manufacture will be carried on in different buildings. The shingles, sidings, and ceilings, will be manufactured in a two-storey building 200 feet long by 80 feet wide. Their cornice and fire-proof window factory will be a four-storey building 40 feet by 200 feet. The lath and fire-proof studs, furrings, etc., will be manufactured in a two-storey building 40 feet by 200 feet. The galvanizing, tinning and pickling plant will occupy a structure 60 feet square, while the painting will be done in a building 40 feet by 80 feet, and three storeys high. The offices, storehouses, and shipping room, will be "L" shaped, and, over all, 40 feet wide by 400 feet long, to a height of three storeys.

It is the present intention of this company to erect this factory as soon as the weather will permit. The buildings will be of fire-proof construction, the company employing only goods of their own manufacture, and cinder concrete. Their galvanizing department, painting and pattern room, will be absolutely fire-proof. The outlay will be in the neighborhood of $150,000.

MONTREAL BUILDERS' BANQUET.

THE Montreal Builders' Exchange had a right good time at the banquet held last week, the success of which was largely due to the efforts of President N. T. Gagnon and Vice-President E. M. Roberts. The feature of the evening was a most cleverly prepared menu card, entitled "Specifications," which read as follows:

Foundations—Oysters, Malpecques on the half-shell. To be bedded on an undisturbed stomach.

Grouting—Soup. Consomme a la Princesse. To be well mixed in proper proportion, and ladled into position.

Coursing—Fish. British Columbia salmon, pommes Rachel. To be of a rich portage entry color.

Bond Timbers — Cutlets of Sweetbreads a la Victoria.

Joisting—Bread and butter rolls. To be laid on bond timbers and properly bridged, and to be covered diagonally with butter (nut), knots less than 1½ inch allowed. Hair joints will not be required in this flooring.

Joints—Roast young turkey. Properly trussed and braced and strapped at angles with ½ inch by 3 inch cranberry sauce straps.

Ribs of beef au jus. To be laid up and neatly pointed with horse-radish, with not more than six joints in 12 ins.

Note—Carving to be executed by experienced workmen, and to detail.

Plastering—Mashed potatoes. Best 3-coat work, corners to be neatly rounded.

Roofing — Material to be haunch of venison, made secure with good roofing composition of red current jelly. Watercress. To be rendered weatherproof by a thorough application of best mastic(ation).

Trim—Unless where otherwise specified, to be clear pine, spoon cleaned, and principal rooms to be for enamel finish (Harlequin ice cream) a nice cream.

Hearths—To be of assorted cakes and wafers, with a border of bon-bons and chocolates.

Hardware—Except bolts (nuts and raisins) to be supplied by proprietor, but put in place by contractor.

Decorations—The dining room to be frescoed with apples, oranges and bananas.

Glazing—To be best cut glass lemon (ade) color. Any glass of other than this color brought on the job will be entirely at contractor's risk.

Tiling—To be best brown glazed Spanish (T and Coffee) make of tiles, finishing at ridge with tooth pick ridge-roll to special detail.

Note—This work must be strictly carried out according to details, which will be supplied by architect, after the completion of work.

BUILDING NOTES

A new House of Refuge is to be built at Belleville.

A new $45,000 school is to be erected at Brantford.

L. B. Woods is to erect a $2,000 residence at Edmonton.

Crowe & Wilson, Vancouver, B.C., intend to erect a $30,000 business block.

The Brantford Carriage Co. intend to build an addition to their office building.

J. P. Howe, Seattle, is said to intend to build a new theatre at Vancouver, B.C.

The Revelstoke Saw Mill Co. is erecting a large mill at Big Bay, on the Columbia River.

The Bell Telephone Co. has purchased a site in Brantford, and will erect a telephone building.

The Grand Trunk Railway Company will erect a tourist hotel in the Algonquin National Park.

An American wholesale firm has purchased a site in Hamilton, and intends to erect a large warehouse.

Permits have been issued for 47 new buildings to be erected in Toronto. The total cost is to be $219,200.

Robert Ward & Co., Vancouver, B.C., are having plans prepared for an eight-storey fire-proof office building.

The new Process Building to be erected by the Industrial Exhibition Board in Toronto will cost about $100,000.

The contract has been awarded for the new fisheries building at New Westminster. The contract price is $14,000.

Tenders are being called for by the school board of Killarney, Man., for the erection of a solid brick school at that place.

Goderich is being asked to grant assistance to aid in the rebuilding of a large elevator recently destroyed by fire in that town.

It has been decided that the new St. Boniface Cathedral at Winnipeg will be commenced in the Spring. The cost will be about $250,000.

"DOMINION BRAND" ROOFING MATERIALS ARE THE BEST FOR YOU

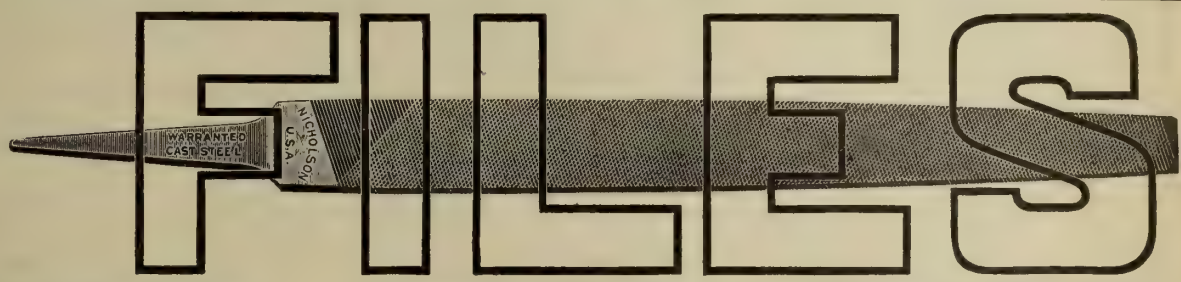
DOMINION BRAND
TARRED FELT

BECAUSE they are the most durable and in every way the most satisfactory.
BECAUSE their quality remains long after the price is forgotten.
BECAUSE they are the easiest to sell. You know what that means.

Write if you can't call

LOCKERBY & McCOMB, 65 Shannon St., Montreal

Our Motto for 1906



Standard of Excellence .·. Unsurpassed Value .·. Prompt Shipments

Thirty-Five Years Manufacturing...

FILES and RASPS

NICHOLSON FILE CO. - (Dominion Works) - Port Hope, Ont.

What Are You Doing

about Cylinder Lock trade? Are you getting your share or is another dealer getting it? With a stock of

Gurney Cylinder Locks

you will be equipped to meet competitors with "other" locks. You will have the advantage on Quality and Price, which, we reckon, is a pretty good advantage.

Builders know what our guarantee stands for, because they know how **Gurney Cylinder Locks** work. These builders order from hardwaremen in their own town. **Why not you?**

Catalogue No. 7 and **Supplements** give full details concerning **Gurney Cylinder Locks,** and our numerous designs in **artistic trimmings,** which will be of interest to you also. Write for copies at once.

THE GURNEY, TILDEN CO., LIMITED

HAMILTON

BRANCHES:
WINNIPEG—Tilden, Gurney & Co., Limited
VANCOUVER—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P. Q.,—Charles Nicoll, 85 St. Peter St.

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

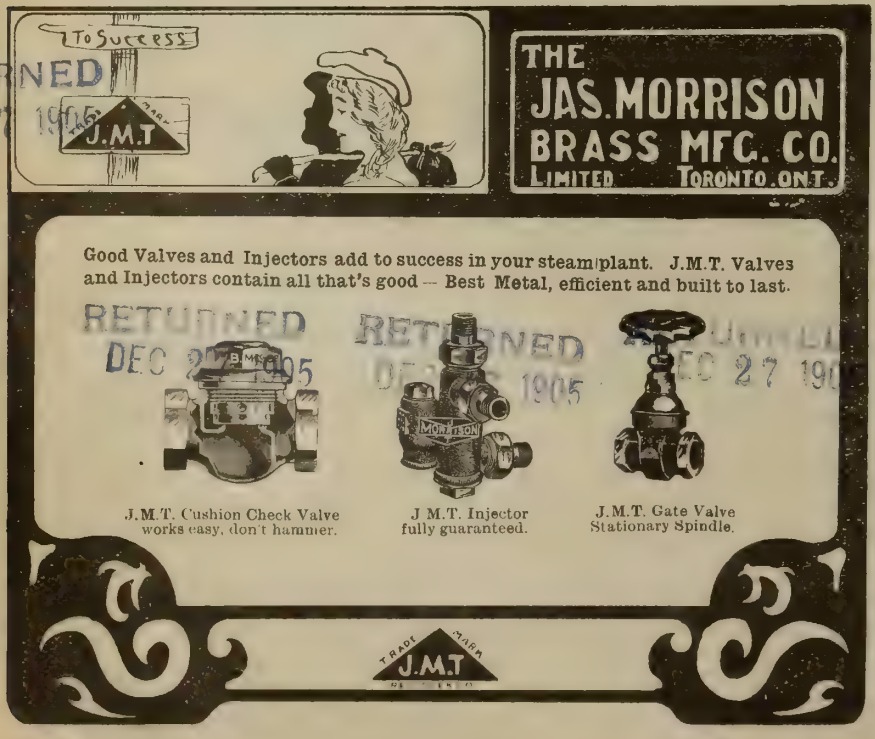
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Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.

ENGINEERS' AND STEAMFITTERS' SUPPLIES



Iron and Brass Pipe and Fittings

Pipe Cutting to Sketch

Pipefitters' Tools



PLUMBING GOODS

Try

J.M.T. Cushion Bibbs, Bath and Basin Cocks

for Durability

PLUMBING AND STEAMFITTING

THE FIRST TRIALS CONCLUDED

LAST Saturday saw the close of the series of trials before Judge Clute, sensational addresses being delivered by judge and lawyers before sentence of the court was passed upon the defendant associations and individuals. As forecasted in last week's Hardware and Metal Judge Clute found the accused guilty of conspiring together to restrain trade and imposed heavy fines as penalties. Elsewhere the list of fines is given.

* * *

Sentence having been passed, it may be safe to comment briefly upon the trial and the facts brought out during its continuance. It has been clearly established that certain methods of procedure adopted by the various sections of the plumbing trade have been outside the pale of the law, the chief of these being the I.O.U. system. It would also appear that while a jobber may rightly refuse to sell goods to a customer whose credit is bad it is wrong for an association of supply men to agree that they shall sell goods only to certain customers, charging all others a higher figure. But the trial brought out another fact and one which in many respects overshadows the points referred to—the fact that the master plumbers and supply men were advised that their actions were legal—barring the I.O.U. system—and the lawyers who gave this advice must bear their share of the ill-repute resulting from the trial. In the face of the mass of condemnation meted out to the plumbers by the daily press it is refreshing to note the following sane statement made by the Mail and Empire of December 11 :

"The decision against the Toronto plumbers and the Supply Association, and the heavy fines imposed, leave everybody wondering how it came about that any lawyers advised that the combination was within the law. Such advice is alleged to have been given. If lawyers advise a course that is wrong, or fail to warn against such a course when consulted, what wonder is there that laymen may get into conflict with "the statute in that case made and provided" ?

* * *

In the opinion of many outsiders the case for the master plumbers was handled much more satisfactorily than that of the supply men. The former finding that the court was a hostile one and realizing that a verdict of guilty was practically certain, adopted "jollying" tactics and while bringing out all the evidence possible kept the court and prosecuting counsel in the best of humor. On the other hand the counsel for the supply men did not encourage his clients to go into the witness box and in many ways came into conflict with the judge and opposing counsel. Judge Clute was most severe during the trial and in his closing address, reproduced in this issue, made some exceedingly harsh statements which seem hardly to be justified by the facts brought out. His imputation of dishonest evidence given by Secretary Morris. of the Supply Association, also caused much unfavorable comment.

* * *

The evidence having been concluded Mr. Riddell, for the Master Plumbers' Association, said he would not call any witnesses. He argued that that body had not done any wrong. The system of tendering meant nothing more than a means whereby some reasonable profit on the cash outlay could be obtained. As to the bonus system, it was perfectly clear that it was opposed to the methods of the association and sixty per cent. of the members knew nothing about it. Mr. Riddell went on to argue that there was no proof of conspiracy in regard to several points.

"If conspiracy is proved between the defendants, it is not necessary to show that each little detail was known to every member of the association," observed Mr. Justice Clute.

FINES IMPOSED UPON PLUMBERS.

Central Supply Association, Limited	$5,000
Master Plumbers' and Steamfitters' Co-operative Association, Limited	5,000
William Mansell	500
Fred. Armstrong	300
J. H. Wilson	250
Joseph J. McKittrick	250
Robert W. Harrison	250
George H. Cooper	250
Robert Ross	300
Patrick Joseph Hayes—suspended sentence.	
Total	$12,100

The agreement between the master plumbers and the union, Mr. Riddell explained as due to the well known power of labor organizations and the need of employers to remain on good terms with their workmen.

"If there was anything wrong with that agreement with Labor Union 46, then it certainly will not be acted upon for one hour," continued Mr. Riddell. "We are desirous of knowing our exact legal position."

The combination of his clients he held to be quite legal ; it would be for the court to decide whether the means used to accomplish their ends were illegal. Mr. Riddell intimated that he had advised his clients that the bonuses were illegal and should be paid back.

* * *

Speaking in defence of the supply men Mr. Watson made an interesting address full of legal points. "There is no evidence before this court to prove that the final agreement between the two defendants was in force," said Mr. Watson. "It is fortunate that in this case there are written records of the policy and course pursued by the defendant corporation, and so we are not totally dependent on oral testimony. More than that, it is shown that such an agreement is contrary to the by-laws of the association. Mr. Morris states clearly and emphatically that the basis of the corporation was no agreement should be made. It is also proved that this policy has been preserved."

"Mr. Watson may as well come to the gist of this at once," said Justice Clute. "What is the meaning of this 7½ per cent. in this last agreement, if not to evade that ? The Master Plumbers' Association was anxious to prevent the Supply Association dealing with anyone not a member of their association. Your association was anxious to get their patronage at as cheap a price as possible, and the result was the agreement of September, 1905."

"I would like to come at this in the regular course of my argument," said Mr. Watson. "Following on that resolution of September, 1905, the master plumbers were informed of the cancellation of the agreement and the determination of the supply men to sell to any master plumber. This is contained in the documentary evidence submitted at this trial. We find after that the same course was pursued. We find that the complaint against the Canada Brass Company of not selling to all was investigated thoroughly by the secretary. There is not a tittle of evidence after July 25, of any refusal."

"I think there is," said Justice Clute.

"There was evidence of a complaint," said the counsel, "but no evidence of discrimination. In fact, the statement of the secretary shows that the agreement was not in force."

"I did not fancy Mr. Morris' statement when he said this agreement was not in force owing to the understanding that it should stand until there was a settlement in the Crashley case which was before the courts. I think that statement was an afterthought," said Justice Clute. "Mr. Morris appeared to give his evidence in the earlier part of the trial frankly, but when he was recalled I didn't like it."

* * *

Crown Prosecutor DuVernet maintained that the evidence of the Crown was conclusive. "I submit it proves a clear, flagrant violation of the act. After their organization was perfected they grew bolder and certain classes of men were unable to buy goods in this province with which to conduct their business.

"The plumbers undertook to do things which were utterly illegal. Look at the oath of obligation which all took on becoming members. It is aping the oath taken in the courts of justice. The sole object of the combination was disregarding the public interests and the law. It was not until the Minister of Customs had threatened to take off the protection that they allowed the public to

have the advantage of a few cents, and they kept the dollars to themselves. It just took a bar or two down to the public. They took advantage of the tariff to crush out competition. There was no such thing as an honest tender.

"They absolutely hoodwinked and defrauded the public; they were not content with 20 and 25 per cent. gain; they must get 26½ and an additional 5 per cent. They had the dishonest percentage paid into the supply houses distributed by these honest individuals who sat around a table and divided other people's money without the slightest compunction. There was not such a thing as honest competition. When a man was called for tenders, large sums of money were put on to be divided among the tenderers. Mr. Riddell, for the master plumbers, freely admits that such a proceeding was disreputable, and says he has advised the money to be paid back.

"Every person had to pay these commissions, bonuses, rake-offs, or whatever they are called. Even in the case of the Government $2,000 was added for the association. The entry was made in the book and the secretary made an attempt to get it. The combination was a splendidly organized attempt to extort unreasonable, unfair and dishonest prices from the public. When a Hamilton man tendered in Toronto, he had to pay 15 per cent. to his association for tendering so much lower than the Toronto plumbers. In addition to that, he had supplies cut off, a punishment that could not be worse, preventing a man as it did from earning his living at the trade at which he had been working all his life.

"In the records of Toroto we find that man after man was driven out of business. Out of all the tenders during the past two years only one honest one was submitted, and that was the one on E. & S. Currie's. Think of the tremendous difference in that one case, nearly $6,000. Is that an honest difference? I don't think it could be.

"What was the result of having this absolute wall around Toronto? What was the result of this breaking down of competition? The supply men began to grumble. It was found out by the public that they would have to pay double for any building that they wished to erect, and so they did not erect it. As a result the call on supplies began to decrease. It was absolute tyranny. Thorne, who took a man into partnership, was expelled from the association. Reeves, when he went out, wrote them that they were corruptionists and little better than a band of pirates. So they were, too, cutting their own and the public's throat. Threats were made to call Reeves' men out and have his supplies stopped unless he went back. It was no idle bluff, and the men left and the supplies were cut off.

"I ask your lordship to find that the agreement entered into by the two defendants in November, 1902, continued up to the present time. The changes were a mere matter of form, not of substance. The same common design runs all the way through. If the defendants were guilty in the early part of this year they are just as guilty now. The last directory, published in July, has never been withdrawn. The agreement was never cancelled. The statement that the agreement we have does not go into force until the Crashley case is disposed of is a mere evasion of the law."

Mr. DuVernet spoke nearly seven hours, concluding on Saturday morning by stating that he thought the court had only been given a slight glimpse of the evils which were carried on in the association. Their own counsel had not known of the rake-off system, which he condemned, till Mr. Joseph Harrison told of it in the box. The members might be able to disclose more but they took an oath to stand by the association when joining it. This might have landed them in penitentiary, for such an oath was absolutely illegal and against the law of the land, especially when taken under those circumstances.

The rule of the association which gave a member the right to claim a customer after working for him for two years formed another unreasonable and vicious clause. By it younger and more vigorous plumbers were restricted and it placed a customer at the mercy of anyone who had done his work. No matter how badly a plumber treated a customer that man was forced to employ him.

There were the fines and penalties which created the funds of the association. The more one dwelt on the case the more wonderful appeared the methods for getting percentages. The one thing plumbers were never fined for was charging too much.

The tyranny of the master plumbers' attitude towards the members of the Supply Association was remarkable. The wholesale men gave degrading exhibitions of humiliation, coming before the association board to offer apologies for selling some little article to an outsider.

Mr. DuVernet turned his attention to the Central Supply Association, Limited. He contended that it was exactly the same organization which was formed in 1901, under the name Plumbers' Supply Association, and later assumed the other designation.

The contention of the Crown was that the supply men had assisted the objects of the other association by refusing to sell to outsiders. The evidence showed that men had been turned away up to six weeks ago. They had even gone one better than the master plumbers, and not only prevented a man getting goods but threatened him with criminal action when he managed to do so.

* * *

Crown Attorney Curry discussed the connection between the tariff and the difficulty of some plumbers in getting supplies. He sketched the development of trade organization amongst the supply men and said that in 1903 an agreement was reached whereby no goods were to be supplied to parties outside the trade. At the same time there was an understanding between the master plumbers and the journeymen's union. "According to this the master plumbers would employ union men, while the union men would work only for the master plumbers. Thus the three parties tried to impose on the others, but all imposed on the public."

* * *

"I find that the evidence has been proven for conspiracy under Section 520 of the Criminal Code," said Judge Clute when Crown Attorney Curry had concluded his address. "I find the defendants guilty of the offence charged. As the matter may come to appeal, as there is a special provision for appeal in this case, it may be desirable that I should mention some of the grounds that led me to the conclusion.

"A preliminary objection was taken by Mr. Watson that there could not be conspiracy between two incorporated companies, and that this particular case was not contemplated under the section 520. I entirely disagree with that. I have to take the view on that count that such an interpretation would destroy the intention of the Act and be contrary to its clear meaning. In the Interpretation Act the word 'persons' is defined to include, amongst others, 'bodies corporate.' That is the clear intention of the legislation.

"With regard to Mr. Watson's other objections, I find first that there may be conspiracy between two corporate bodies. But it is said that under the section the companies could not be bound by any acts or circumstances previous to its incorporation, and that the Central Supply Association of Canada, Limited, not having been incorporated until September 7, 1905, all that was evidenced prior to that could have no bearing on the charge, and that nothing appears since its incorporation which would amount to a trade combination within the Act. I do not take that view.

"I think the evidence clearly establishes that there has been a criminal combination within the meaning of the Act since at least the year 1902, and that the defendants, the present companies who are the successors to that criminal agreement and combination, have adopted it, have become responsible for it, and by their engagements have undertaken to carry out the engagements of the association which previously existed, and that applies also to the incorporated Master Plumbers' and Steamfitters' Co-operative Association, Limited."

In order to understand the objects of the two associations, and how they carried them out, Judge Clute followed the history of the organizations and referred to their taking over the funds of the previous ones and undertaking to carry out their agreements. The judge then sketched the incidents leading up to the agreement giving to members of the plumbers' association an advantage over non-members by allowing them a preference with the supply firms.

Speaking of the "bonus" system his lordship said: "One hardly knows how to express one's self in reference to the disclosures such as we have had in regard to this matter. A number of hitherto reputable men meet around a table, and under the pretence of sending in invited tenders, deliberately adopt a method by which, without apparently the slightest compunction, they took from that portion of the public who happened to be interested, money to which they had no possible claim, no more claim than any person meeting another upon the street and by force robbing him of what he had. Indeed, I think that offence rather the least offensive. Here they adopt a system of misrepresentation and fraud in order to induce persons inviting tenders to believe that the tenders were reasonable and fair, when for at least two or three years it was admitted that not one single honest tender had come from this association."

Justice Clute concluded his judgment as follows: "I think there can be no doubt that the object of these two associations was one and the same. It was to do the very thing that the statute was intended to prevent, and that the

effect of this combination was to unduly limit the supply or dealing in articles or commodities mentioned, and that it did restrain and hinder trade and commerce in relation to such articles and commodities as they were manufacturers of or sold, and that it did in fact unduly prevent and lessen the manufacture and production of such articles, and that it unreasonably enhanced prices. I, therefore, find defendants guilty and impose the penalty of $10,000, $5,000 to be paid by each association."

* * *

James McKittrick, J. H. Wilson, Frederick Armstrong and Wm. Mansell, of the Master Plumbers' Association, were then placed on trial on the indictment charging them with conspiracy with Wm. Bush, Jas. Richards, Peter McCann, Al. McBain and John Priestly of the local union No. 46. Mr. Riddell, K.C., counsel for the accused, in view of the decision just given, withdrew the plea of "not guilty." and entered a plea of guilty. At the same time he pointed out that his clients did not want to have any agreements that was not legal. As they had been advised that the agreement with the plumbers' union was legal, he asked that his lordship rule wherein it was illegal.

Justice Clute did not comply with the request, but accepted the plea of guilty and recorded a conviction.

Mr. Riddell also stated that he had advised that in every case in which the association became acquainted that I. O. U.'s had been given, the amount which had been added to the contract price should be paid back to the person upon whose contract it had been added, and that advice he understood was being followed. In all matters the defendants submitted themselves to the judgment of the court.

Judge Clute then passed sentence upon the accused, the fines being adjusted largely upon the ability to pay of the person fined.

* * *

Patrick Joseph Hayes, Robert William Harrison, George Henry Cooper and Robert Ross were next called upon to stand up for sentence, having pleaded guilty to the charge of conspiracy as original incorporators of the Master Plumbers' Association. They were also fined upon the same basis as those named in the first indictment, with the exception of Mr. Hayes, who, for reasons which the judge did not announce, was not fined but given his liberty on suspended sentence.

The Crashley case was not gone on with, being traversed to the January Assizes in spite of an objection made that as the accused was only an employe of a supply house, the case against him should be dismissed.

* * *

Although the members of the Master Plumbers' Association who signed the agreement with the Journeymen Plumbers' Union have been convicted of conspiracy because of that agreement, no indictment has yet been preferred against the representatives of the local union, who carried on the negotiations which culminated in the signing of the agreement. It is quite within the range of probability that in the next proceedings taken these gentlemen will be included as defendants.

* * *

The Master Plumbers' Association lost no time in paying the $5,000 fine imposed upon them, but the Central Supply Association are understood to be considering the question of appealing the case. This action is unlikely, however.

* * *

On Tuesday the various cases yet undecided came up in the police court, but as the bulk of the documentary evidence was at Osgoode Hall an adjournment was made until December 19, when the charges against the 150 or 160 master plumbers, the charges of fraud against the firms who gave "I.O.U.'s" on contracts, the charges against the individual supply men for conspiracy and the charges against Mr. James Hardy in reference to the hardware associations will come up for hearing. This week is, therefore, an off week when the plumbers are allowed to earn some money to buy Christmas presents or to pay off their fines, as "I.O.U.'s" or York Loan shares will not be accepted as collateral by the courts.

The investigation adjourned at Hamilton last week is also expected to be taken up again next week.

THE BACTERIAL PURIFICATION OF SEWAGE

By Albert Glyndon in "Scientific American."

IT is only about twenty years since the first experiments in bacteriological sewage purification were made. Schloesing and Muntz in France, Warrington and Frankland in England, and the Massachusetts State Board of Health were the pioneers of the movement. The necessity for sewage purification is distinctly a modern one. It has grown out of the development of the water carriage system. In olden times many and fearful were the diseases due to the bad sanitation of streets and houses. Now, however, architects and engineers have solved that old problem, and by means of the water carriage sewerage systems, they are able to have the poisonous wastes safely conveyed away from human habitation. Nevertheless, the problem of the ultimate disposal of sewage has not yet been thoroughly solved. Man has sought to deal with the subject by building sewers to the nearest stream, and thereby removing the nuisance as far as he is concerned. But in doing this he has only transferred it in a degree to some other community, and has established the modern evil of stream pollution. It is hardly necessary for me to dwell upon the results of this evil. It is sufficient to point out that it contaminates the natural water supply of the towns, kills fish, makes rivers unpleasant for boating and bathing, renders the water practically useless, and aids in the spreading of typhoid fever.

Depositing Sewage in Rivers.

It would be foolish to make laws against the passing of sewage into streams if there were no better ways of disposing of it. Modern science, however, has come to the rescue. Filters have been invented and put into operation which have the power to convert the most foul and turbid sewage into clear, sparkling water, and which enable men to pass harmless effluents into the rivers.

The modern method of filtration is not a mechanical nor a chemical one; these systems have been tried, but have failed to dispose of the large quantities of impurities in solution. It is a system of breaking up animal and vegetable matter into their harmless constituent parts by means of the action of bacteria which inhabit the sewage. It is really a process of combustion or oxidation, that is to say, the converting of organic substances into inorganic. The same kind of action is seen frequently in nature. It takes place in conversion of foliage into dried-up dead leaves and in all processes of decay. The bacterial sewage treatment system is simply the adaptation of this method of nature to the requirements of man.

Rapid Growth of Bacteria.

Before one can understand how it is possible for such purification to be accomplished, two things must be realized. The first is the enormous force of bacteria present. The second is the insignificant bulk in sewage that requires purification. As many as 115,000,000 bacteria have been counted in one gramme (1-28 ounce) of soil from a trench along which sewage had been running. They multiply with extraordinary rapidity and, were there no forces to interfere, one bacterium would have sixteen and a half million descendants in twenty-four hours. Ordinary sewage, on the other hand, only contains one part in a thousand of dead organic matter; 998 parts are pure water and one part harmless mineral matter.

The simplest example of bacterial sewage disposal is the throwing of a pan of dish water over the ground. The liquid becomes finely divided in passing through the air, and reaches the ground in fine particles. Here the bits of grease, soap, and food refuse remain on the surface, where they are slowly oxidized by the aerobic bacteria. The liquid passes on through the earth, and is attacked by millions of micro-organisms, which search each drop for food. After a time the liquid becomes practically pure, and the retained solids have disappeared, passing off as carbonic acid, water, nitrogen, or oxides of nitrogen.

Many are the varieties of systems devised for the disposal of sewage. The patent offices of both England and the United States have been flooded with new inventions for sewage treatment. Many have proved utterly worthless, but there are several which have been operated with entire satisfaction.

I will not attempt in this article to go into details of each different method of sewage disposal, but I will give a brief description of the most important systems now in use.

The oldest of all forms of bacterial sewage disposal is known as land treatment, broad irrigation, or sewage farming. It was understood for a long time that land had the power of purifying sewage without its being known exactly what took place. Accordingly, sewage was passed over land for the purpose of purification, and at the same time was used for the fertilization of crops. This system has been in operation in many

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parts of England, but it can hardly be looked upon as a practical method. In some cases, however, most successful results have been obtained by land treatment, but such cases are very rare. Financially, this system can never be a success. The area of land required to purify a comparatively small volume of sewage is enormous, the expenses of operating are considerable, the land is liable to receive so much more liquid than the ordinary rainfall that it becomes "sewage sick," and useless either for purification or for raising crops. It is rapidly becoming an out-of-date method except, perhaps, for finally disposing of sewage works effluents, or in isolated cases where topographical and other conditions are specially favorable to its adoption. Land treatment is used successfully at Berlin, Germany, on a tract of land of over 19,000 acres—larger than the city itself. It is kept in condition by convict labor. In one instance, a year of exceptional drought, the crops from these farms realized receipts which more than defrayed all cost of administration and maintenance. Land treatment on the whole, however, is haphazard, uncertain, and expensive.

Septic Tanks Successful.

In 1895 Donald Cameron, of Exeter, England, brought the septic tank into prominence. This consists of a large tank in which sewage is allowed to remain, where it is acted upon by anaerobic bacteria—micro-organisms that live without the presence of air. Sewage contains a considerable portion of solid matter in suspension. By means of anaerobic action part of it becomes liquified and goes into solution, part rises to the top as scum, while part descends to the bottom as sludge. The inlet and outlet of the tank are placed below the surface, so that the sewage may pass quietly through with as little commotion as possible. The scum which rises to the top becomes oxidized after a time, and passes off into the air as harmless gas. A certain amount of decomposition takes place in the sludge at the bottom. When the tanks are large, sludge accumulates very slowly at the bottom. At a septic tank at Mansfield, Ohio, only a few inches of deposit were drawn off after it had been in use for a year and a half.

The septic tank has proved a most useful factor in sewage purification. It is used extensively as preliminary treatment for contact beds and percolating filters. It cannot, however, be considered by itself as a system of purification; it can be used successfully only as part of one.

There are some small towns, however, where septic tanks alone have been used. The results in these places have invariably been very poor. The septic tank by itself is regarded by sanitarians as little better than an apology for a sewage disposal plant. In some cases, however, when only a low degree of purification is needed, such as when sewage is put into the ocean, septic tanks have proved useful.

Contact Beds Practical.

Perhaps the most practical method of sewage disposal is the combination of the septic tank and the contact bed. The contact bed system was devised by W. J. Dibdin, who installed the famous bed at the town of Sutton, England. In this system sewage is first passed through a screen, to prevent the floating particles from blocking the interstices of the bed. It is then passed over a coarse-grained bacteria bed. This consists of a tank three feet deep filled with broken stone, coke, burnt ballast, or other suitable material not more than three inches in diameter. It is supplied with under-drains, so that it can be easily emptied. The sewage is allowed to enter the bed until the level of the filtering material is reached. The inlet is then closed, and the sewage is allowed to remain standing "in contact" for a certain length of time. During this period the aerobic bacteria do their work. They oxidize the organic matter in solution, and in their search for food they decompose a considerable portion of the impurities. Furthermore, certain ferments known as enzymes aid in the work of decomposition, while the solid particles adhere to the filtering material. The sewage is then allowed to flow slowly out of the bed, leaving many impurities upon the filter material. It flows into another similar bed, where further similar action takes place. Now that the bed is empty, aerobic action goes on among the particles of sewage left in the interstices of the material. Before the next flush comes, most of the spongy matter in the bed has been converted into gases. When the bed fills again, the gas is driven out of the bed into the air above.

Such is the method in use at Sutton. It is simple and effective, and has been widely used in systems laid out more recently. After the sewage has been treated in a septic tank, it generally need only be treated in one contact bed to secure the necessary purification.

Most septic tank-contact bed systems contain several bacteria beds, so that while one bed is filling, another may be in contact, another emptying, and another resting empty. Four is a favorite number of beds for a small town plant, while six are often used.

The contact bed system involves only a small fall, so that it can be applied to almost any district. It has been in successful operation in many towns both in this country and in England. The secret of its success is the regularity of the time of contact and aeration. Experience has shown that unless such regularity is maintained the bacteria will not remain in healthy condition.

At Manchester, England, is the largest septic tank-contact bed system in the world. The beds are opened and closed at regular intervals by hand. In the more recent contact bed systems installed in this country, the invention of automatic airlock apparatus has made it possible to have the beds fill and empty at regular intervals automatically.

A more recently devised system of filtration, and one that is gaining favor in England, is known as intermittent downward filtration, percolating, or trickling filters. These filters are many feet in depth. The sewage is distributed in intermittent doses—often by means of a large revolving sprinkler. They are filled with material similar to that used in contact beds. At the bottom there is an open space for the circulation of air.

In order that percolating filters work successfully, great care must be taken in their construction. It is essential that air should always be present in all parts of the filter, scum must not be allowed to accumulate; there must be a thorough draining at the base, so that the filtrate may come from the filter easily and force air to come in by induction. During the fall of the sewage through the bed, the aerobic bacteria get a splendid opportunity to oxidize organic matter, provided they have a sufficient supply of air. The effectiveness of a percolating filter increases with its depth, so that the filters are made as deep as possible. They are generally used with septic tanks. This system is in use at Birmingham and Hanley, England, but it has practically never been applied in this country. The objections to its use are first the great fall required, and secondly the danger of stoppage through frost unless artificial heat is used. At an experimental plant at Leeds a purification of over 80 per cent. was secured in three minutes by this method.

Filtration in New England.

The method of intermittent downward filtration is largely used in New England. It is, however, merely an adaptation of the old system of land treatment. It consists of passing sewage over soil intermittently, so that the land after receiving one charge of sewage is allowed to rest for a certain space of time before receiving the next. Underneath are generally placed under-drains so that the effluent can easily escape. Although areas averaging as much as

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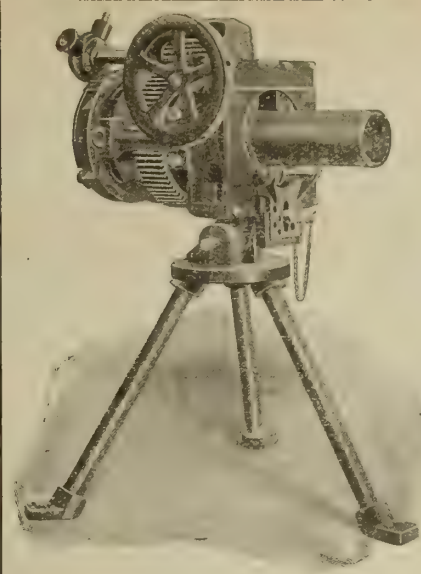
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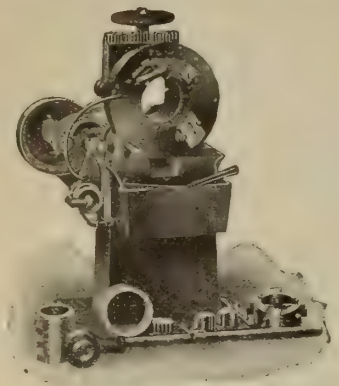
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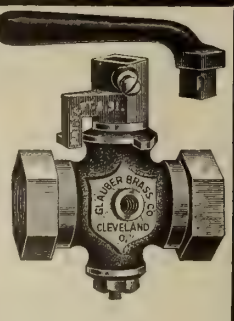
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from ten to twenty acres per million gallons are necessary for these beds, the results obtained have been satisfactory. It is frequently necessary to pump the sewage to the filters. The best-known examples of intermittent downward filtration through sand are those at Brockton and Framingham, Mass. In both cases pumping stations are required. This system has one or two drawbacks besides its expense. Unless great care is taken, the sewage goes through the filters in channels instead of percolating through the material, while the beds frequently freeze and become useless in Winter.

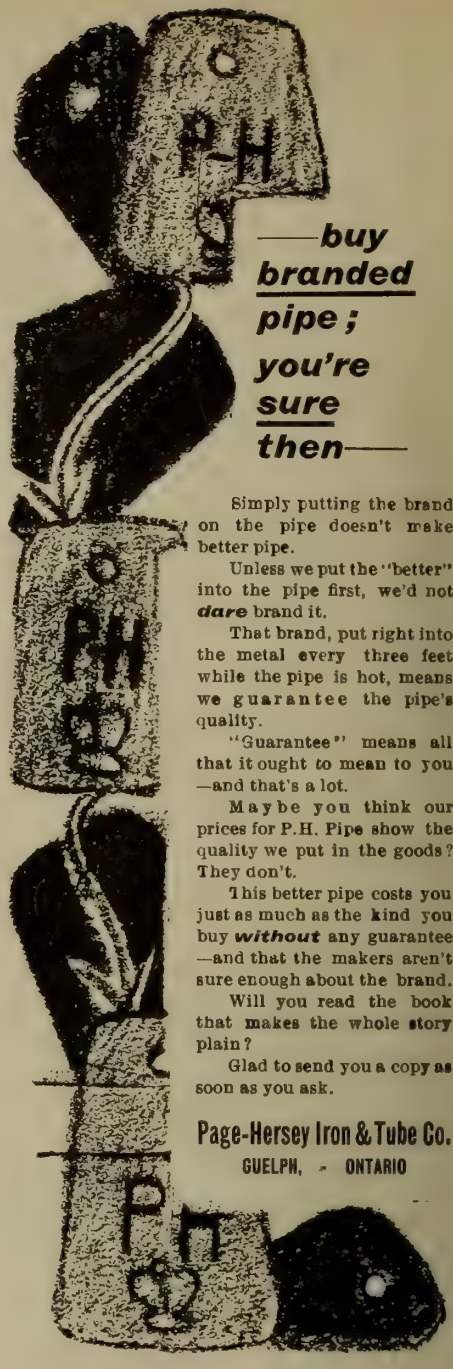
There is no doubt that the bacterial process of sewage treatment has come to stay. The question raised is no longer shall the bacterial system be used, but which kind of bacterial system best complies with the given conditions. All the methods I have described work successfully under the proper conditions, but the contact bed system has proved the most generally applicable because of the small fall required and its ability to operate in all weather.

THE ART OF HOUSE LIGHTING.

THE proper lighting of a house is almost as much of an art as its proper decoration; indeed the two are closely associated and one cannot be perfectly accomplished without the other being taken into account. In olden times when artificial light was costly and secured by crude methods, its merits were measured chiefly, almost entirely, by the intensity of the illumination produced; a well-lighted house was one that was bright, a poorly-lighted house was one that was not.

With the wonderful lighting inventions perfected and introduced within the limits of the last century—gas, kerosene, electricity, acetylene, gasoline, and the like—all this has been changed, and the character of the light is regarded as quite as important as its intensity. Lights are provided with reference to the delicate structure of the eye, lights that will possess the requisite power without dazzling. This effect is produced by the employment of shades which are considered with a view to producing artistic effects as well as properly illuminating a room. In this respect the character of the light, itself, must be critically studied with reference to the exact effect that is desired to be produced.

In lighting a house much also depends upon the location of lights with reference to openings in the various rooms, the location of the furniture, the draperies and decorations. A fortune may be spent in artistically decorating a house and half the good effects lost through improper or inartistic lighting. While this applies with greatest force to costly residences, it still affects the humbler home. In planning houses architects should give close attention to the problem of lighting, from this standpoint, a thing that is too frequently left to the judgment of inexperienced or incompetent persons. Art is invading the field of the builder and the question of proper and artistic lighting is destined to receive more attention in the future than has been bestowed upon it in the past.—Architect and Builder.



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A RISE in the price of lead pipe is the only change of the week in the price of plumbing supplies here. This was to be expected, however, after the remarkable career of pig lead, and, consequently, no surprise has been felt. The discount has been changed to 20 per cent. from 25.

The business transacted during the present week has been most gratifying to the local jobbers, who declare that each day's mail shows orders quite up to the standard of several weeks ago, which is a most unusual condition at this time of the year. In fact, the slack season seems to be getting shorter every year, and it is expected that it will be even shorter than usual this Winter.

Range Boilers—The demand is keeping up well at the same prices as have prevailed for some time. We quote: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—As we predicted last week discounts have been withdrawn and higher prices substituted. Our prices now are as follows: Discounts twenty-five per cent f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—There is still a scarcity evident on the market here. We give the following prices: Discounts on all sizes of nipples up to 6 inch, 67 1-2 to 70 per cent.

Iron Pipe—Special sizes are hard to get, even though the situation has been somewhat relieved since our last report. We are quoting as follows: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings— Orders are still quite numerous and the turnover is more than satisfactory for the season. We quote as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—Although both lead and tin are stronger again this week, we still quote for solder: Bar solder, half-and-half, guaranteed, 22c.; No. 2 (wiping solder), 18c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Decmeber 15, 1905.

LEAD pipe has made its expected advance, being now quoted at 20 per cent. instead of the former 25 per cent. discount. The steadily increasing prices of lead made it apparent that higher figures would be quoted so that the trade were well advised of the change which has been made.

Business is falling off, but still the amount of orders being booked is abnormal for this season. Owing to heavy shipments of enameled goods to the west, there has been a shortage of this class of supplies, but this is being relieved considerably. Other lines continue as reported last week.

Lead Pipe—The expected advance has been made, but the jump upward is larger than looked for. Trade is active. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 20 per cent.

Soil Pipe and Fittings—Buying is very active with prices very firm. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Quotations continue as before. Business is lively and the market is strong. We quote the following prices: Black, 1-4 inch, $2.09; 3-8, $2.09; 1-2 inch, $2.42; 3-4 inch, $3.04; 1 inch, $4.37; 1 1-4 inch, $5.96; 1 1-2 inch, $7.15; 2 inch, $9.54; 2 1-2 inch, $15.00; 3 inch, $19.35; galvanized, 1-4 inch, $2.91; 3-8 inch, $2.91; 1-2 inch, $3.29; 3-4 inch, $4.19; 1 inch, $6.02; 1 1-4 inch, $8.21; 1 1-2 inch, $9.85; 2 inch, $13.14; 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Prices have dropped on some sizes. Buying is quite active, however. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $4.75; extra heavy, $7.50; 35 gallon, standard, $5.75; extra heavy, $8.50; 40 gallon, standard, $6.75; 40 gallon, extra heavy, $9.50; 52 gallon, $11.00; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29: extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Business is active. Prices are very firm. We quote: Bar solder, half-and-half, guaranteed, 21 1-2c. and wiping at 20c.

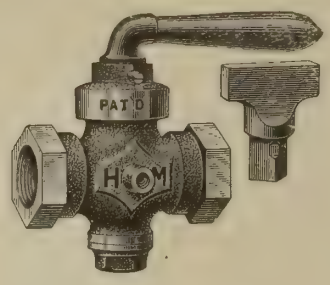
Enameled Ware—Shortages are being relieved owing to western shipments having been completed. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

ANTIQUITY OF PLUMBERS.

IN the museum at Arles, in the south of France, which was a Roman colony, is a piece of lead pipe, exactly like the seamed lead pipe which, as met with in old houses to be altered, is within the experience of architects of the present day, who have been practising for not more than twenty years. The pipe is said to have been taken from a Roman aqueduct, and bears the evidence of its genuineness in a trade mark, stamped on the pipe, which, as copied into the writer's sketch book, reads Scantius × Poihinus × Fac. Scantius Poihinus makr. How near that trade mark seems to bring the pipe to modern times, and reminds us that the citizen of the Roman Empire, except that he did not wear trousers and his science was not sound, was a very modern person, and Rome in those days not unlike New York. Among other points of resemblance, which bring it nearer to our own days than to those of Shakespeare, there was the distribution of heat, it is said, but certainly water in the villas of her millionaires; and, if we may trust the evidence of the museum at Arles, the distribution of water was done by means of lead pipe—put in by a plumber.

MUELLER GROUND KEY WORK

No. 49 Stop and Waste Cock.



A stop cock may show no defects under a hurried test, and yet develop a slow leak when put into use.

Mueller Stop Cocks are tested not only for flaws that are easy to find, but are kept under hydraulic pressure long enough to detect any leak of a slow nature. They never have to be watched when put into service.

Mueller Stop Cocks are made in solid handle, socket head and patent cap patterns and in all pipe connection styles. The cock illustrated is the patent cap pattern, iron pipe style.

Each cock is given a 200-pound hydraulic pressure test as near like actual service use as possible, bears the Mueller trade mark and is *unconditionally guaranteed.*

We also make fuller work and compression work for plumbers' use. Catalogs upon application.

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

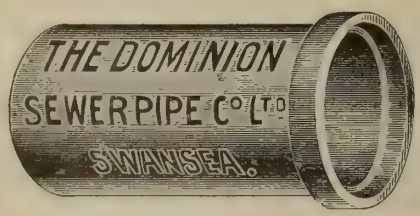
Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

"None So Blind as Those That Won't See!"

If you refuse to "see" our proposition and take advantage of it—
The blame is your own entirely.

Here again we state it, as plainly as possible:—

You exhibit a line of NATURO CLOSETS in your showroom and explain their good features to your customers—
That's all you have to do.
We do extensive advertising
Refer all inquiries to you
Furnish descriptive literature.



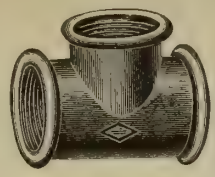
The NATURO Closet

does the rest, bringing you a large volume of business.

The NATURO Co.

C. H. MUCKENHIRN, President Salem, N.J.





DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The **Oshawa Steam and Gas Fittings Co.** Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

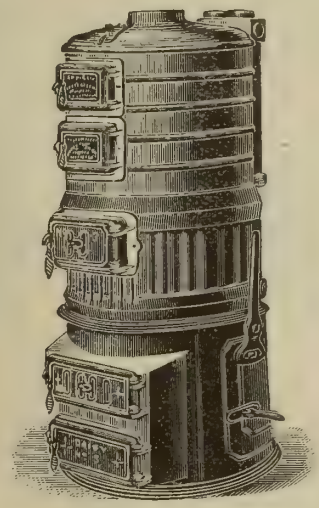
Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL



AVOID THE DANGER

That comes with using something just as good.



AUTOMATIC INJECTOR

GET THE GENUINE

PENBERTHY AUTOMATIC INJECTOR

AND SAVE TIME, TROUBLE AND MONEY.

WRITE FOR CATALOGUE.

OUR GREASE CUPS ARE THE BEST MADE.

ASK YOUR NEAREST JOBBER.

Brass and Copper Pipe

Our Stock comprises

BRASS: 1/8-in. to 3-in. in Iron Pipe sizes

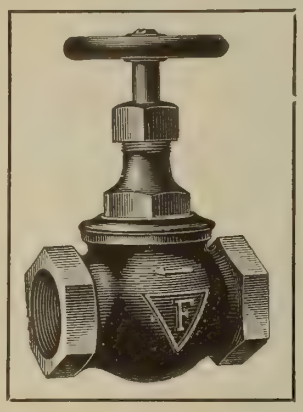
COPPER: 1/8-in. to 2-in. " " "

All orders shipped promptly. **Correspondence solicited**

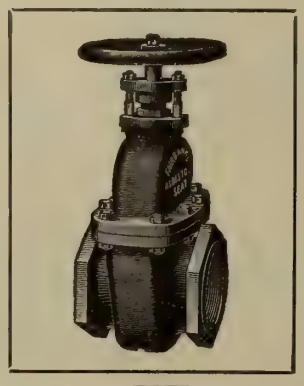
WM. STAIRS, SON & MORROW, Limited, HALIFAX, N.S.

FAIRBANKS RENEWABLE DISC VALVES

The Best That Money and Skill Can Produce



GLOBE



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Leading Hardware and Supply Dealers Sell Them

THE CANADIAN FAIRBANKS CO. LTD.

MONTREAL TORONTO WINNIPEG VANCOUVER

Give that man a ***UNION PLANE*** when he asks you for a

GOOD PLANE

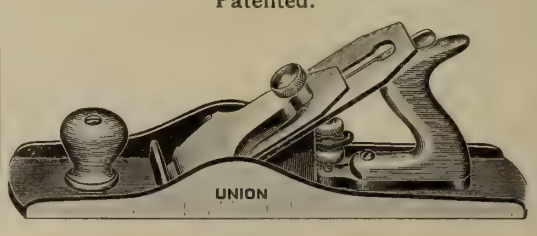
They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever adjustment and Solid Frog.

Patented.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

New Britain, Conn., U.S.A.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

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Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

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Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

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UNITED KINGDOM

HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

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Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

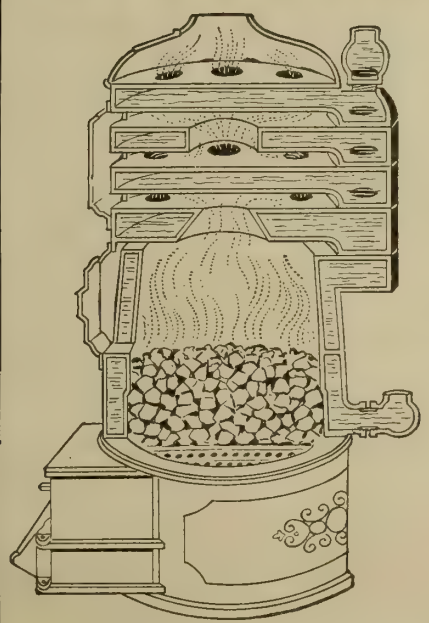
Batty Stove and Hardware Co.

182 Adelaide Street West

Talk to the Builder

You don't have to be a gold digger to get money out of a hole in the ground. Get acquainted with the man who is taking out that foundation—talk the

OXFORD HEATING SYSTEM



to him, point out its immense superiority, as only a practical man can, and it is about certain you will get the contract to heat that new building.

The Oxford ("B" series) Boiler is in a class by itself. One feature of the Boiler is the overhang of the upper walls of the fire-pot. It is a proven fact that this construction adds greatly to the heating power of the boiler by increasing the surfaces against which the heat impinges. Combine this with our double-sized first water section with bell-shaped flues, and you have the maximum of efficiency with the lowest possible fuel consumption.

The Oxford is not only scientifically and economically perfect as a heating apparatus, it is also the most durable boiler ever built. We avoid the use of gaskets or washers by making all connections with our Oxford Steel Push Nipples, thereby assuring an indestructible iron-to-iron joint.

Oxford Hot Water and Steam Radiators are built of cast iron—they don't rust and can't leak. Used with Oxford Boilers, they make a splendid, durable and economic heating system, the sort that gives absolute satisfaction and builds up a dealer's reputation.

Send for the Gurney Oxford Book of Hot Water and Steam Heating Apparatus.

WE also manufacture Cast Iron Ranges, Steel Plate Ranges, Gas Stoves, Gas Ranges and Heaters, Hotel Ranges and all kinds of Cooking and Heating Apparatus, Plumbers' Supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

135

None Better None as Good

Our two brands of **Sheathing**, "**Cyclone**" and "Joliette," are special lines that have proven their usefulness as well as their attractiveness. Hardwaremen in great number now sell them. Why not you?
It will be to your advantage to secure particulars about them and also our

"BLACK DIAMOND"

WRAPPING PAPER
BUILDING PAPER

TARRED FELTS
READY ROOFING

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Dec. 15, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$39 00 $40 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, 16 x 20 base	$6 50
I X 16 x 20 "	8 00
I X X, 16 x 20 base	9 50
Famous, equal to Bradley—	
I C, 16 x 20 base	6 50
I X, 16 x 20 "	8 00
I X X, 16 x 20 base	9 50
Raven and Vulture Grades—	
I C, 16 x 20 base	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C, 16 x 20 base	5 50
I X, 16 x 20 "	6 50
I X X, 16 x 20 "	7 50

Allaway's Best"—Standard Quality.

I C, 16 x 20 base	4 75
I X, 16 x 20 "	5 75
I X X, 16 x 20 "	6 75

X Coke Plates—Bright Bessemer Steel—

I.C., 14 x 20 base	4 00
I.C., special sizes, base	4 25
20x28	8 00

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 00
IX., Terne Tin	8 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	
" 14x60, " }	7 00
" 14x65, " }	

Tinned Sheets.

2x30 up to 24 gauge	7 00	7 50
" " 26 "	7 50	8 00

10c. extra for squares and odd sizes.

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 97½	2 00
Forged iron "	2 22½	2 43
Refined " "	2 37½	2 40
Horseshoe iron "	2 37½	2 40
Hoop steel, 1½ to 3 in. base		2 75
Sleigh shoe steel "	2 17½	2 20
Tire steel	2 27½	2 30
Best sheet steel		0 12
B K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J quality, best warranted		0 18
"I " warranted		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 65
Chas. Leonard	0 08	0 09
CrucibleSteel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 16
" Silver steel		0 12
" Black Diamond	0 08	0 09
Thos. Jowett & Sons B P.L. tool steel annealed		0 10½
Self-hardening		0 45
Rapid self-hardening		0 75
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

Canada Smelting Co., Limited.

Hard Genuine Rabbit	0 40
Standard Anti-Friction Babbit	0 30
" Special Babbit	0 25
Car Box Babbit	0 20
Extra "	0 15
No. 1 "	0 12
No. 2 "	0 07
No. 3 "	0 05½
Standard Phosphor Tin	0 40

On large orders special discounts given.

BLACK SHEETS.

	Montreal.	Toronto
14 gauge		2 55
16 gauge	2 40	2 30
18 "	2 35	2 35
20 to 24 gauge	2 30	2 50
26 "	2 30	2 70
28 "	2 40	2 90

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary, 52 sheets	2 60
All bright "	3 85
Galvanized Canada Plates, 52 sheets	4 10

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 25	....
22 to 24 gauge 3 50	3 75
26 " 3 75	4 00
28 " 4 00	4 25

Apollo.

10⅜ oz. (American gauge)	4 15
28 gauge	4 00
26 "	3 85
24 "	3 75

Comet Bell.	Queen's Head.
16 to 20 gauge 3 25	....
22 to 24 gauge 3 50	3 75
26 " 3 75	4 00
28 " 4 00	4 25

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

Ingot.	Per 100 lb.	19 50
Casting, car lots	19 25	

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square, Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	23 00
Plain, 14 oz.	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned } 47½ per cent. off list.
Spun }

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 25	7 50
Domestic " "	7 00	7 25

ZINC SHEET.

5-cwt. casks	8 00	8 00
Part casks	8 25	8 25

LEAD.

Imported Pig, per 100 lb	4 30	4 50
Bar, "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 05½
Sheets, 3 to 6 lb. "		0 05½

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.		14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 5 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$19 15		17 15
5 feet "	20 15		18 15
5½ " "	21 65		19 65
6 " "	24 40		22 40
Plate E II			
5 feet 2½ in. "	18 65		16 65
5½ " 2½ " "	20 15		18 15

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c.	30 & 10 p.c.
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality		2 55
" " " " " B "		2 40

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 09
⅜ "	2 09
½ "	2 37
¾ "	2 98
1 inch	4 27
1¼ "	5 84
1½ "	7 01
2 "	9 35

Galvanized pipe—

⅛ inch	2 91
¼ "	2 91
⅜ "	3 22
½ "	4 13
¾ "	5 93
1 "	8 09
1¼ "	9 71
1½ "	12 95
2 "	

Lead Pipe discount 20 per cent.
Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
12 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock	net	1 90
No. 4 " "	"	1 75
No .7 Fuller's	"	2 10
No. 4½, "	"	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 65 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

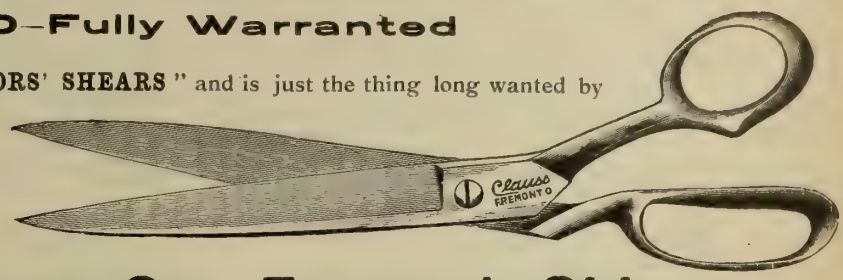
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
0	7.00	9.50
52	11.00	14.00
66	18.00	20,00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Dressmakers' Shears

CLAUSS BRAND—Fully Warranted

This shear is made after the pattern **"TAILORS' SHEARS"** and is just the thing long wanted by the dressmakers.



Manufactured by Our Secret Process.

Ask for Discounts.

The Clauss Shear Co., Fremont, Ohio.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Montreal	Per lb. Toronto
Bar, half-and-half, guaranteed	0 22	0 21½
Wiping	0 18	0 20

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.
Pure	5 50 5 80
No. 1	5 10 5 25
No. 2	5 05
No. 3	4 12½
No. 4	4 05
Munro's Select Flake White	5 65
Elephant and Decorators' Pure	5 50
Tiger brand, pure	5 75
Decorators' Special for exterior use	5 00
Monarch	5 75
Decorator's Pure	5 50
Essex Genuine	5 00
Sterling Pure	5 75
Island City Pure	5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06 0 08
French V. M.	0 06½ 0 07
Lehigh	0 06 0 06½
Pure	0 07½
No. 1	0 06½
No. 2	0 05¼

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 40
" " " ½ gal.	1 35
" " " gal.	1 30
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

	Per lb.
Petroleum, barrels	0 15½ 0 15¾
Arsenic, kegs	0 15½ 0 16
50 and 100 lb. drums	0 16 0 16½
25 lb. drums	0 16½ 0 17
1 lb. paper boxes	0 17 0 17½
½ lb. tins	0 18 0 18½
¼ lb. paper boxes	0 19 0 19½
1 lb tins	0 20½

Terms 2 per cent. off 30 days or 90 days.

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots.	Per gal.	Net.
Carriage, No. 1		1 50	1 60
Pale durable body		4 10	4 25
" rubbing		2 85	3 20
Gold size, japan		1 50	1 60
No. 1 brown japan		0 85	0 90
Elastic oak			1 50
Furniture, extra		1 10	1 25
" No. 1		0 90	1 00
Hard oil finish		1 35	1 50
Light oil finish		1 60	1 70
Damar		1 75	2 00
Shellac, white		2 40	2 50
" orange		2 30	2 40
Turpentine, brown japan		1 10	1 20
" black japan		1 10	1 20
" " No. 1.		0 85	0 90
Elastilite varnish, 1 gal. can, each			2 00
Granitine floor finish, per gal			2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.			$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.			assorted
Canada Paint Co's sun varnish			2 00

GLUE.

Common	0 08 0 08½
French medal	0 10 0 14
White, extra	0 18 0 22
Gelatine	
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	
Ground	0 12 0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.	

Farm.

American, each	1 35 3 00

House.

American, per lb.	0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent
" " ⅜ and smaller	60 and 0
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent.
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 40
Canadian pitcher spout	1 80

A Profitable Investment

is made when you lay in a stock of Paterson's Building Papers and Wire Edged Ready Roofing. These goods have the Quality and Reputation that make them popular with your customers.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 10 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	8 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb. 0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	....	4 50
12 in. up	"	....	3 25
Spring, No. 20, per gro. pairs		....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	.... 0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list	Oval head
M.R.M. Co. brand, 55 per cent.	
"P.B." Brand, 55 to 60 per cent.	
"Monarch," 50 and 7½ per cent.	
"Peerless" 50 per cent. dis.	

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.'Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	....	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes	....	2 50

Woodyatt, ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ..per doz.
Cabinet.
Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem ....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	....	10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent

Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	....	7 80
" "	"	....	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ 40 per cent.

THERE IS NO FEATURE

In the sale of an article that inspires the dealer to recommend, and induces the customer to buy, equal to the merit of the article itself. As one knows a true friend from long acquaintance and association, so it is that stock in trade that has stood the test of time is recognized as something safe to invest in.

CHURCH'S

ALABASTINE

Is a PERMANENT and SANITARY WALL-COATING, that hardens with age. Has been on the Canadian market and made in Canada for more than twenty years. Is extensively sold and persistently advertised. Sells without effort and affords a good margin of profit. The country is full of cheap kalsomines, foreign made; but what does it profit a dealer to sell them and lose his reputation for dealing in only first-class articles?

ALABASTINE is NOT A KALSOMINE. We make **JELLSTONE, which is a Kalsomine**, and in point of merit as such has no competitor, If you **must have a temporary coating**, stock **JELLSTONE** which is Canadian-made goods. **ALABASTINE** satisfies the customer, and a satisfied customer is a splendid advertiser. **PUSH ALABASTINE.**

Look up your **ALABASTINE** stock. Do it this fall. Order now, from jobber or manufacturer. Spring dating.

THE ALABASTINE CO., Limited, - - Paris, Ont.

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's ..... "	3 00	15 00
Finners', solid ..... per set	....	0 72
" hollow ..... per inch	....	1 00

RAKES.

Wood ..... per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 40 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal		0 10½
Pure Manilla		0 15
"British" Manilla		0 11½
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea		0 16
Jute		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet ..... per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet ..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished ..... per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ..... per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's ..... per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete ..... each	0 75	2 75
" frame only ..... each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century $6 25
" " No. 1 Maple Leaf 5 25
" " Happy Medium 4 25
" " Watch Spring 4 25
" common frame 4 00

SASH WEIGHTS.

Sectional ..... per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb 0 31

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's ..... per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style ..... per doz.	6 50	
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style .... per doz.	6 75	
Common doors, 2 or 3 panel, in natural colors, oil finish ..... per doz.	8 75	

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood ..... per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	...	0 85
" 18 x 30	....	1 00
" 18 x 36	....	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'	4 50	11 50

SOLDERING IRONS.

1, 1½-lb ..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ..... per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita ..... per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador ..... "	....	0 13
" Axe ..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas ..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe ..... per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch ..... "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ½ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk 85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin ..... per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's ..... each	0 90	2 85
" steel ..... each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German ..... per doz.	4 75	00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian ..... per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress ..... per lb	0 33	0 45
Staging ..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 52½ per cent. off the list.
Copper wire, discount 52½ per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15 —No. 9, $2.55 — No. 10, $3.20 to $3.20 —No. 11, $3.25 to $3 25 — No. 12, $2.65 —No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure, F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb	2 75
Galvanized, plain twist	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

COILED SPRING WIRE.

High Carbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net	1 50

Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

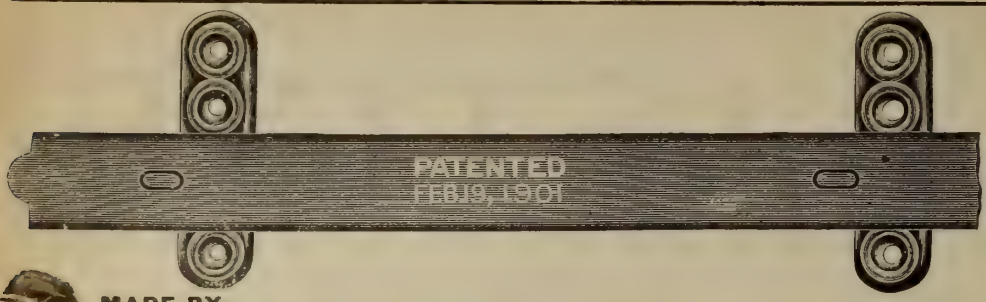
Leader, 11 in. ..... per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

STORM KING TRACK LIKE THE STORM KING HANGER



is the most popular Flexible Hanger Track made in Canada. Popular because it surpasses all others in quality and workmanship.

The discriminating buyer specifies **"Storm King" Brand—the Perfect Track.**

Every piece stamped "Genuine Storm King" with our name.

Ask Your Jobber

MADE BY

SAFETY DOOR HANGER CO., - Hamilton, Canada



WALKER CORK SCREWS

are good holiday souvenirs and live sellers the whole year. Are made well and are made out of good material. That is why we guarantee every one that we put out. When ordering Cork Screws try **Walkers.**

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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Diamond Saw & Stamping Works, Buffalo

Emery Wheel Dressers.
Diamond Saw & Stamping Works, Buffalo

Fence Machines.
London Fence Machine Co., London.

Files and Rasps.
Barnett Co., G. & H., Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.
Grose, Walter, Montreal.

Financial Institutions
Bradstreet Co.

Fire Brick, Furnace and Stove Cement, etc.
Francis-Frost Co., Toronto.
Scarfe Co., Brantford, Ont.
Sterne, G. F., & Son, Brantford.
Winnipeg Paint & Glass Co., Winnipeg.

Firearms and Ammunition.
Caverhill, Learmont & Co., Montreal.
Claybrough & Johnstone, Birmingham, Eng.
Colts Patent Firearms Co., Hartford, Con.
Hamilton Rifle Co., Plymouth, Mich.
Harrington & Richardson Arms Co., Worcester, Mass.
Hobbs Hardware Co., London, Ont.
Johnson's, Iver, Arms and Cycle Works, Fitchburg, Mass.
Walter, E. F., & Co., Montreal.

Food Choppers
Caverhill, Learmont & Co., Montreal.
Enterprise Mfg. Co., Philadelphia, Pa.
Lamplough, F. W., & Co., Montreal.
Smith & Hemenway Co., New York.

Galvanizing.
Montreal Rolling Mills Co., Montreal.
Ontario Wind Engine and Pump Co. Toronto.

Gas and Acetylene Lamps, Mantles, etc
Auer Light Co., Montreal.
Continental Heat & Light Co., Montreal.
Rochester Lamp Co., Toronto.

Glaziers' Diamonds.
Sharratt & Newth, London, Eng.
Shaw, A., & Son, London, Eng.
Winnipeg Paint & Glass Co., Winnipeg.

Glue.
Grove Chemical Co., Lancashire, Eng.
Winnipeg Paint & Glass Co., Winnipeg.

Hack Saws.
Diamond Saw & Stamping Works, Buffalo

Hardware Specialties.
Erie Specialty Co., Erie, Pa.
Gurney, Tilden Co., Hamilton, Ont.
Mast, J. M., Mfg. Co., Lititz, Pa.
Smith & Hemenway Co., New York.

Hollow Ware.
Welsh Tinplate and Metal Stamping Co., Llanelly, Wales.

Horseshoe Pads.
Canadian Rubber Co. of Montreal.

Horseshoes and Nails.
Canada Horse Nail Co., Montreal.

Hot Water Boilers.
Cluff, R. J., & Co., Toronto.
Gurney Foundry Co., Toronto.

Ice Cream Freezers.
Dana Mfg. Co., Cincinnati, Ohio.
North Bros. Mfg. Co., Philadelphia, Pa.

Ice Cutting Tools.
Erie Specialty Co., Erie, Pa.
North Bros. Mfg. Co., Philadelphia, Pa.

Injectors—Automatic.
Morrison, Jas., Brass Mfg. Co., Toronto.
Penberthy Injector Co., Windsor, Ont.

Iron Pipe.
Page-Hersey Iron and Tube Co., Guelph.

Iron Pumps.
McDougall, R., Co., Galt, Ont.

Ladders—Extension.
Waggoner Ladder Co., London, Ont.
Winnipeg Paint & Glass Co., Winnipeg.

Lanterns.
Kemp Mfg. Co., Toronto.
Ontario Lantern Co., Hamilton, Ont.
Wright, E. T., & Co., Hamilton.

Lawn Mowers.
Birkett, Thos., & Son Co., Ottawa.
Maxwell, David, & Sons, St, Marys, Ont.
Smart, Jas., Mfg. Co., Brockville, Ont.

Ledgers—Loose Leaf.
Crain, Rolla L., Co., Ottawa.

Locks, Knobs, Escutcheons, etc.
Gurney, Tilden Co., Hamilton.

Lumbermen's Supplies.
Pink, Thos., & Co., Pembroke, Ont.

Machinery Supplies.
Armstrong Bros. Tool Co., Chicago, Ill.
Canada Foundry Co., Toronto.
Canadian Fairbanks Co., Montreal and Toronto.
Jardine, A. B., & Co., Hespeler, Ont.
Jenkins Bros., New York.
Kerr Engine Co., Walkerville, Ont.
Morrow Machine Screw Co., Ingersoll, Ont.
Penberthy Injector Co., Windsor.

Machines—Power Hack Saw.
Diamond Saw & Stamping Works, Buffalo

Mantles, Grates and Tiles.
Batty Stove and Hardware Co., Toronto

Manufacturers' Agents and Brokers.
Gibb, Alexander, Montreal.
Jenking, A. C., & Co., Montreal.
Rogers, Herbert & Co., London, Eng.
Pearce, Frank & Co., Liverpool, Eng.
Thorne, R. E., Montreal and Toronto.
Turnbull & Henderson, Vancouver, B.C.

Metals.
Canada Iron Furnace Co., Midland, Ont.
Canada Metal Co., Toronto
Caverhill, Learmont & Co., Montreal.
David, R. Sullivan, Montreal.
Deseronto Iron Co., Deseronto, Ont.
Eadie, H. G., Montreal.
Frothingham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson., W., Pontardawe, Wales
Henderson, J. A., Montreal.
Ironside, Son & Co., London, Eng.
Jackson, C. F., & Co., Vancouver, B.C.
Johnston, Rd., Clapham & Morris, Manchester, Eng.
Kemp Mfg. Co., Toronto
Leslie, A. C., & Co., Montreal.
Lewis, Samuel, & Co., Dudley, Eng.
Lysaght, John, Bristol, Eng.
Montreal Rolling Mills Co., Montreal.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Portland Rolling Mills, St. John, N.B.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Stairs, Son & Morrow, Halifax, N.S.
Summers, John, & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

Metal Lath.
Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

Metal Polish, Emery Cloth, etc
Solarine Company, Chicago.
Oakey, John, & Sons, London, Eng.

Mop Wringers and Buckets.
Eagle Cooperage Works, Circleville, O.

Nails and Spikes.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

Paints, Oils, Varnishes and Glass.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Fenner, Fred., & Co., London, Eng.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works Windsor, Ont.
St. George, H. E., London, Ont.
Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

Perforated Sheet Metals.
Greening, B., Wire Co., Hamilton.

Plumbers' Tools and Supplies.
Borden Co,, Warren, Ohio.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co., Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Stairs, Son & Morrow, Halifax, N.S.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Toronto Foundry Co., Toronto
20th Century Mfg. Co., New York.
United Brass Mfg. Co., Cleveland, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Imperial Cement Co., Owen Sound.
Thompson, B. & S. H. & Co., Montreal.
Winnipeg Paint & Glass Co., Winnipeg.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.
Winnipeg Paint & Glass Co., Winnipeg.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Caverhill, Learmont & Co., Montreal.
Lewis Bros., Montreal.
Spear & Jackson, Sheffield, Eng,

Saws—Hack.
Diamond Saw & Stamping Works, Buffalo

Saws—Hack Frames.
Diamond Saw & Stamping Works, Buffalo

Saws—Power Hack.
Diamond Saw & Stamping Works, Buffalo

Saws—Kitchen.
Diamond Saw & Stamping Works, Buffalo

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co., Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Round, John, & Son, Sheffield, Eng.

Skates, Etc.
Fisher, A. D., Co., Toronto.
Starr Mfg. Co., Dartmouth, N.S.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co., Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Dieckmann, Ferdinand, Cincinnati.
Clare Bros., & Co, Preston, Ont.
Collins Mfg. Co., Toronto.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
Harris, J. W., Co., Montreal.
James & Reid, Perth, Ont.
Joy Mfg. Co., Toronto.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
McLean, Holt & Co., St. John, N.B.
Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Perfection Safety Furnace Pipe Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Stewart, Jas., Mfg. Co., Woodstock, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Tub Hoops.
Watt & Squire, Brantford.

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Coating.
Alabastine Co., Paris, Ont.
Winnipeg Paint & Glass Co., Winnipeg.

Washing Machines, etc
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Caverhill, Learmont & Co., Montreal.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

Window and Sidewalk Prisms
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Munro Wire Works, Winnipeg.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
United Factories, Toronto.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex ., & Co., Montreal.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

J.C.M.

Galvanized Sheets for Corrugating are best. Submit

your enquiries by mail or cable to

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER ENGLAND

UTICA TOOLS LEAD IN QUALITY, DESIGN and FINISH

ASK YOUR DEALER FOR THEM or WRITE US.

UTICA TRADE MARK

ONLY THE GENUINE BEAR THIS TRADE MARK



This plier is specially adapted to work on heavy cable wire.

It has a large throat and is a most powerful tool.

Every tool guaranteed

UTICA DROP FORGE & TOOL CO.
296 BROADWAY, NEW YORK
Factory, Utica, N.Y.

Canadian office,
215 Coristine Bldg., Montreal.

ARE YOU IN NEED OF

SPRINGS?

We make them any shape

Send samples for prices

The WALLACE BARNES CO., BRISTOL, Conn.

The most light for the least money

C. G. E. INCANDESCENT LAMPS

LONG LIFE EFFICIENCY RELIABILITY

Write for prices and quantity discounts.

CANADIAN GENERAL ELECTRIC CO., LIMITED

HEAD OFFICE: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland

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THE BEST EFFORTS

of skilled workmen are to be seen in the

METALLIC ASH-SIFTER

and the best results are to be had from this sifter. A hardwareman with an eye to sales, of course selects the **METALLIC ASH-SIFTER** in preference to any so-called metallic sifter or unreliable wooden sifter. He doesn't want stock that depreciates, or about which there is always complaint. The **METALLIC ASH-SIFTER** suits every time. Have you a supply?

C. M. CUTTS & CO., Toronto Junction, Ont., Sole Makers

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED

STANDARD OAK

FOR A HEATER.

SOVEREIGN

AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited

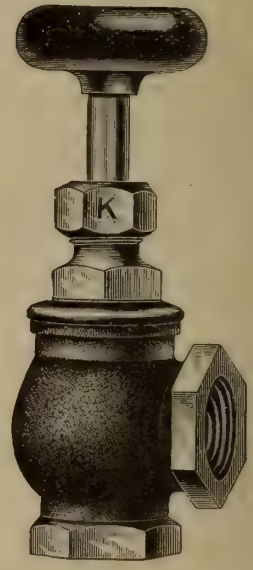
OTTAWA, ONTARIO

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.

HESPELER - - - ONTARIO



Kerr's Standard and Jenkin Disc Radiator Valves

are perfectly constructed, and of beautiful design. Like all "Kerr" specialties, strictly high-grade.

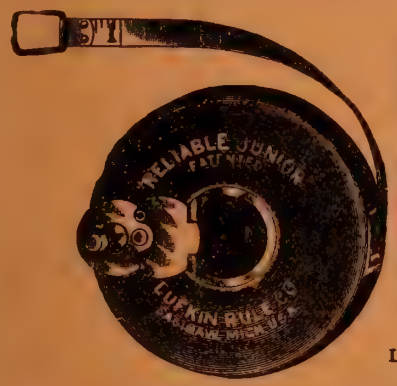
The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE - ONTARIO

IRON

Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

London Rolling Mill Co.
Limited,
LONDON, CANADA.

STEEL



LUFKIN MEASURING TAPES

Steel, Metallic, Linen, Pocket, Ass Skin, Pat. Leather, Bend Leather, Etc,

ARE THE BEST AND MOST POPULAR TAPES IN THE WORLD.
YOUR STOCK IS NOT COMPLETE WITHOUT THEM.

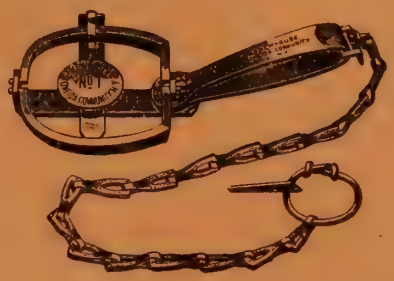
LUFKIN RULE CO., Saginaw, Mich, U.S.A.

London Office and Warehouse—48 Lime St. New York City Branch—220 Broadway.

For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.

FURS ARE VALUABLE

Don't allow your catch to escape because caught in a poor trap. GENUINE NEWHOUSE trap will hold the game and earn its extra cost several times in a season.



Newhouse Steel Traps

ARE ABSOLUTELY GUARANTEED

Made Since 1848 by

ONEIDA COMMUNITY, Limited

Write for Catalogue NIAGARA FALLS, Ont.

PFLUEGER'S Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines.

Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio

Est. 1866. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve Medals



Awarded
By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

"Redstone"

High Pressure
Sheet Packing

A packing that will hold. For use in highest pressures for steam, hot or cold water and air. Packs equally well for all.

From actual tests, we believe that this packing is the most durable and satisfactory of any on the market. Try a sample lot and see for yourself.

Manufactured Solely by

THE GUTTA PERCHA & RUBBER MFG. CO.
of TORONTO, LIMITED

HEAD OFFICES.
47 Yonge Street, Toronto.
Branches: Montreal, Winnipeg, Vancouver.

We can quote favorable prices on the following goods for shipment from the United States:

"Apollo" Galvanized Sheets,
Black Sheets, Bessemer and Open Hearth.
Range Steel, Pickled Sheets., etc., and different qualities suitable for all purposes.
Polished Sheets of different grades,
Coke and Charcoal Tin Plates,
Black Plates,
Taggers,
Terne Plates,
Large Tinned Sheets,
Galvanized Canada Plates,
Black Canada Plates.

Send us your enquiries.

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

Dominion of Canada Sales Agents
UNITED STATES STEEL PRODUCTS EXPORT COMPANY
Sheet Steel and Tinplate Department - - New York

SADLER & HAWORTH

LEATHER BELTING

YOU CAN ALWAYS DEPEND

on the **quality** of our **leather belts.** We are satisfied to abide by future results if you will give us a trial. If you want a dependable belt, ask us about our brands—

Extra Standard
Diamond Agricultural

Montreal. Toronto.

PLUMBING SECTION, PAGE 53.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL, TORONTO, WINNIPEG, DECEMBER 23, 1905 NO. 51

POCKET KNIVES

H. BOKER & COS

IMPROVED

TREE BRAND

TRADE MARK

RAZORS CUTLERY SCISSORS

For Sale by leading Wholesale Hardware Houses.

EVERY SHEET BRANDED

Unscrupulous dealers have been known to ship out bundles with a sheet of "Queen's Head" on top and cheap unbranded sheets inside. Every sheet of "Queen's Head" and "Fleur de Lis" is branded and the quality guaranteed.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.

A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch.

Canada's Most Expert Radiator Manufacturers

The Very Best

It takes skill, first-class material, and experience to make the very best radiators.

It was because we had the skill and the material and the experience that we were able to make

SOVEREIGN RADIATORS

the very best radiators.

In **Sovereign Radiators** you find Increased Surface, Reduced Friction, Larger Connections, Screwed Nipples.

Our King St. West Branch, Toronto, has a stock of **Sovereign Radiators**, which can be shipped on short notice.

Carry "Sovereigns" and success is yours



Taylor-Forbes Company, Limited

TORONTO 21 Richmond St. W.

Head Office and Works: GUELPH

MONTREAL 9 De Bresoles St.

See Classified List of Advertisements on Page 71.

English Brass Goods

Brass Candlesticks **Letter Racks** **TRAYS** **Pen Trays** **Brass Clocks**

RETURNED DEC 23 1905



BRASS INK STANDS

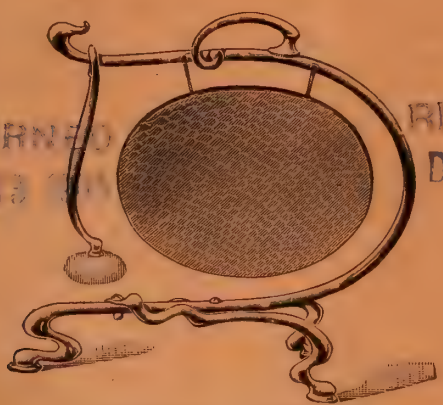


BRASS CLOCKS



BRASS TRAY

All Sizes, in Round or Oblong



DINNER GONGS



DINNER GONGS



DINNER GONGS

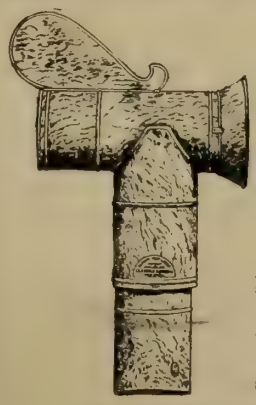
WRITE FOR PRICES AND CATALOGUE

RICE LEWIS & SON

LIMITED

TORONTO.

Business Getters for Tinsmiths



Are there any defective chimneys in your locality?

Then it is your chance to get business.

— THE —

ZEPHYR Ventilator

saves the expense of building a high chimney.

It is so constructed as to guarantee a perfect draft, and, therefore, easy combustion.

By using the ZEPHYR, it is possible to burn soft coal with the best results.

The smoke is easily drawn off, enabling an even heat to be generated.

THE ZEPHYR IS STRONGLY PUT UP AND WILL RESIST ANY STORM

This is what others think of it:

Montreal, June, 1901.

Messrs. J. W. HARRIS Co. Lt'd.

Dear Sirs,

We have been using two (2) of your "AEOLIAN" Ventilators for the past three years and would say that they have given entire satisfaction and are certainly all that you claim for them.

Yours respectfully, WARDEN KING & SON.

We manufacture and guarantee:

The Harris Filter. The Zephyr Ventilator.
The Aeolian Ventilator. Expansion Conductor Pipe.

The J. W. HARRIS COMPANY, Limited

Successors to LESSARD & HARRIS

Contractors ***MONTREAL***

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

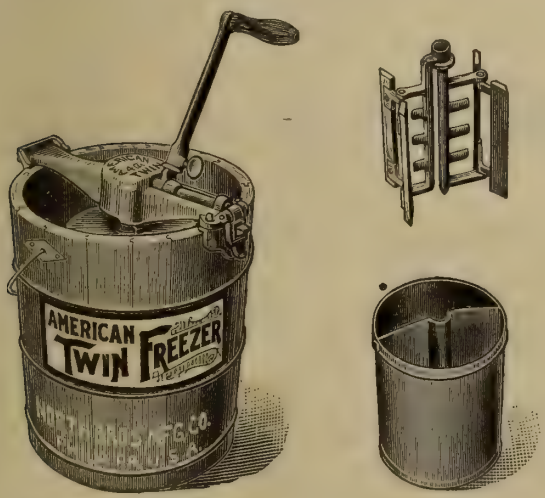
in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.



"AMERICAN" (2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.

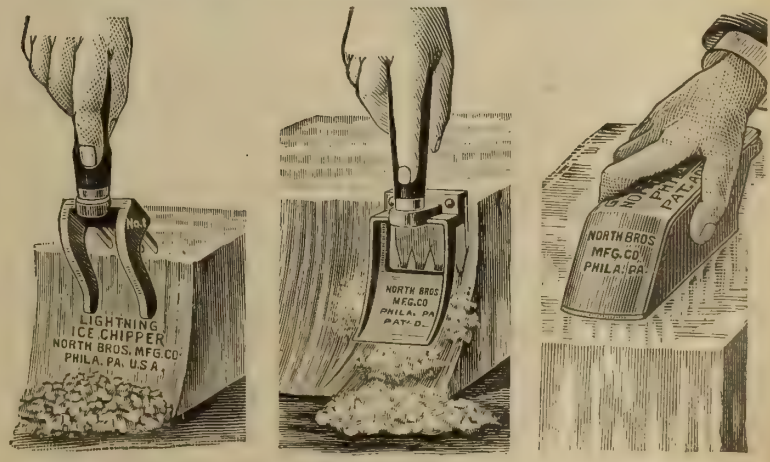
PHILADELPHIA, PA.

"LIGHTNING" "GEM" "BLIZZARD"



THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



"LIGHTNING" ICE CHIPPERS "CROWN" "GEM" ICE SHAVE

Christmas Greeting 1905

We desire to take this opportunity to heartily wish our many Customers and Friends, **A Very Merry Christmas,** and to return our sincere thanks for the liberal patronage extended to us during the past year.

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

M. & L. Samuel, Benjamin & Co.

have removed their offices and warehouse to 54-56-58 Front West.

M. & L. Samuel, Benjamin & Co.

TORONTO

English House—16 Philpot Lane, LONDON, ENGLAND

THE "BONANZA"
CINDER SIFTER SHOVEL



Combined Ash Sifter, Cinder Sifter and Coal Sifter.
(PATENT PENDING.)

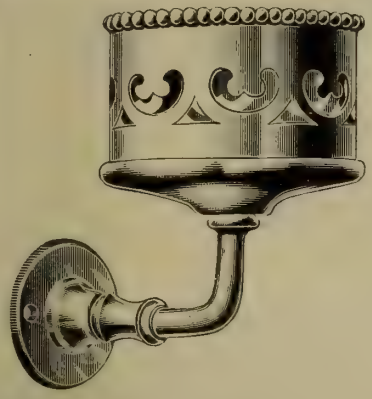
Write for price list and full information.

MANUFACTURED SOLELY BY

The Collins Manufacturing Co.

34 ADELAIDE STREET WEST, TORONTO

Also Ash, Coal and Snow Shovel. No dust, no dirt. Ashes sifted right inside furnace pit, and cinders thrown directly back in furnace. Same shovel picks up the ashes and deposits them in ash receptacle. Substantially made of extra heavy 18 gauge expanded metal; will last for years. Universally acknowledged to be the best thing ever made for the purpose. No order too large. Prompt shipment.



BATHROOM FIXTURES

are now made in Canada by

THE CARRIAGE MOUNTINGS CO., LIMITED

TORONTO

Catalogue B shows attractive styles of

TOWEL BARS, TUMBLER HOLDERS, SOAP DISHES, SPONGE BASKETS, ROBE HOOKS, PAPER FIXTURES, ETC.

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

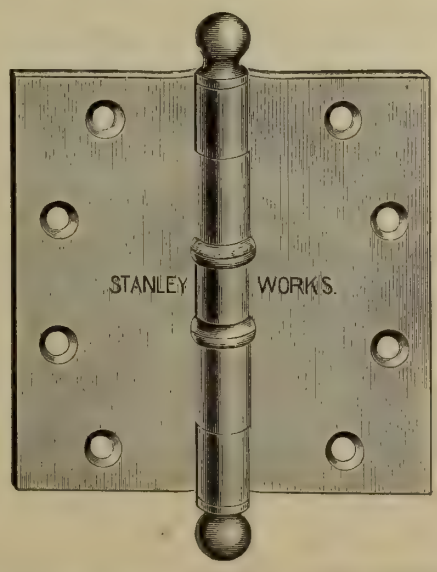
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FOR ALL THEIR IMPORTANT WORK. *DEALERS SHOULD HAVE THEM IN STOCK.*



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.

THEY CUT TO THE POINT

REGISTERED W TRUE TRADE MARK

"TRUE" BRAND SCISSORS

AND EVERY PAIR IS FULLY GUARANTEED

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BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

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GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
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ESTABLISHED 1847

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WITH SILVER AND PLATED MOUNTS

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

We want to mail our Catalogues to all Canadian Dealers, will YOU send us YOUR name?

HOTEL and SHIP'S OUTFITS, special goods for hard wear. Special designs for all purposes supplied free.

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

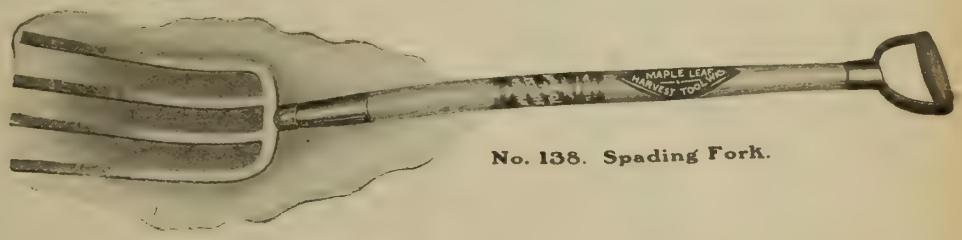
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Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



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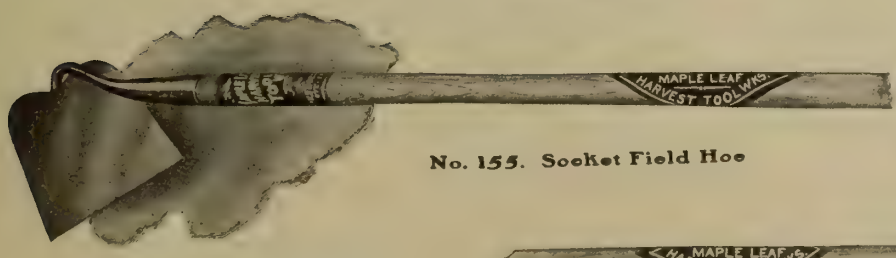
No. 138. Spading Fork.



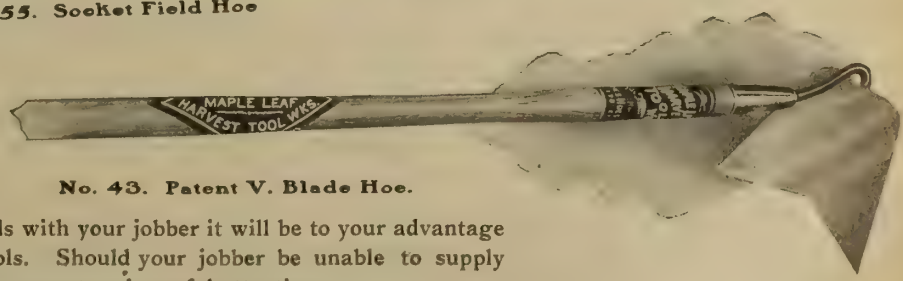
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No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

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When placing your order for harvest tools with your jobber it will be to your advantage to specify for the "**Maple Leaf**" Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Pink's Lumbering Tools

MADE IN CANADA

THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

Pink's Duck Bill Winter Cant Hooks, Handled in Split Maple.

Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

Boom Chains, Pike Poles, Skidding Tongs, Boat Winches, etc.

Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

I Can Furnish You with the

Brazil Patent Snow Plough and Road Maker;
also **The DesJardin Patent Log Sleighs**

Send for Catalogue and Price List

THOMAS PINK & CO., Pembroke, Ont., Canada

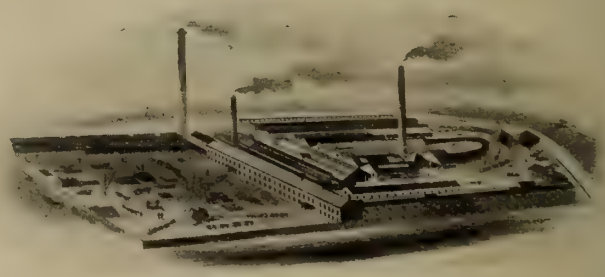
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Hawarden Bridge Works, Shotton, Flintshire, England



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These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



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GALVANIZED SHEETS

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One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal

A Christmas Wish

The air resounds with chant and chime,
The season that we love is here,
May Christmas prove a happy time,
And usher in a bright New Year.

Frothingham & Workman, Limited
Wholesale Hardware and Iron Merchants
FOUNDED 1809 MONTREAL, CANADA

F. & W.

PERFORATED SHEET METALS

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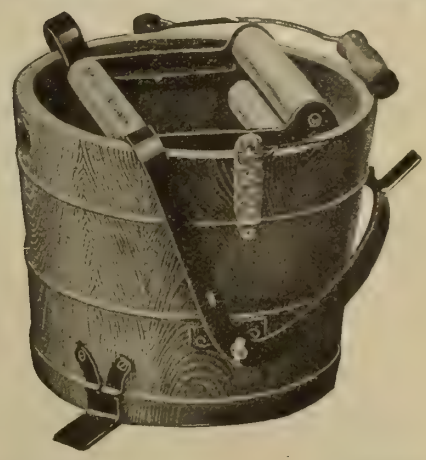
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Grain Cleaning Machinery,
Bee Keepers,
Malt Kiln Floors, Etc.

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That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS
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A bright design often goes a long way to increase the effectiveness of a good advertisement.

Our Pictorial Ad. Department is designed to assist our patrons to improve the quality of their advertising at the lowest possible cost.

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You have sold the old style Irons for years.

The handles break.

Customers are dissatisfied, and they remember it against the dealer who sold them.

Next time they are buying Irons they go elsewhere.

Then it's time to look for Something Good.



THE OLD TROUBLE



The New C.L.C. Special Irons

are sold at a reasonable price. They have a new style handle, which is indestructible, with a straight cold wood grip, so bolted together that it cannot come apart. The spring in this handle never loosens.

C.L.C. IRONS HOLD THEIR HEAT, and are handsomely nickel-plated.

Three assorted Irons in a set; six sets in a case.

Sell the C.L.C. SPECIAL IRONS

and secure the Sad Iron Trade. Your Customers will appreciate them.

Before buying Sad Irons, write for a sample set.

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We manufacture Cordage and Binder Twine of every variety.
We solicit your 1906 business for the following brands:

Blue Ribbon,	650 ft.	per lb.
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Tiger,	550 "	"
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MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.
MERRICK, ANDERSON & CO., Winnipeg Distributors of our Binder Twine for Northwest.



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The Very Newest

Combination, Bow Lever and Side Pedal drive; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



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THESE ARE TRADE BRINGERS

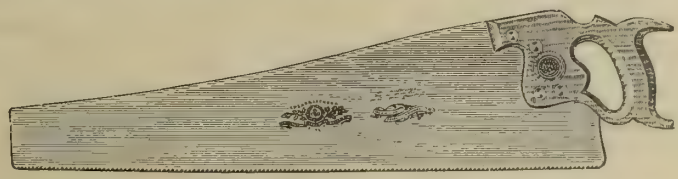
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THE DOWSWELL MANUFACTURING CO., Limited
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Established 1774 **Established 1774**

We are "old" in experience, "young" in method. We rivet our attention on "make" and "material," the combination that produces the unrivalled

SPEAR & JACKSON HANDSAWS



Our Circular Saws, too, are made in a "telling" way, in all sizes and for all purposes. We'll stand comparison on the price question. Look into our goods. Correspondence with this house will benefit **you—your** business.

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HARDWARE AND METAL

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The lower blade is cogged, thus holding the material in place for the sharp upper blade to cut it.

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If it's money you want, we can put you on the right road. Our



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We Manufacture CHAIN

Brass and Iron Jack Chain
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FOR ALL PURPOSES. WRITE FOR PRICES.

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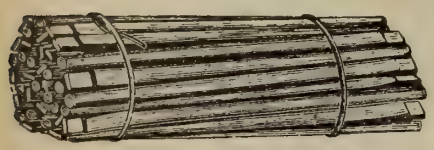


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Your Order Solicited.
QUEBEC AGENT:—**J. A. BERNARD, 21 St. Peter St., Quebec, P.Q.**



Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.

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Cutlery and Plated ware. Agents for Norway Iron, Steel, Galvanized Iron Chains, Sheet Iron, Hoop Iron, Machinery Steel, PEN-DAR Metal Lockers.

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The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)

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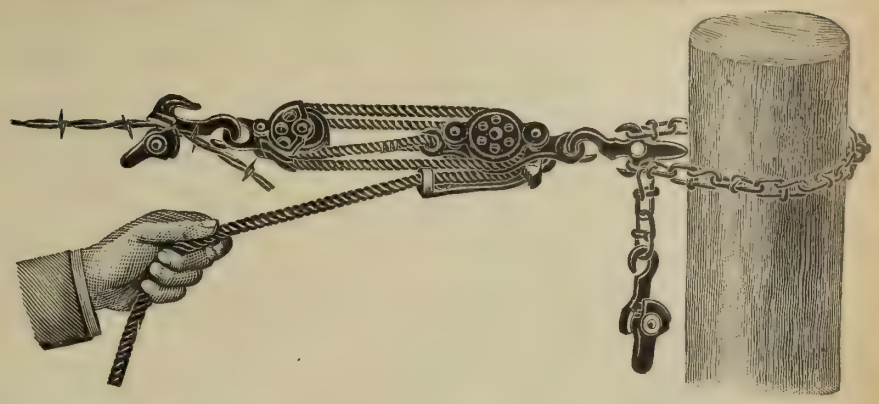
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None better on the market unless it is the Triumph.

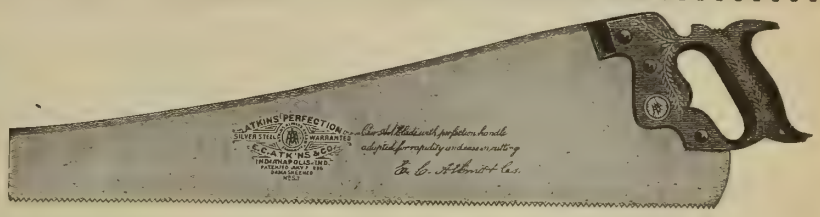
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WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

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Is behind every Hand Saw which bears our Factory Brand.

With this guarantee of quality it is no wonder that dealers find a line of **Atkins Celebrated Silver Steel Hand Saws** the fastest selling and most profitable stock that they can carry.

Quality is the Thing. Catalog and Discount furnished on request.

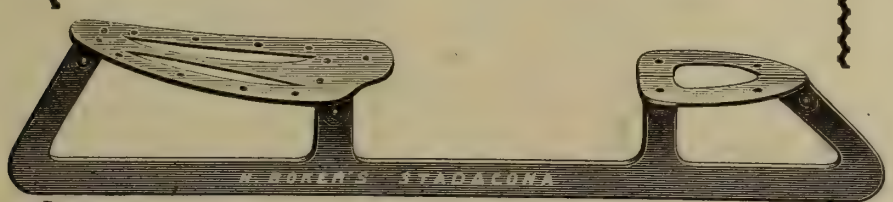
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DON'T MISS BUSINESS. You may not have stocked our skates.

We have provided for the rush season.

WE CARRY FULL LINE OF SHOES with our patent hook. We can give mail orders quick despatch.

Skates attached to shoes complete.

When ordering state size of shoe usually worn.

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POWERFUL, PERFECT, PRACTICAL

Divine's Water Motor

BUILT FOR BUSINESS
ACCURATE AS A WATCH

Power for sewing machines, lathes, scroll saws and other small machines.

For grinding edge tools and polishing silverware or other metals.

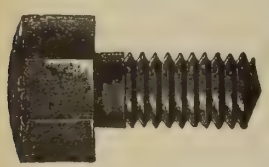
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Price, COMPLETE, including emery, buffing and pulley wheels, faucet connection, polishing composition, etc., **$4.00.**

$3.50 and this ad. will get the motor complete.

DISCOUNT TO THE TRADE.

Divine Water Motor Co.
296 Broadway, New York



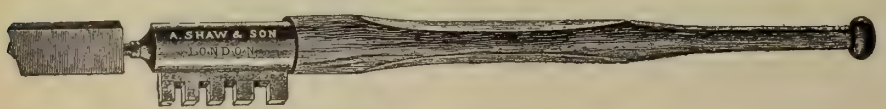
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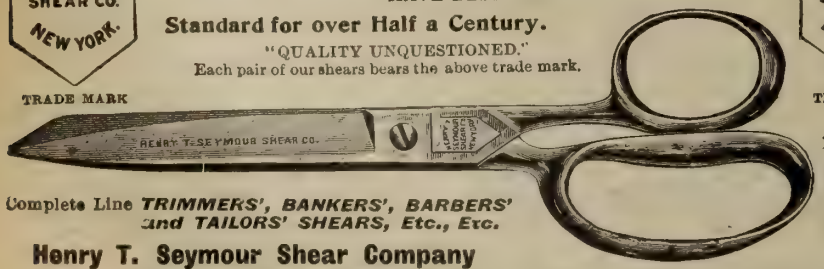
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"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK.

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Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

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are two vital elements in

GILBERTSON'S

COMET GALVANIZED SHEETS

That means they are soft, smooth, and easily worked, that they are flat, well galvanized and that they are lower in price than other high grade brands.

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OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

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(Continued)

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placed in as Ceiling Lights in any building gives a uniform white light in every corner. Applied to Lean-to Skylight it is effective in long rooms where it would almost seem impossible to have anything but darkness.

No other daylight-increasing system can perform thus except in the "patch-light" way.

Maximum Light Glass is successful in "operation" because it is successful in "make." The difference between it and "other" systems is the difference between the **ability to perform** and the **attempt to perform.**

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THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED

Dec. 20, 1905.

We wish our many friends and customers a Merry Christmas and a Happy New Year.

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KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

KEMP MFG. AND METAL CO., Limited,
McDermot Ave. East, Winnipeg, Man.

Hardware and Metal

ANNUAL MEETING N. W. C. T. ASSOCIATION.

A Record Attendance.

WITH a membership of 1,843 and a surplus in the treasury of almost $100,000, the Northwest Commercial Travelers' Association is undoubtedly in a flourishing condition. The favorable showing reflects great



D. J. Dyson, President N.W.C.T. Association.

credit on the management of the association in recent years and the careful husbanding of resources by the astute and watchful treasurer who for ten years has been the custodian of the strong box. With the resources on hand the association are now planning to extend the field of their activities and as a result of the discussion at the annual meeting in Winnipeg on Saturday, December 16, it seems likely that the long discussed project of building a commercial travelers' club will be pushed to conclusion.

Officers Elected.

On Saturday, November 25, officers were nominated at a general meeting of the association held for the purpose in the board room of the Winnipeg Grain Exchange building. The president and treasurer were elected by acclamation, but as a result of the nominations there was a keen contest for the vice-presidency and for positions on the board of directors. Ballots were mailed to all the association members and a fairly heavy vote was polled. The elections resulted as follows :

President—D. J. Dyson (acclamation).
Vice-president—J. E. McRobie.
Treasurer—L. C. MacIntyre (accl.).
Directors—John Horne (retiring president), A. S. Lock, F. H. Nesbitt, Geo. Wilson, Thos. Montgomery, F. M. Morgan, W. C. McLean, G. F. Bryan, F. W. Drewry.

British Columbia officers and directors :

Vice-president for Vancouver — E. F. Gerster.
Vice-president for Victoria — W. W. Duncan (accl.).
Directors for Vancouver—C. P. Egan, F. A. Richardson.
Director for Victoria—J. C. Devlin (accl.).
Director for New Westminster — Fred Lynch (accl.).
Director for Kootenay—Geo. Nunn (accl.).

President Dyson.

In their newly elected president the active Northwest travelers have a man who is one of themselves. The duties of the office are such that it is absolutely necessary to elect as president a man who is not an active traveler. It is desirable, however, that he should be a



J. E. McRobie, Vice-President N.W.C.T. Association.

man who is closely in touch with the boys on the road.

Mr. Dyson complies with these requirements. As head of the Dyson Co. his business duties keep him in Winnipeg most of the time, but it is only some eighteen months or more since he was an active traveler, and hence he is in touch with the sentiments of the man who carries the sample grip and has not had time to forget his point of view. Mr. Dyson is justly popular among the travelers for his frank, straightforward character and his kindliness of disposition. The travelers have the utmost confidence in him and they know that the affairs of the association are in safe hands.

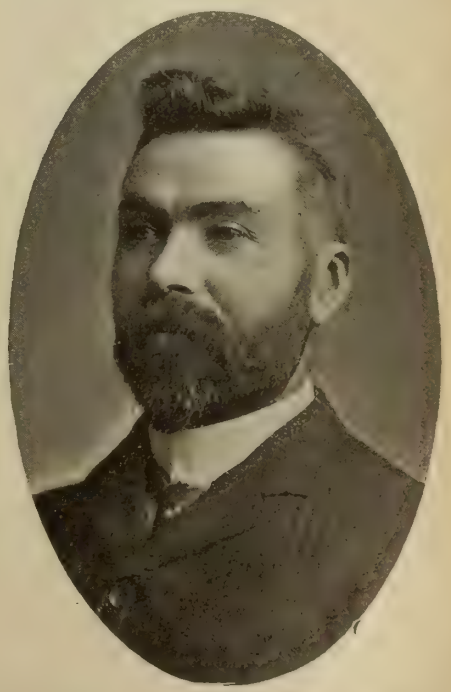
Mr. Dyson came west in 1891, severing his connection then with Gorman, Dyson & Co., of London—now Gorman, Eckert & Co. He founded in Winnipeg the Dyson-Gibson Co., which is now known as the Dyson Co. In building up his present extensive pickle and spice trade Mr. Dyson has traveled the territory from Winnipeg to the coast many times and many retailers will be glad to learn in these columns of the honor conferred upon him.

Vice-President McRobie.

Vice-President J. E. McRobie is an active traveler whose good qualities have made him popular in all parts of the west. He is at present secretary-treasurer of the Western Retail Hardware and Stove Dealers' Association and in that capacity spends most of his time on the road . For a number of years he represented the James Robertson Co., Limited, in the west. He was a faithful member of the board of directors last year and there is no doubt that in him the association will have a capable vice-president. His election is very popular among the boys.

Treasurer MacIntyre.

For ten years L. C. MacIntyre has been custodian of the association funds and he has been again elected by acclamation for his eleventh term. Ten years ago, as he mentioned in the course of a speech at the annual meeting, the membership was only 369 ; it is now 1,843. Mr. MacIntyre has therefore seen the association make great strides



John Horne, Retiring President N.W.C.T. Association.

during his term of office. His re-election by acclamation is sufficient testimony of the high esteem in which he is held by his fellow members.

Among themselves commercial men are plain speakers and their criticisms are frank. The only criticism of Mr. MacIntyre's administration has been that he is over zealous in his protection of association funds, and surely that criticism is about the highest compliment that could be paid to a treasurer. Even his failings seem to "lean to virtue's side."

Mr. MacIntyre came to Winnipeg from Victoria county, Ontario, in 1882. For 10 years he was a traveler for Turner, McKeand & Co., wholesale grocers, of Winnipeg, and for the last 13 years he has been manager of the Paulin-Cham-

President's Report.

The president's report, which was adopted unanimously, showed a very satisfactory condition of affairs.

The total membership is now 1,843, showing an increase for the year of 16 per cent., being a total of 293 new members. The membership is apportioned as follows: Winnipeg, active, 1,429; Winnipeg, honorary, 30; life members, 2; British Columbia, active, 382.

The directors have held fifteen meetings during the year, with an average attendance of eight members.

The association has to mourn the loss of ten members, namely: Messrs. C. Jacobs, J. E. Code, W. W. Hicks, J. A. Webber, W. C. Hourston, W. T. Johnstone, S. C. Burton, J. M. Laver, K. P. Wollaston, and R. J. Whitla. The total claims on the mortuary fund this year amount to $1,450, some $600 less than last year.

The British Columbia branch of the association cootinues to flourish and increase in members, the total this year being 382 as against 306 in 1904.

The association's liability under the mortuary benefit by-law now amounts to $350,420, an increase for the year of $63,795.

A branch has now been opened for the issue of certificates in Calgary, with Mr. Chas. J. Packham as assistant secretary in charge. Any members of the association making their headquarters in Alberta will apply to Calgary office for certificate for 1906.

The board have this year made two grants to hospitals, namely: $250 to furnish a ward in the new Vancouver hospital; this is at the urgent request of the British Columbia members, this ward to be always at the service of commercial travelers. At the Winnipeg General Hospital the ward which was equipped by the association some years ago was found in need of new furniture, etc., and was therefore refurnished throughout at a cost of $218.

The board have made every effort in conjunction with the other associations, boards of trade, and other representative bodies to have disallowed by the Dominion Government the obnoxious tax on travelers recently put in force both in British Columbia and Quebec, so far without avail.

At the invitation of the Eastern Canadian Passenger Association the board authorized the president and secretary to attend a meeting in Montreal of the presidents and secretaries of all the associations of commercial travelers in Canada and the Eastern Canadian Passenger Association, to discuss the present method of granting rebates by the issuing of certificates by each association. The railway companies have for some time been desirous of securing greater uniformity and no duplication of numbers, and suggested that all certificates should be supplied by the passenger association to each commercial travelers' association in consecutive numbers and absolutely uniform. This proposition did not commend itself to the delegates, as in the first place it would be likely to cause the several associations to lose their identity, and being, secondly, likely to cause some complication in connection with the association insurance. There are many other points of importance which should be considered before definite action is taken. The delegates therefore asked that action be deferred until next year, and it was so decided, and there will be another meeting of delegates called early in the new year by the secretary of the Eastern Passenger Association, of which all delegates will have thirty days' notice.

The delegates were unanimous in condemning the travelers' tax, and passed a resolution in Montreal which was forwarded to the Dominion Government, copies being sent to the premier and other ministers.

The accident and disease insurance of $1,000 on each member has again been renewed with the Ocean Accident and Guarantee Corporation, tenders having been taken and theirs being the most advantageous.

In conclusion, the association is congratulated on its splendid showing this year, and there is no doubt that it will continue to grow and prosper under the management of the new board.

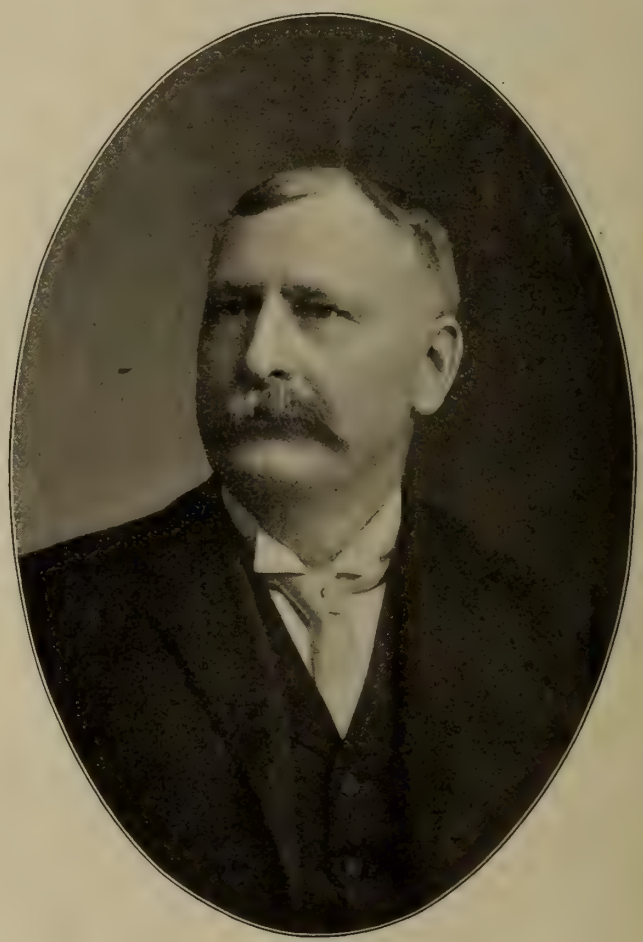
(Signed) FRED. J. C. COX,
Secretary.
JOHN HORNE,
President.

In Flourishing Conditions.

Mr. MacIntyre's report showed the finances of the association to be in a flourishing condition. Owing to the sale of the Lombard street property the assets increased during the year by $35,421.51. The normal increase was more than $3,000 larger than in any previous year. The net surplus is $97,709.73.

Club Room Proposal.

At the general meeting in November a committee was appointed to inquire into the practicability of renting recrea-



L. C. MacIntyre, Treasurer N.W.C.T.

tion or club rooms in Winnipeg for the members. A. L. Johnson, chairman of the committee, presented a report showing the cost of rental of two or three suites of rooms in Winnipeg. The members thought the rental excessive and after long discussion it was decided, on motion of L. C. MacIntyre and A. S. Lock, to authorize the executive to purchase a lot and proceed to build a club house.

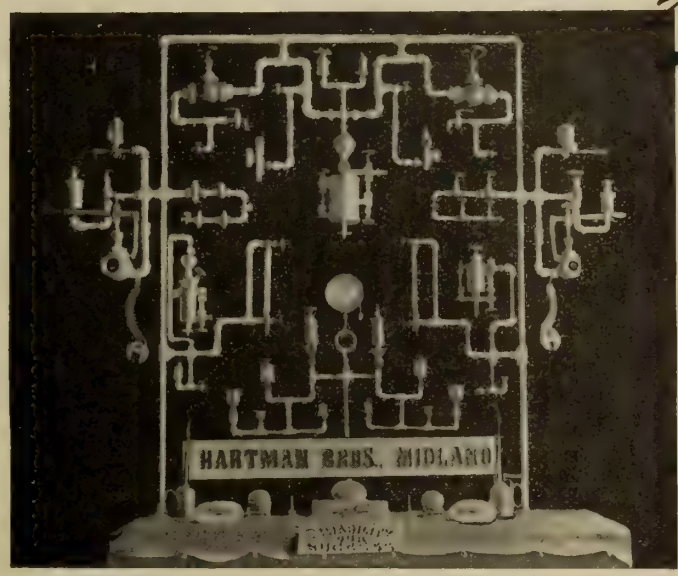
Glace Bay's new $30,000 electric lighting plant was put into operation last week. When the old plant was established four years ago 400 lights were in use. Now there are 6,000, and this is expected to increase to 10,000 in two years. The population of Glace Bay is about 15,000.

Displaying Plumbing and Steamfitters' Goods

SOME plumbers are content with little or no display, relying either upon their ability to talk or on the value of the work executed by them in the community in which they live. Others, however, take special interest in preparing an attractive showroom, displaying new features and keeping their establishment up-to-date in all particulars. One way to bring to the public notice new fixtures and to demonstrate the application of old ones, is to set closets, basins, tubs, etc., both under water pressure and with sewer connections. This allows the prospective purchaser to see the working of all fixtures in a much better way than if water pressure and sewer connection were not at hand. It is also a good idea to rough in the entire plumbing for a bathroom, leaving the floor open so that the soil pipe may be inspected, showing how the lead bends are connected up, and in all respects to bring to the view of prospective customers the actual working and uses of various fixtures, traps, back vents, air chambers, etc. This affords the plumber an opportunity to explain at some length the superiority of his work over that of others, to show why back vents are used, and in a general way to bring out the mechanical features of a plan. A wrinkle which is sure to bring trade is to inclose a small room, about the size of an ordinary bathroom, have it nicely papered with a varnish paper and set up the fixtures in the way they would be used in the room. This affords an opportunity to display to advantage various nickel plated fixtures, such as towel racks, clothes hooks, soap boxes, etc., used in bathrooms, and which are a profitable line for the plumber to carry. This method of displaying fixtures has the advantage of showing off the goods in their true size; goods on the floor being apt to be dwarfed by the large dimensions of the room, and the size of the other goods near them. If space is available and business warrants, two or three bathrooms should be fitted up with different priced fixtures to explain quickly and forcibly to customers how certain priced goods will look when installed in their homes. Another feature which has been found to be of advantage is to have neat photographs of important pieces of work either kept in a book in the office or framed to hang on the walls, showing customers different arrangements, expensive fixtures and general conditions in up-to-date houses, regarding plumbing fixtures. A plumber in a small Pennsylvania town, says a traveling salesman in the Metal Worker, has a neat showroom, and the expense connected with fitting it up was not more than is ordinarily incurred by plumbers. The first space of 15 feet was devoted to the display of tubs and other fixtures, which were arranged tastefully so that people could walk around all sides of them and view the fittings. On the walls, which were free from shelves, were arranged either photographs of the buildings or architects' wash drawings where this firm had installed the plumbing work. The rear of the room, instead of having the usual rough counter with showcase on top, found in so many stores, had neat glass show counters about 12 feet in length, of the same kind as those ordinarily used by cigar dealers and which cost very little more than the ordinary wooden counter with glass showcase on top. In these were placed nickel plated fittings of all kinds, which not only displayed themselves to the best advantage but were kept free from dust. Back of these counters were desks for the proprietors and the bookkeeper, and still further back in the room was a door leading into the shop. The shop, however, had an entrance to the street through another part of the building, so that workmen never came through the showroom. This is very desirable, as careless workmen often rub up against a prospective customer with a piece of soil pipe.

NOVEL METHOD OF DISPLAY.

HARTLAND BROS., Midland, have a novel and effective method of displaying stationary and marine engineers' supplies, as is shown in the accompanying illustration. On a nickel plated brass pipe frame they have executed a well-balanced and fancy design exhibiting much ingenuity and excellent workmanship in assembling the numerous parts contained in the display. They state that this is one of their most popular selling lines, and the exhibit has proved a good advertisement to their business. The following articles were used in the design: Oil cans, oil cups, grease cups, S. F. oil cups, cylinder lubricators, auto S. F., lubricators, steam whistles, steam gauges, water gauges, pet cocks and cylinder cocks, inspirators and injectors; globe, angle, and check valves; peet valves and gate valves, steam cocks, relief valves and throttle valves, brass fittings, including tees, Ls, unions, nipples, crosses, bushing and plug; also full line engine packing and engineers' tools.



Novel Display of Engineers' Supplies.

KEEP THE WINDOWS CLEAN.

The old problem of keeping the windows free from frost is now a live one. Many methods that have been devised from time to time are well known to the trade, but there are some trimmers who do not take advantage of them. If the windows are well ventilated they will not coat with moisture, or become covered with frost nearly so much as unventilated windows. One of the simplest and quickest methods of removing ice from windows is to place common coarse salt on a dry cloth and rub the frost. You will be surprised to see how rapidly the frost is removed, and the glass will not coat again for a day or two, even in very cold weather.

A properly dressed window is a valuable advertising asset; not only is it a forceful advertisement, but it is invariably taken as an indication of the store and the stock.

HARDWARE AND METAL

President:
JOHN BAYNE MACLEAN

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NEW ADVERTISEMENTS.

Canadian Co-Operative Co., Winnipeg.
Whittaker Stove Works, Windsor, Ont.
Ernst Stevens, Cradley Heath, Eng.

GET AFTER FARMERS' TRADE.

THE days of January slackness are not far away, now, but the aggressive hardwaremen will not be content to sit on a stool with his feet on the stove and a pipe in his mouth waiting for somebody to come in and buy a pound of nails. No, he will rather begin right now to plan for work during that slack month which will increase his business in the future.

What class of trade pays you best? Unless you are doing business in the heart of a large city, the answer must, almost of necessity, be that it is the farmers' trade which you most value. And, as you cannot get too much good business to suit you, your endeavors should be along the line of developing the farmers' trade. And, in doing this, do not forget to estimate carefully the value of the personal element in business. A prominent retailer to whom the writer was speaking, not long since, declared that he attributed his success to the personal interest he always took in his customers. He makes it a point to be in the store throughout the business hours of the day. He personally attends to the wants of as many customers as possible and, even when his clerks are waiting upon them, he takes the trouble to greet them with a cheerful "Good day." That man began business in a small Quebec village. He moved into Montreal and opened up on a little side street, but soon found it advisable to change to his present quarters on one of the busiest retail streets in the city.

Taking a lesson from the experience of this hardwareman, see that you throw yourself heartily into a January campaign among the farmers of your vicinity. If you have a horse (and there are few hardware dealers who have not) drive around among them making friendly calls on those you know, and getting acquainted with those who are strangers to you. In this way you will greatly interest them in your business, perhaps without even mentioning it. And a few things you hear incidentally will be of immense value to you. Is your host going to build a new barn? Get after his order for builders' hardwares. Does his wife need a new kitchen range? That is your chance. Perhaps, too, he has been thinking of buying a cream separator, and you ought to be loaded up on the points of the line you carry so as to set things going your way.

These are but a few hints of the good that can be done by well-timed personal calls. An aggressive, but, at the same time persuasive man, will gain many new customers and get a firmer hold on old ones by adopting this plan.

TORONTO'S ADVERTISING SCHEME.

TORONTONIANS are awakening to the commercial possibilities of their city. This is good. But what is better, they are discussing practical advertising methods, and a few days ago a conference was held under the auspices of the Board of Trade with this end in view.

Toronto has great possibilities and great attractions, but its weak spot is its municipal corporation. Business common sense is as necessary to the government of a city as it is to the management of a commercial enterprise, but the average member of the Toronto city council is poor in business common sense. When commercial problems are up for solution the governing body seems incapable of grappling with them, and they either kill or maim them by their stupidity or apathy.

Fortunately the Board of Trade is interesting itself in this publicity proposition. Otherwise we fear it would afford another opportunity for an exhibition of municipal blundering. A business council is necessary to deal with business problems.

THE WHEAT DISTRIBUTION.

ACCORDING to figures compiled in Winnipeg by Warehouse Commissioner C. C. Castle, the bulk of the western wheat crop has now been marketed. On November 30 51,784,980 bushels had already been marketed and he estimated that there were left in the possession of the farmers 36,633,000 bushels. His total estimate of the season's "bumper" crop is therefore 88,418,000 bushels, not quite so large as some enthusiasts predicted earlier in the season but nevertheless the largest crop on record. Moreover, the bulk of the season's wheat crop has graded high, a very important consideration when the grower counts the season's gains.

Not all of the wheat still in the farmers' hands will be shipped out of the west; it is estimated that 14,091,000 bushels will be required for seed and for consumption by country mills, leaving about 22,542,020 bushels still to be shipped. Adding the amount of wheat in store at country points waiting for cars it is probable that more than 40,000,000 bushels have still to come forward. The following table shows in detail the distribution of the crop:

Estimated yield ...		88,418,000
Inspected to date, 30,525 cars 30,525,000		
In store, country elevators, C.P.R..13,229,052		
In store, country elevators, C.N.R.. 2,165,890		
In transit, C.P.R.... 2,129,038		
In transit, C.N.R.... 577,000		
Milled west of Winnipeg to date 3,159,000		
	51,784,980	
In farmers' hands....36,633,020		88,418,000
Less required for country mills 5,591,000		
Less required for seed 8,500,000		
	14,091,000	
Balance to market..		22,542,020
Add amt. in store, in transit		18,100,980
Balance available to move by railways		43,643,000

From these figures it is evident that while much has already been accomplished by the railways, there is still a large proportion of the crop for which the growers have not yet received their money. A very large amount of money is still to be put in circulation. The effect of the wheat money in relieving financial stringency has already been very noticeable; bills have been paid and the load of credit has been very considerably lightened. A further improvement will be experienced as the balance of the crop is marketed. The prosperity of the west was never on a more solid basis.

KEEPING CLERKS' TIME

A COUPLE of weeks ago Mr. W. H. Wiggs, head of the Mechanics' Supply Co., Quebec, raised an interesting question in a letter published in these columns. The matter of keeping of clerks' time, the payment for overtime and the payment for lost time through sickness or for holidays, is one of interest to all business men whether wholesalers or retailers.

The questions asked have brought a prompt response, and the two replies published this week deal with the subject in an interesting manner. Other articles touching upon various phases of the question will appear in future issues of Hardware and Metal. So far, however, the discussion has been participated in chiefly by jobbers and as retailers will have more time to take up correspondence after the holiday rush, we may expect to hear from them shortly.

Mr. Fred Lariviere, president of the well-known hardware plumbing supply house of Amiot, Lecours & Lariviere, Montreal, writes instructively as follows:

"Editor Hardware and Metal:—

"Agreeable with your invitation, I take pleasure in expressing my views on this interesting and very important question.

"I admit that properly managed factories must necessarily have a record of time of all employes, with fines imposed on those coming late and paying extra hours; a time clock is the best record I know of and same should be used in stores, but with no fines, different rules and regulations, especially for hardware clerks. Everybody knows the great variety of articles comprised in hardware. This business not being divided in departments confined to special clerks, it becomes necessary. for the employes to be able to fulfill their duties, to have a good knowledge of all the lines, and this, therefore, becomes brain work which in my opinion should not be treated as manual labor, for the success of a house depends largely on the ability of the employes. Moreover, the hardware clerks are not paid extra for overtime given to customers at meal time, closing hours and during stocktaking.

"To old employes I have always paid salary during time of sickness, and have also given leave of absence for funerals and other similar circumstances, besides a week's vacation with pay to all employes having over a year's service.

"I treat every employe, from the small office boy to the superintendent in a fatherly way, taking care not to reprimand him before customers or fellow-workers, and I find that I get much better service with this principle. A clerk will readily admit his wrong doings (if he be truthful) alone with you, but will always find an excuse if reprimanded in presence of others and he appreciates the deference you have for him, which will naturally please him, and as a result he will take more interest in his work, will be satisfied with his position, will feel at home in the establishment and will not only come on time, but will work well while at business whether the superintendent is there or not.

"In my experience I have found the young clerks were those generally late; the old hands being always on time. In looking over the time sheets I can easily detect those coming late accidentally or customary; it must not be forgotten that any clerk who knows that he may be called at any moment to account for his lost time, will try to be punctual, provided he is not bold enough to have his time registered by a friend, or come in himself, register his time and then leave the store by the side or back door for a quarter or half an hour: and when he does re-appear, tell you he was in another departemnt, or in the lavatory. If this happens often I simply discharge such employe.

"The above are the best results of many experiences made during my 25 years in the hardware business.

"Yours very truly,

"FRED LARIVIERE."

Another letter containing several valuable suggestions is given below, the writer being Mr. John T. Fisher, representative of Messrs. Lockerby & McComb, manufacturers of building papers, etc., Montreal. Mr. Fisher writes:—

"Editor Hardware and Metal:—

"In answer to Mr. Wiggs' inquiry of Dec. 9th, in regard to keeping of clerks' time, it gives me very much pleasure to give a few ideas on the subject. In every large factory, warehouse, departmental store, you will find the clock system installed, and will find that it also saves a great deal of time, to say nothing of the trouble that used to be with the old brass check system in factories.

"In regard to fines or rewards, I would suggest for a large warehouse that no fines should be charged to an employe, but the clock record should be watched closely, and if an employe has been late more frequently than thought necessary he should be spoken to and brought to bear that he is to be on duty at 8 o'clock, not 8.15 or 8.30, such as the clock record shows. Should this continue, it would be better and cheaper to have the person dismissed, as it will be found the best employe will make it not only to his employer's interest, but to his own, to be on time.

"In the matter of extra time made after hours in busy seasons, it would not be necessary to pay extra wages to an employe whatever. Of course, it will be understood in this case, that every man is paid for two weeks' vacation in the Summer, and close every Saturday afternoon at 1 o'clock sharp. It makes the employe feel happy and that you appreciate his work.

"If an employe is sick. This is a matter better left to the head of the department with whom the person is working. For an old employe it would only be right that he should be paid for his absence in case of sickness, but sometimes we will find fickle employes, who will stay away for little cause whatever, and would rather suggest that they be not paid.

"In regard to absence on account of funerals, in case of relatives, every employe should be granted the absence, and his time marked O.K. for the day or days he is away

"Yours very truly,

"JOHN T. FISHER."

Other readers are invited to express their opinions on this subject. Let the clerks who read Hardware and Metal (and there are many intelligent ones capable of discussing such a question) also be heard from. It is not necessary that names be published and any clerk or other correspondent who has something to say and prefers to use his initials or a non de plume, can do so.

A MERRY CHRISTMAS.

CHRISTMAS comes but once a year —and most people, after the rush of Christmas trade, present buying, giving and receiving is over, are glad that the joyous day is not more than an annual event. And when another year rolls by, how young and old count the weeks to the coming anniversary of the birth of Christ!

The giving of presents, the family reunions, the turkey, plum pudding and Christmas cake which have become associated with the day, all tend to make the day a merry one. But to thoroughly enjoy the holiday one must give as well as receive; one must wish others a "Merry Christmas"—and endeavor to make the wish a reality—rather than, sponge-like, absorbing what others give without making a return.

It is a good thing to observe Christmas Day. The mere marking of times and seasons when men agree to stop work and make merry together is a wise and wholesome custom. It helps one to feel the supremacy of the common life over the individual life. It reminds a man to set his own little watch, now and then, by the great clock of humanity.

Hardware and Metal extends its best wishes to all its readers at this season. May the day be a pleasant one in the lives of all—one that can be looked back upon in future years as one of the happiest of a long lifetime. Again we say: "A Merry Christmas."

CANADIANS OUTWIT YANKEES.

IN the recently published report of Special Agent Charles M. Peppar, who made a trip through Canada investigating the industrial conditions and possibilities of this country on behalf of the United States Government, an interesting reference is made to how Canadian manufacturers outwitted their American—can we say competitors? In referring to how the Canadian trade is being developed by home manufacturers Mr. Peppar says, "The American shovel manufacturers also lost a permanent Canadian trade by agreeing several years ago to accept a cash bonus and stay out of the Dominion market. The result was that when they wanted their share in this field they found the Canadians had it well under control."

Readers of Hardware and Metal are well aware of the existence of the arrangement referred to, and will be interested in how the slow-witted Canadians, as "smart Americans" are wont to consider the people of this country, got ahead of the American shovel manufacturers. For a certain consideration the latter agreed to keep out of our market, and they thought they were getting "easy money." But the Canadians, having the field to themselves, went ahead improving their plants, extending their business connection and generally strengthening themselves. When too late the Americans found they had been gold bricked.

The entry into the Canadian field of the two new shovel factories at Hamilton and Peterborough may have a far-reaching influence on this branch of industry. While large stocks will be required for the extensive railway building to be done during the next few years it is likely that keen competition will take the place of the quietude existing in this trade for several years past. No one is more interested in the situation than the hardware merchant, and he will watch future developments with keen interest.

SUPPLY MEN COMMITTED.

On page 53 a resume of the progress of the conspiracy trials this week is given, the result being that 120 members of the Master Plumbers and Central Supply Associations were committed for trial. After this case was concluded the one against Messrs. A. A. McMichael, W. H. Carrick and H. T. Bush, supply men, and Fred Armstrong, K. J. Allison and C. H. Beavis, master plumbers, was taken up, the result being that the three latter were released because of previous convictions. The three supply men were, however, committed for trial.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 11.

THE travellers who have been successful on the road are numerous, but when the superlative degree is applied, the number dwindles greatly. This small and select body of most successful salesmen includes Mr. Joseph E. Auger, who is the subject of our sketch this week.

Mr. Auger learned the hardware business with James Walker & Co., Montreal, where he was employed for ten years. Being seized with the "Western fever," he then accepted a position with the J. H. Ashdown Co., of Winnipeg. Mr. Auger had great success in repre-



J. E. Auger,
Representing the Sherwin-Williams Company in Montreal.

senting this firm on the road, covering the Northwest between Winnipeg and Vancouver. Later on he went with Sample Benjamin & Co., a United States firm, whom he represented in Wisconsin. Coming east again Mr. Auger joined the traveling staff of the Canada Hardware Co., of Montreal, and for three and a half years he sold their goods from Montreal to Halifax.

He then accepted a position with the Sherwin-Williams Co., whom he has represented in the City of Montreal for the past four years. Although it has been uphill work, Mr. Auger has met with phenomenal success in introducing "S. W. P," and now has over three hundred of the best accounts in the Royal City. This business has grown so rapidly that at the Salesmen's Convention held in Chicago last year, he was granted the top notch button for the best increase in sales, and first prize for varnish sales. Not content to rest after this recognition, he applied himself even more strenuously to his work, with the result that, at the convention recently held in Montreal, he was awarded the top notch fob for the Canadian division.

Mr. Auger is of French and German descent, his father, the late J. C. Auger, having been registrar of Montreal East. However, he speaks English perfectly and his knowledge of both languages is of immense assistance to him in working the cosmopolitan City of Montreal.

"Joe," as he is familiarly known, is a strong believer in the policy of winning a dealer's confidence, even though that involves a considerable amount of time and trouble on his part. Don't promise too much, is his maxim, but always keep your promises. By paying prompt attention to his customers' slightest requests and by his never-failing courtesy and politeness, even under discouraging circumstances, Mr. Auger has gained a warm place in the hearts of the Montreal trade. He makes it a point to keep well posted in his line, and being convinced that his goods are right, he manages to communicate his own enthusiasm to his customers.

PRIZES FOR XMAS DISPLAYS.

HARDWARE AND METAL, for the encouragement of good window displays, has decided to open a competition for its subscribers. Prizes will be awarded for photos or drawings of window displays of Christmas goods and accompanying descriptions of the same. The prizes will consist of:

First Prize	**$5.00**
Second Prize	**3.00**

and $2 for every picture and description which is considered worthy of publication.

The competition, which closes on January 15, 1906, will admit of photographs, pen and ink or wash drawings, with good ideas counting more than the pictures, although, of course, all pictures, in order to receive a prize, must be of sufficient distinctness and good workmanship to admit of their publication.

Mark all manuscripts and photographs intended for this department with the words "Window Dressing Competition."

Care should be taken to avoid reflection in the photograph. The best photos are often taken at night.

PERSONAL MENTION

Quebec.

Mr. Albert Pontbriand, of South Roxton, was in Montreal a few days ago.

Mr. Aime Lemieux, general merchant, of Henryville, visited Montreal during the week.

Mr. Owens, of Owens Bros., general merchants, Montebello, paid a visit to Montreal recently.

Mr. J. E. Seale, general merchant, of Morin Flats, visited Montreal on a buying expedition last Wednesday.

Mr. S. Henry, general merchant, of Maxville, Ont., visited Canada's commercial metropolis a few days ago.

Mr. Thos. McQuillan, of Toronto, president of the Commercial Travelers' Association of Canada, was in Montreal last week.

Mr. J. R. Marlow, manager of the transportation department of the Canadian Manufacturers' Association, was in Montreal recently.

Mr. J. A. Jackson, of the sales department, Lewis Bros., Limited, is spending the Christmas vacation in Brantford, Ontario.

Mr. Sydney T. Hackett, Canadian representative of Ironsides, London, England, left Montreal on a trip to the Old Country a few days ago.

Mr. Henthorn, of Marsh & Henthorn, founders and machinists, Belleville, Ont. was in Montreal a few days ago, and visited some of the supply houses there.

Mr. C. M. Strange, director of Lewis Bros., Limited, is taking his first holiday in nineteen months this week, and is enjoying himself in Kingston, Ontario.

Mr. J. N. Walker, of Caverhill, Learmont & Co.'s city staff, Montreal, has quite recovered from his recent severe and painful illness. Mr. Walker had been for some time laid up with a poisoned hand.

The 51st annual dinner of the Caverhill, Learmont & Co. boys took place at Peloquin's Hotel on the Back River on Friday night of last week. A good number went out by trolley and enjoyed themselves immensely.

Among the travelers of Caverhill, Learmant & Co.'s staff who are at present in Montreal are: Mr. J. H. Brent, of Toronto, Mr. J. A. Laporte, of the Quebec province staff, and Mr. Wm. Leslie, who has been covering Eastern Ontario.

A very effective window is being shown by L. J. A. Surveyor, St. Lawrence street, Montreal, this week. In the background is a firearms advertisement, while the window proper displays such seasonable goods as silver-mounted heaters, patent coils, tea kettles and skates.

A fire on Tuesday morning did $700 damage in the premises of Hector McKenzie, plumbers' supplies, and agent for Beaver oils, Craig street, Montreal. The blaze, which originated in the basement, climbed up an elevator shaft and got in between the flooring, but as there was not much oil in the place, the firemen soon put it out.

Mr. J. Harry Roper, who recently took over the agency in Canada of J. Shaw & Son, Wolverhampton, Eng., has just returned from a trip to the headquarters of his firm. Mr. Roper was for years with Mr. Alex. Gibb, of Montreal, where he acquired a connection that cannot fail to be a great asset to him in his new work on his own account.

Mr. Fred. W. Doty, of the Doty Engine Works, Goderich, visited Toronto this week on a business trip. Mr. Doty has a wide reputation as a manufacturer of marine engines, and his growing business has required the extension of the Goderich works.

Ontario.

Mr. Eager, manager of the Toronto branch of Wood, Vallance & Co., visited Hamilton last Saturday.

Major Allan, hardware merchant, Newmarket, was a visitor in Toronto during the past week.

Mr. W. W. Near, of the Page-Hersey Co., Guelph, made a business trip to Toronto this week.

Mr. H. J. Morden, who has been with the Standard Ideal Company at Port Hope, has left for Colborne, where he has purchased Roblin's hardware store.

The store of James Rolston, Dunnville, was recently broken into by thieves and considerable damage done to the windows and vaults in addition to smashing the safe and making off with a quantity of deeds and other private papers, cutlery, guns, etc., and nearly $100 in cash.

Mr. David Humphrey, superintendent of the plumbing department for Hon. Frank Cochrane, Sudbury, has been in the general hospital, Toronto, for a few weeks, undergoing an operation for appendicitis. His many friends will be pleased to hear that he is recovering and will soon be around again.

Messrs. Maxie Morrell, manager of Lewis Bros.' Toronto branch; J. R. McMillan, W. R. Tait, W. R. Dunn and N. A. Wylie, traveling representatives in Ontario for this fiem, left Toronto on Wednesday to attend the annual banquet and conference of Messrs. Lewis Bros.' travelers, held in Montreal on Thursday night.

Mr. H. Clucas, manager of the Toronto branch of the Canada Paint Co., has returned from the annual convention of this company's travelers at Montreal last week. When Hardware and Metal called on him this week the scribe was presented with a beautiful watch fob of solid silver in the form of a miniature elephant, this being emblematic of their well-known elephant brand of paints.

Rice Lewis & Son exhibited a timely window last week, when the snow was on the ground, the window being made up of toboggans, snowshoes, skis, skates, and other Winter goods. A feature of the display was a card giving the regulations governing the four toboggan slides which the park commissioners have established at High Park. This sport has become very popular in Toronto during the past couple of Winters.

Practically all the traveling representatives of the various Toronto jobbing houses were taken off the road in the early part of the week, and will remain at headquarters until after New Years, facilitating the closing up of the year's business and commencing stock-taking. Amongst those from a distance who are in Toronto are Messrs. J. P. Fluker, Pembroke, and H. Hocking, Fort William, both representatives of H. S. Howland, Sons & Co.

Mr. Anderson, one of the traveling representatives of the Winnipeg branch of the McClary Mfg. Co., passed through Toronto this week on his way home to Hastings, where he will spend the Christmas holidays. Mr. Anderson reports that so popular have been McClary goods in the Northwest that their stock was practically sold out and the travelers had to be taken off the road about the middle of November. The sales in this district for the year show an increase of between $25,000 to $50,000.

Western Canada.

Mr. Fred. Sermon, of the Miller-Morse Hardware Co., Winnipeg, is in Montreal.

The Winnipeg Paint & Glass Co. are building a large warehouse in Calgary, having purchased for the purpose a large site in the wholesale centre from E. F. Hutchings.

Mr. C. D. Waldon, salesmanager of the Pease-Waldon Co., Winnipeg, left for the east during the week, traveling via Chicago. Mr. Waldon will spend about three weeks in Toronto.

Mr. H. V. Lawlor, of Henderson, Potts Co., Limited, will return to Winnipeg in a few days from an extended western trip. Mr. Lawlor was the first commercial traveler to go to Edmonton over the C.N.R.

Mr. Hyman Miller, president of the Miller-Morse Hardware Co., Winnipeg, has postponed indefinitely an intended trip to England. The sudden death of the late Mr. Morse has interfered with his plans in this matter.

Mr. A. J. Falconer, Deloraine, intends spending the Winter in California and he leaves shortly for the land of Winter sunshine and flowers. Mr. Falconer is a prominent member of the Western Retail Hardware Association, and he will be much missed at the semi-annual meeting in February.

Mr. G. F. Stephens, of Winnipeg, expressed mild surprise to Hardware and Metal this week when asked about the report in the daily papers that his firm are about to start up in Calgary. G. F. Stephens & Co. have, of course, been established in Calgary for several years. They are now building a large new warehouse.

His friends are congratulating Mr. J. E. McRobie, of Winnipeg, on his election to the vice-presidency of the Northwest Commercial Travelers' Association. Every hardwareman in the west knows the genial Retail Hardware Association secretary, and all will be glad to learn of the new honor conferred on him. His election is deservedly popular among commercial travelers and retailers.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 66.)

THE WEEK'S MARKETS IN BRIEF.

MONTREAL.

Linseed Oil has advanced one cent.
Floor Hinges are quoted lower.
Bommer Hinges 33⅓ off list.
Chicago Hinges 45 off list.
Shot has advanced to net list.
Canadian Pig Lead has declined to $4.55 and $4.65.
Ingot Copper has advanced to 20½c.

TORONTO.

Linseed Oil has been advanced by some dealers.
Shot is now quoted at net list.
Sheet Copper has advanced to 25c. per pound.

WINNIPEG.

Pig Lead has advanced 25c.
Shot has advanced 25c.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, Dec. 22, 1905.

ALTHOUGH there are still a few travelers on the road sending in a fair quantity of orders, the majority of them are now resting up for next year's campaign, and stock-taking has begun in earnest.

Only a few price changes of any importance have been made this week, and, in nearly all cases, they show an upward tendency. The only exception to this tendency, in strictly hardware lines, is the decline in floor hinges, due to an open market in the United States. Discounts on Bommer hinges are now 33 1-3 per cent., while Chicago goods are selling at 45 off list.

Shot has once more advanced, as the primary market shows little or no break in strength. Quotations are now at net list.

Local firms are constantly in receipt of letters from American hardware manufacturers, withdrawing prices on their respective goods. The high prices now commanded by all metals has rendered this step imperative. It is almost certain that retailers will have to pay more for their stocks next year, and it would be well for them to pave the way now for advancing their own prices.

Axes—Normal conditions prevail. We quote: Chopping axes, unhandled, $6.00 to $9.50 per dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—We quote: No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Hay Wire—Last week's advance is strongly maintained. We quote: No. 13, $2.45; No. 14, $2.55; No. 15, $2.70; net cash, f.o.b., Montreal.

Sewing Machines—Fair sales are being made. Our quotations are as follows: Hand-sewing machines, $11 each, net; complete machines, with stand, $18.00 and up, according to quality.

Lanterns—Our prices remain as follows: Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—No further changes have taken place in these lines, last week's advance still holding good. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 40 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Business keeps brisk. We quote: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Turnover is fair at the same prices as last week. We quote: 3-8 and smaller, 60 to 10; 7-16 and larger 55 and 5.

Horse Nails—Demand keeps up surprisingly well for the season. Prices are unchanged. Following prices rule: C brand, 40, 10 and 7 1-2 per cent.; M.R.M. Co., 55 per cent.; P.B. brand, 55 per cent

Wire Nails—The increased price reported last week has held steadily. We quote: $2.15 per keg, f.o.b. Montreal.

Cut Nails—A sluggish market is reported. We quote: $2.20 per keg, f.o.b. Montreal.

Horseshoes — Shipments are still fairly heavy. Our prices are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M Co. latest improved pattern iron shoes, light and medium pattern No. 2 and larger, $3.65; No. 1 and smaller, $3.90; snow pattern, No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4, No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60 Toeweight, all sizes, No. 1 to 4, $6.85 Packing, up to three sizes in a keg, 10c. per 100 pounds. More than three sizes, 25c.

Sporting Goods—We are quoting as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.. American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred pounds; chilled, $7.00 per hundred pounds; buck and steel, $7.50 per hundred pounds; ball, $8.00 per hundred pounds. We quote discounts 10 per cent. on shot, f.o.b., Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper— The trade is very quiet at present. Prices are stationary at the quotations given in the back of this issue.

Cement and Firebrick—The market in cement is almost stagnant now. Firebrick, however, is selling in fair quantities. Our prices are as follows: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch, $17.00 to $21.00; American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags, $2.05 in barrels in round lots.

Coil Chain—Our prices are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Shot—Following the progress of pig lead, shot has been advancing right along, and is now quoted at net list.

Skates—The demand for skates, and especially the higher-priced grades, is abnormally large this year. Our prices are from 25c. to $2.50, according to quality.

Sleigh Bells—We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape, $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Our prices are: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes — It is practically impossible to secure deliveries on most lines. We quote from $15 to $35 per dozen pairs, according to quality.

When you build or remodel, figure to have plenty of room for tables. Shelves are necessary, but tables help out in the displaying of lines which you want brought to the attention of your trade immediately.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Dec. 22, 1905.

SHOT has advanced again and is now quoted at the net discount rather than the 5 per cent. discount which was quoted by us last week. The high price of lead recently has been the cause of the three advances which have been made during the past six weeks. With this exception there have been no changes.

Travelers are taking their Christmas holidays and are helping in the work of stock-taking, which will commence in most wholesales next week. They all report business to have been very satisfactory although the mild weather during the Fall has handicapped the retail trade considerable.

Considering that this has been the week before Christmas trade has kept up very lively and shipments from the jobbing houses have been quite large. Now that the holiday trade is over, however, a falling off is expected.

Axes and Handles— Shipments are fairly large.

Cutlery and Silverware—Demand has kept up well, the volume of the season's business having been very large.

Sporting Goods—Shotguns and ammunition are having a fair sale.

Washing Machines—Trade is reported to be falling off.

Chain — We are still quoting prices as follows: 1 inch, $6.50; 5-6 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Quotations continue as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Quotations continue unchanged and business seasonable. We still quote: $2.42 1-2 f.o.b. Cleveland. In barb and coil spring wire a seasonable trade is being transacted.

Wire Nails—A good trade is reported at the advanced prices. We are quoting $2.25 with the usual 10c. rebate.

Cut Nails — A satisfactory volume of business is reported. Quotations are: $2.40 per keg f.o.b. Toronto.

Horse Nails—Orders are satisfactory and shipments large.

Horseshoes— Trade continues brisk; prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Business in halters, girths, horse blankets and similar goods is active.

Skates and Sleigh Bells—The coming of snow and ice has created many sorting orders and shipments are large.

Screws—Advancing prices in metals make the market very firm, but prices are unchanged.

Rivets and Burrs—Copper rivets and burrs have advanced, but iron goods are unchanged.

Bolts and Nuts— Demand is active and prices very stiff.

Cordage—Sorting orders are plentiful. We still quote: Manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are unchanged and trade is seasonable. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick—Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—Prices continue unchanged and a fair trade is being done.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, Dec. 22, 1905.

BOOKINGS are naturally very light during this, the Christmas, week, but the firm tone of the market has been well maintained, the only disposition for lower prices being seen in Canadian pig lead, which has declined slightly. Otherwise, the market is very strong, some further advances being in evidence.

Antimony has now recovered strength and is quoted considerably higher in the Old Country. The prospects are that Canadian dealers will have to advance their prices before long.

Conditions in ingot tin are just about the same as last week, though there is now more of a scarcity apparent. Copper has shown still further strength and has been advanced to 20 1-2c. for ingots. It is extremely difficult to get deliveries of this metal. The prices in New York at time of writing are extremely high and would allow but a very small profit to Canadian dealers on the quotations we give. No reduction is to be looked for in either tin or copper.

We are giving a decline in pig lead this week, although the market in foreign pig is just as strong as ever and indeed even stronger than before. Both in New York and in the Old Country prices are very high.

In sheet metals the strength which has been manifest for several months has by no means abated, and no concessions can be obtained even for large quantities. Canadian importers have been refused good offers on large shipments from the Old Country, thus showing the tendency of the market. Business generally is keeping up remarkably well and is giving the local jobbers no time to take stock.

Canada Plates—We are still quoting the following prices: 52's, $2.60; 60's, $2.65; 75's, $2.75; full polished, $3.75; galvanized, 52's, $4.10; 60's, $4.35.

Copper—Another jump in price has occurred during the past week leaving the market decidedly strong, so that no reduction may be expected for some time yet. Our prices now are: Ingot copper, 20 1-2c.; sheet copper, base sizes 25c.

Ingot Tin—Whether market manipulators are gaining their end in striving for a corner, or not, it is hard to say, but at any rate there seems to be a scarcity of this metal and the tone is very firm at present time. We cannot now quote under 40c. a pound even for large quantities.

Pig Lead— Although the Canadian product has declined somewhat, foreign pig is still quoted as high as ever. The domestic article is now selling at from $4.55 to $4.65 per 100 lbs.

Boiler Tubes—Slight advances have been made on both Scotch and American tubes and importers are now paying from 1-4c. to 3-8c. more than last week. The mills are very busy and deliveries on fair sized quantities cannot be obtained under six or eight weeks. Small quantities can, of course, be shipped immediately ex-store. Jobbers are still quoting as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Last week's advances are being held firm and will likely remain so until the Spring. Of course most of the Canadian consumers are well stocked for the Winter, but there are occasional small lots being shipped. We quote:

"Dom.," No. 1, $19.50 to $20.00 delivered Montreal.
Usual difference in price for lower grades.

Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19 00	"	"
" No. 3	18 50	"	"
" No. 4	18.00	"	"
Londonderry	20.50	"	"
Carron No. 1	23.00	"	"
" (special)	22.00	"	"
Summerlee No. 1	23.50	"	"
Clarence No. 1	20.00	"	"
" No. 3	19 50	"	"

Tool Steel— We quote: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Colver's, 10c. to 20c.; "Air Haradening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel—Last week's prices are unchanged. We still quote as follows: Sleigh shoe, $2.17 1-2; tire, $2.27 1-2; spring, $2.75; toecalk, $2.82 1-2: machinery iron finish, $2.27 1-2; ruled machinery steel, $2.75; mild, $2.17 1-2 and

upwards; square harrow tooth, $2.27 1-2. Net cash 30 days. Rivet steel quoted on application.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch. $3.50 per 100 lbs.

Galvanized Iron—Prices given last week are firmly held with a tendency for advances in the near future. Our quotations are as follows: Queen's Head, 28 gauge, $4.25; 26 gauge, $4.00; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.50; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge. $3.40; Fleur-de-Lis, 28 gauge, $4.00; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.25; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge. $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10. "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—We are still quoting. 28 gauge, $2.40; 26 gauge, $2.35; 22-24 gauge, $2.30; 19-20 gauge, $2.30; 8-10 gauge, $2.45.

Antimony—The Old Country market is much higher this week, and it is thought that Canadian dealers will soon be forced to advance their prices again. Meantime we quote: 14c. to 14 1-2c. for Cooksons.

Tin Plates—Our prices are as follows: Cokes, base size, 1C, 14 x 20, $4.00; charcoal, base size, 1C, 14 x 20, $4.25.

Terne Plates— We are still quoting $6.85.

Ingot Zinc—Prices remain the same as before, that is 7c. to 7 1-4c.

Sheet Zinc—We still quote 8c. in casks and 8 1-4c. in less than casks.

Sheet Lead—We are quoting: 2 1-2 lbs., 5 1-2c. by the roll; 3 lbs. and heavier, 5 1-4c. by the roll; large quantities, 25c. per hundred pounds.

Bar Iron—Local price remains at $1.97 1-2, f.o.b., Montreal.

Old Material—Metals generally are in remarkably good demand and the tone this week is a shade higher than last, although we have not changed our quotations. The rubber market is very quiet and sales are small. It looks as if the price would weaken somewhat, but much doubt is expressed as to the prospects in this branch. Our quotations are as follows: Copper wire, 14 3-4c.; light copper, 13 3-4c.; heavy red brass, 12 1-2c.; yellow brass, 9 3-4c.; light brass, 7c.; lead, 3c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $11; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Dec. 22, 1905.

ANOTHER advance of 1c. per pound has been made on sheet copper, this now being quoted at 25c., the highest price it has reached since 1899, and about double the lower figures quoted in 1902. Other metals remain at the same figures quoted last week with the exception of antimony which has advanced from 14 1-2c. to 15c. Londonderry pig iron is not held as firmly as quoted by us last week and in large quantities the price can be shaded considerably.

A good business is being done, although the holidays have affected business somewhat. All metals are strong, however, and the market is very firm.

Prices of both anthracite and soft coal have been advanced considerably of late, the mine owners and railways taking advantage of the necessity of the public and of the probability of a strike in the Spring. The figures we quote this week are held to quite firmly and with the strike scare hanging over the market there is little probability of lower prices for some time.

Pig Iron—Large buyers can buy Londonderry at $21.50, so we are shading our quotations to that figure. Prices of other lines are very stiff. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	20 00
" No. 2, "	19 50
Midland, No. 1, "	20 00
" No. 2, "	19 50
Radnor, at furnace	31 50
Londonderry, f.o.b. Toronto	21 50

Bar Iron—A good trade is being done at unchanged prices. We still quote: $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Ingot Tin—The market is very active and stock scarce. We quote 40c.

Tin Plates—Demand continues strong and prices stiff.

Galvanized Sheets—Conditions are unchanged, the demand being heavy at the same quotations.

Brass—Business is satisfactory, discounts continuing at 10 per cent.

Lead—Last week's advance is being held to locally. We quote as follows: Pig lead, $4.60 per 100 lbs., and bar lead, $5.00 per 100 lbs.

Zinc Spelter—Business is reported active with prices unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Sheet copper has been advanced again. We quote as follows: Ingot copper, $20 per 100 lbs., and sheet copper, $25 per 100 lbs.

Antimony—An advance from 14 1-2c. has been made and 15c. is now quoted.

Old Material—The amount of goods being received is very large for this season. Dealers' buying prices are as follows: Heavy copper and wire, 14c. per lb.; light copper, 13c. per lb.; heavy red brass, 12 1-2c. per lb.; heavy yellow brass, 10c. per lb.; light brass, 8 1-2c. per lb.; tea lead, $3.00 per 100 lbs.; heavy lead, $3.25 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $10.50, No. 2 wrought $3 to $5; machinery cast scrap, $15; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—Recent advances are attributed to a scarcity caused by the railroads and mine-owners taking advantage of the possibility of a strike to make a good margin on this Winter's sales. We quote: Anthracite in cars at bridges, grate, $5.50 per gross ton; egg, stove and nut, $5.75 per gross ton; pea, $3.75 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.70; 3-4 inch, $1.60, run of mine, $1.40; nut, $1.25; N.P. and S., $1.00; slack, 75c.; box cars 10c. per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.80; 3-4 inch, $2.70; mine run, $2.60; slack, $2.35.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, December 21, 1905.

THE report in one of the leading daily newspapers that the United States Steel Corporation has on its books orders aggregating over 7,300,000 tons is true. No one fact could better serve to show the condition of the steel works and rolling mills of the country, since it is well known that the other large companies are similarly committed for their full capacity for a long period to come.

A shortage of basic pig has again developed in the eastern markets. One steel works took 5,000 tons at $17.90, delivered; another took a like quantity, while a third purchased 15,000 tons in addition to purchases of 10,000 tons made a short time ago. A fourth eastern steel company is now in the market for 18,000 to 20,000 tons for delivery during the second half of 1906.

The scarcity of steel is indicated by the fact that the Ohio works of the Carnegie Steel Company will be taken off from rails and put on sheet and tin plate bars in January. Only about 75 per cent. of the sheet mill capacity of the corporation can now be operated on account of the scarcity of steel, while 92 per cent. of the tin mills are running when more capacity ought to be employed. It was hoped that the wire trade would slacken this month so that steel could be diverted, but the pressure on the wire mills is too great.

There is a heavy export movement in progress, and a very much larger tonnage could be taken were it not for the pressure of requirements from the home markets. Among recent inquiries is an aggregate of 20,000 tons of rails for New South Wales and Mexico. The large Canadian business has not yet been placed.

The cast iron pipe industry continues to flourish. It is stated that never before so far in advance of the season had so much business for Spring delivery been booked. Philadelphia gas interests have just placed heavy contracts, but as they were distributed among several foundries the total tonnage is not known. The Philadelphia water department will shortly call for bids on a large quantity of 48-inch pipe, and it is expected that the New York department of water supply will ask bids on a large lot of the same size. Bids will again be opened Friday on 30,000 tons of pipe by the latter, and it is expected that they will be somewhat more numerous than before.

LONDON METAL MARKETS.

From Metal Market Report, December 15, 1905.

Pig Iron— Cleveland warrants are quoted at 52s. 9d and Glasgow Standard warrants at 51s. 9d, making prices as compared with last week 6d lower for Cleveland warrants and 5d lower for Standard warrants.

Tin—Spot tin opened easy at £165, futures at £164, and after sales of 170 tons of spot and 220 tons of futures, closed firm at £165 2s. 6d for spot and £164 2s. 6d for futures, making price as compared with last week £1 7s. 6d higher on futures.

Copper—Spot copper opened easy at £79, futures £78 15s., and after sales of 200 tons of spot and 700 tons of futures closed firm at £79 5s. for spot and £78 17s. 6d for futures, making price as compared with last week £1 lower on spot and 7s. 6d lower on futures.

Lead—The market closed at £17 making price as compared with last week 6s. 3d lower.

Spelter—The market closed at £28 12s. 6d, making price as compared with last week 2s. 6d lower.

"Eastlake" shingles

"Eastlake" Metallic Shingles are veritable trade bringers to the dealer in Sheet Metal specialties. Their economic advantages over wood or cheap metal shingles are so evident to every buyer that the comment and discussion of their merits bring other customers and more trade.

They have no raw, ungalvanized edges and, when put on with the patent "Eastlake" cleat, make a neater job on any roof than is possible with other makes.

Wind, rain and fireproof, "Eastlake" Steel Shingles make the most useful and durable roofing for any building.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
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"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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Nova Scotia Trade News.

Halifax, N.S., Dec. 20, 1905.

TRADE is now falling off in the hardware business, and some of the firms have this week started to take stock. Jobbers report a general advance in shelf and heavy goods.

* * *

Metals attract the most attention. Galvanized iron is quoted at $4 to $4.25 per hundred pounds, and black sheet iron at $2.25. Jobbers say that the cost of the latter is higher, but they have not as yet increased the price. All lead goods show a big advance. Shot may be taken as an example of how the price has advanced. One month ago it was selling at $1.38 per bag of 25 pounds. To-day it is quoted at $1.63. Lead pipe has advanced from $4.55 to $5.50 per one hundred pounds, an advance of about one cent. per pound. Bar iron is quoted at $2.10, and ingot tin at 38c. White lead has gone up 25c. per 100 pounds right through on all brands.

* * *

The blacksmith's business is good at present, and jobbers have been kept busy supplying the trade with toe caulks and horseshoes. Some days the orders came in so fast that the jobbers could not fill them. The price of glass still keeps very high, and no immediate relief is looked for. The stocks held here are very small.

* * *

The Strathcona Coal Co., Limited, have declared a dividend of 4 per cent. on both the preferred and ordinary stock for the year ending Sept. 30 last. The dividend is payable on January 1. The mines of this company are at River Hebert, N.S., but stockholders are largely in Moncton and Sackville. The capital stock is $120,000, of which $50,000 is preferred and $70,000 ordinary. The company are to install a coal cleaning and loading apparatus, with operating engine, at their mine, and the order is being taken by A. Matheson & Co., of New Glasgow. The Atlantic Grindstone, Coal & Railway Co., Limited, of Providence, who have a coal mine near Lower Cove, Cumberland county, N.S., are also putting in a complete bankhead equipment, including tipples, screens, picking tables, etc., the order for which has been placed with the same firm.

New Brunswick Trade News

St. John, N.B., Dec. 18, 1905.

THE noteworthy feature of the hardware market here is the continued firmness, and in some cases the further advances of metal prices. The general tendency so far as metals are concerned, is decidedly bullish. Some dealers believed that advances previously alluded to were the last for some little time, but this idea has proved to have been erroneous. Since the last letter to Hardware and Metal there have been further advances in lead pipe, in sheet iron, bar iron, etc., and it may be said that, generally speaking, the local metal market has rarely been firmer in years. One dealer speaking of the matter pointed out that whereas sheet iron sold for about $1.95 per hundred a few months ago, it is now quoted at approximately $2.40.

* * *

Copper ware is also figuring in the upward movement. A few days back an advance of about ten per cent. on this line of goods came into force. It has not yet, however, and probably will not affect the sale of the goods at all. The demand for copper goods has been showing a steady increase of late, an increase which will continue. Copper kettles are now much more widely used here than formerly and are apparently driving out those of iron.

* * *

Plumbers' supplies have not been behind in respect to advancing prices. As stated above, lead pipe prices have risen recently and solder has followed suit. This news will not be received with equanimity by the householder, who can imagine the effect of the advance on plumber's bills, but such an event will not be surprising to the trade.

* * *

The hardware merchants here have been doing a good bsuiness since the beginning of the Christmas rush. The trade outlook is bright. Collections are fairly good and the indications point to brisk Winter's business, though a lull will follow the Christmas time. The demand for Winter sporting goods is strong, though skate sales were a bit slow in opening up. There is a yearly growth in the interest taken in athletic sports in St. John and this, of course, makes itself felt among the dealers in sporting goods.

* * *

The intimation given in this column of the resignation of Mr. Ebe Perkins as manager of the Maritime Nail Works, proved well founded. Mr. Perkins' resignation has been accepted by the new management of the company. His place has been taken by Mr. Stanley Elkin, who is now the secretary-treasurer of the company. Mr. Elkin is a St. John bred young man who has lately been in commercial life across the border.

* * *

Turpentine now shows an upward tendency. Linseed is also firmer in price.

IN THE LEAD!

In the **prompt** shipping of

Plate Glass

it is a well-established fact that we have constantly been in advance. The demand for our Plate is evidence that our efforts have been appreciated and has been such that to-day we have the **largest stock** and **plant** for handling same in Western Canada

Quotations for Plate delivery sound at your station by wire or mail on receipt of specification.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Dec. 22, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

FOR the week before Christmas there is an unusually active trade, but of course business is confined at present to sorting orders. There are only two changes of importance this week and both are advances. Shot and pig lead have each been advanced 25 cents per cwt.

Game Traps—A few game traps are still selling. Prices are unchanged. We quote:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—The market is "open" and it is hard to quote with anything approaching to exactitude. The average prices are about as follows:

Cold blast lanterns	$5 25 per doz.
Coppered cold blast lanterns	7 25 "
Cold blast dash "	7 75 "
Lift Lanterns	4 25 "

Bluestone—Price for 1906 delivery is $5.75 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb					$3 00
Plain galvanized, 6 to 8	$3 39	9	$2 50		2 90
" " 10	3 50	12			3 10
" " 13	3 20	14			3 90
" " 15	4 45	16			4 60
Plain twist					3 00
Staples					3 50
Oiled annealed wire, 10	$2 96	11			$3 02
" " 12	3 10	13			3 20
" " 14	3 30	15			3 45

Annealed wires (unoiled) 10c. less

Horseshoes—Prices have been steady since the recent advance in steel shoes. Quotations are as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—Prices are firmly held at following quotations:

Pressed spikes, ⅝ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅝ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅜ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged and continue as follows:

Bolts, carriage, ⅝ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅝ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—Unchanged in price. We quote:

Coil chain—

3-16 inch	$3 25	¼ inch	$7 20
5-16 inch	5 20	⅜ inch	4 60
7-16 inch	4 45	½ inch	4 30
⅝ inch	4 10	¾ inch	4 00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz			$3 15
No. 1	1 90	No. 2	1 60
Octagon extra	2 30	No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz.	9.00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits— Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T and elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges— The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz	$8.75
Grass " per doz.	1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers— No change to report. Prices are as follows:

Royal Canadian, per doz	$30.00
R. B., per doz	34.75

Files—Discounts are quoted as follows:

"Arcade"	75 p.c.
"Black Diamond"	60 p.c.
"Nicholson's"	62½ p.c.

Building Paper—The big rush is of course over, but there is still a steady sale at unchanged prices. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—The price is steady since the recent advance. We quote as follows.

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 75
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.
(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.
(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Vises—Prices are quoted as follows:

"Peter Wright," 30 to 34	14½c. per lb.
" " 35 to 39	14c. "
" " 40 and larger	13½c. "

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6. The "1904" sheep shearing machines are sold at $13.60.

Ammunition, Etc.—Shot has been advanced 25 cents per cwt. Other prices and discounts are unchanged. We quote:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	20 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.

Loaded shells:

Dominion Eley's and Kynoch's soft, 12 gauge. black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	6 75
Chilled	7 25
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge,	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

MUNRO WIRE WORKS, Limited
WINNIPEG, MAN. NEW GLASGOW, N.S.

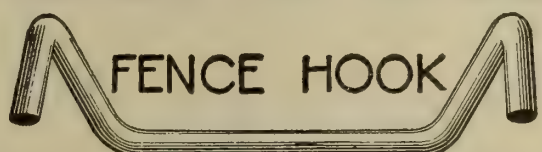
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AND ARCHITECTS' SUPPLIES, ETC.

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THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.
Manufacturers of
Corrugated Roofing and Siding, Metal Ceilings, Cornices, Etc.
WINNIPEG, - MAN.

GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

Canada Plates—No change. We quote:

Canada plate, 15 x 21, 15 x 24	3 50
Canada plate, 20 x 28	3 75
Canadaplate, full polished	4 25

Sheet Zinc—The price is now $8.50 for cask lots, and $9.00 for broken lots.

Pig Lead—There has been another advance of 25 cents and pig lead is now quoted at $5.00.

Iron Pipe—Prices are still quoted as follows:

Black iron pipe, ⅛ inch	....
" ¼ "	2 5
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— Prices are quoted now as follows:

Silver Star, per gal	21c.½
Sunlight "	22½c.
Eocene "	24½c.
Pennoline "	25½c.
Crystal Spray "	24½c.
Silver Light	22½c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine—There is an average trade for the present season. Prices are steady. We quote:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 04
Less than barrel lots	1 09
Linseed oil, raw	0 57
Boiled	0 60

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.05
26 to 40 "	2.20

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz.C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

British Columbia Trade News

Vancouver, Dec. 15, 1905.

THIS week the Vancouver Board of Trade filed its reply to the C. P. R. Company's statement in answer to charges laid by the Board of Trade before the Railway Commission on discriminative rates to Alberta from British Columbia wholesale centres. The reply of the coast merchants is a practical contradiction of the assertions contained in the answer of the C. P. R. Comparisons of rates as between similarly situated points in the United States are made, to show that the comparisons instituted by the C.P.R. in the figures submitted are not conclusive.

Among the strong points made by the shippers is that in connection with the assertion that they cannot expect a rate which will permit them to bring goods here from the east and ship them back to Alberta and still hope to compete with eastern direct shipments. This the merchants say they do not ask for nor expect. But they certainly do ask that goods shipped from the coast to points east shall not be given a rate across the mountains and back less than Vancouver merchants have to pay for shipping direct.

The only development yesterday was the receipt of a request by Chairman McLennan, of the merchants' committee, from Mr. Bowles, assistant to General Freight Agent Greer, to call the boycott off pending the decision of the Railway Commission. Mr. McLennan asked if Mr. Bowles would agree that the C.P.R. would abide by the decision of the Railway Commission, but he was not free to make that arrangement. In that case, Mr. McLennan for the committee considered that it would not be wise to call the boycott off until some agreement was reached with the railway. It is thought the merchants of Victoria are being subjected to strong pressure not to co-operate with the Vancouver merchants in the boycott, which is being vigorously pushed.

* * *

Vancouver City Council proposes submitting money by-laws to the ratepayers at the coming civic elections, for works and improvements totalling nearly a million dollars. The chief item is that providing for waterworks extension, including the establishment of a high level service, which means practically a new system. This will cost $750,000, and construction will cover three years. The other by-laws are for schools, sewers and streets. In 1905 money by-laws totalling some $600,000 were voted on and carried.

* * *

By the success of A. J. McMillan, formerly managing director of the Le Roi mine at Rossland, in being returned to office after having been voted out at a previous meeting of the directors in London, marked changes are to take place at the mining city. The Le Roi is to be deepened and the ore which has been of late going to the big C. P. R. smelter at Trail is to be shipped to the Le Roi's smelter at Northport, Wash., which has of late been shut down. This smelter is owned by the Le Roi Company, and is located just across the international boundary in the State of Washington.

* * *

Following the annual meeting of the Pacific Coast Lumbermen's Association, held at Tacoma on Tuesday, 12th inst., it is announced that a decision had been reached to raise the price of lumber to a $13 base, to go into effect at once, and to prepare a list on a base of $15, to be effective February 1. This will chiefly affect export cargo trade, but it is noticeable that in local circles the rumor is current that a meeting of the local association is likely to be called ere long to discuss prices for local consumption as well as for export east. The shortage of logs at this season is having some effect on lumber conditions. Another point is brought up, that the continuation of the boycott by local merchants will have the effect of making a car shortage which will adversely reflect on the lumber trade.

* * *

New Westminster is not satisfied with merely recovering her long lost prestige as a deep-sea port, which was effected this month by the arrival of the British ship Wethersfield to load lumber at the Fraser River Saw Mills, some miles above the city. The Royal City now seeks to establish a ship-building industry, the object being to secure Dominion aid by way of bonus per ton on all steel ships constructed there. The appeal of the Halifax Board of Trade for endorsation of their petition to the same effect, set the Royal citizens thinking.

* * *

The British Columbia Telephone Co., operating plants in all the chief cities of the province, announce the immediate construction of a fine three-storey brick block in this city, to be used as a central office. In this a modern switchboard of large capacity is to be installed, the cost being estimated at over $100,000 for the switchboard alone. The first installation will be for 4,000 pairs of direct wires, while with addition of sections the capacity can be raised to accommodate from 13,000 to 14,000 subscribers.

* * *

The C.P.R. has announced its plans for railway construction on Vancouver Island for next year. The extension of the E. & N. Railway, now owned by the C.P.R., through Comox to Campbell River, near the north end of the island, is proposed, and a branch from Duncan's via the Cowichan Valley to Alberni on the west coast of the island is another extension for which power to construct will be sought.

* * *

The Great Northern Railway has issued a new lumber tariff effective on the new branch line to Fernie and on the Nelson-Waneta branch to Winnipeg and and a number of other Manitoba towns. The new rate is 33 cents per hundred, a saving of between 60c and $1 per foot over the old rates. Formerly the trade from the Nelson branch paid a 5-cent local rate to Nelson, and the C.P.R. carried the lumber east from that point at its regular tariff.

* * *

Across the inlet from Vancouver a new city is soon to be born. The North Vancouver rural district is to be divided, and the portion on the waterfront, already being developed as a townsite, is to secure civic life. The expected advent of a railway will give impulse to the city now in process of organization. An agreement has been made with the municipality as it now exists for the installation of street car lines. Some six miles are to be constructed early in the Spring, plans for the work having beens approved by both the municipality and the B. C. Electric Railway Company.

The annual output of the mines of Ontario has practically doubled in value during the past year. For the period of nine months, ending with the 30th September, 1905, the total value of the products was $9,000,000, as compared with $5,061,677 for the whole of 1904. The Sudbury nickel mines are now producing the world's largest supply of this mineral, the value of the output for the last nine months being over $2,531,000. Gold was mined to the value of $67,259; silver, $1,300,000; cobalt, $75,000; copper, $522,764; pig iron, $2,907,864, and steel, $2,421,549.

FOUNDRY AND METAL INDUSTRIES

A shipment of mica valued at $700 was made by J. Adams, Perth, recently.

The total sales of the Dominion Coal Company this year will be about 3,300,000 tons, of which 1,118,000 went to the St. Lawrence market.

An explosion in the engine room at the Deseronto Iron Works injured two men last Friday and has caused the closing down of the works.

The Geological Survey Department has issued a report regarding the great coal fields said to exist near Nicola and Quilchena, about 50 miles from Kamloops, B.C.

An effort is being made to interest British capitalists in Nova Scotia gold mines. J. O. James, a Nova Scotia mining engineer, is now in England working to this end.

The output of mineral in the mining district of British Columbia was the largest on record during the first week in December. Over twenty mines shipped ore to smelters, etc.

The steel rail mill of the Lake Superior Corporation at the Soo is said to have sufficient orders booked to keep the plant running to its full capacity for the first half of 1906.

The Boundary Falls smelter was blown in last week. The one furnace now in commission will reduce about three hundred and fifty tons daily from the company's mines. The second furnace is to be blown in later.

The British Columbia Copper Co. have contracted for the enlargement of their reduction works. Three new blast furnaces, each having a capacity of over 500 tons per day, will be installed.

Dr. Haanel, Superintendent of Mines, has received a sample of the first pig iron turned out at the Government experimental electric smelter at Sault Ste. Marie. It is of very superior quality.

Work on the new foundry to be erected at Glace Bay, N.S., for the Dominion Coal Co., has been commenced. The foundry will be built of brick and steel, 90 by 100 feet in size and will cost $25,000.

A Toronto syndicate is said to have secured the right to use a secret German process for the treatment of Cobalt ores. A company with a capitalization of $1,000,000 is to be formed and a smelter established in the Cobalt district.

The Seattle Iron & Steel Co. has purchased considerable iron property near Renfrew, on the west coast of Vancouver Island, and propose to establish pig iron works there to supply material for their steel mill at Seattle.

In the work of establishing a central power plant for all its mines the Dominion Coal Co., Sydney, has purchased three electrical machines of 650 horse power each. The longest distance at present over which power will be transmitted will be No. 6, a distance of about eight miles from the proposed central station at Dominion No. 2.

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Polished Canada Plates
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D. W. CLARK, P.O. Box 521, Toronto, Can.
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NEW GLASGOW, N.S
Manufacturers of
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And SIEMENS-MARTIN
OPEN HEARTH STEEL

NETHERY FLUSH VALVE.

A FLUSH valve of exceedingly simple construction, on the contra-hydraulic system, has been making great progress on the Canadian market for the past two or three years. This valve, which is known as the Nethery Flush Valve, does not introduce any absolutely new principle, but has been tested with highly satisfactory results. both in Canada and the United States. The illustrations produced on this page, will serve to make clear the explanation of this valve, which is now controlled in Canada exclusively by the Robert Mitchell Co., Limited, of Montreal, and manufactured also by the James Morrison Brass Manufacturing Co., Toronto.

The Nethery Flush Valve is by no means complicated in design, and its advantages are numerous. The feature which especially appeals to every one interested in the trade, is the fact that it is absolutely noiseless in operation—an advantage which is unique. The simplicity of the valve is such that it cannot get out of order, except when obstructions come through the water pipe. It may be easily adapted to any modern closet, and does not cost more than an ordinary first class fixture. Furthermore, where there are a number of closets in a building, the water may be easily shut off from any one of them without interfering whatever with any other. Its worth has been shown in the satisfaction experienced from the installations in the C.P.R. Hotel, Winnipeg, the Inglis Block, Montreal, the Boniface Hospital, Manitoba, the new Notre Dame Hospital, Montreal, and other large structures.

Of our illustrations, figure 1 shows the general external appearance of the valve, fig. 2 gives a sectional view of the valve connected to an ordinary closet, and fig. 3 is another sectional view, showing the mechanism of the valve. By referring to fig. 3, the contra-hydraulic principle of the valve will be more easily understood.



Fig. 1—Exterior of Nethery Valve.

The valve chamber "B" is filled with water, the pressure of which, acting on the upper surface of the piston "A" is almost twice that of the water acting on its lower surface. Consequently, the normal position of the piston is resting on its seat "V." But, when the button "M" is pushed, the water contained in the valve chamber escapes through the cap "O" and down the by-pass "H," in the valve casing, into the discharge pipe "X." This releases the downward pressure on the piston, which then yields to the upward pressure. Upon the rising of the piston "A" to the top of the valve chamber, the pin "C" closes the valve "N," whereupon the upper valve chamber begins to refill, through the opening in the piston head. The rapidity of the filling of the upper valve chamber, and therefore the rapidity of the descent of the piston, and the quantity of water discharged at each operation of the valve, is controlled by the disc "D." By this regulating disc, practically any desired quantity of water up to fifteen or twenty gallons, can be drawn at each operation of the valve. In the descent of the piston, the closet flush is obtained while the piston is between piston ring "P" and the piston ring "R," passing the supply opening, and the refill is accomplished while the piston is passing the opening from piston ring "R" to piston ring "T," at which point of its descent the base of the piston has reached its seat "V," and the flow ceases.

From an economic standpoint, the most important advantage possessed by this valve, where a water meter is used, lies in the fact that no manipulation of the push-button will obtain a continuous flow and consequent waste of water. It will work perfectly, on any pressure, from five pounds up. The Nethery Flush valve may be seen in operation at the St. Catherine Street branch of the Robert Mitchell Co., Limited, Montreal.

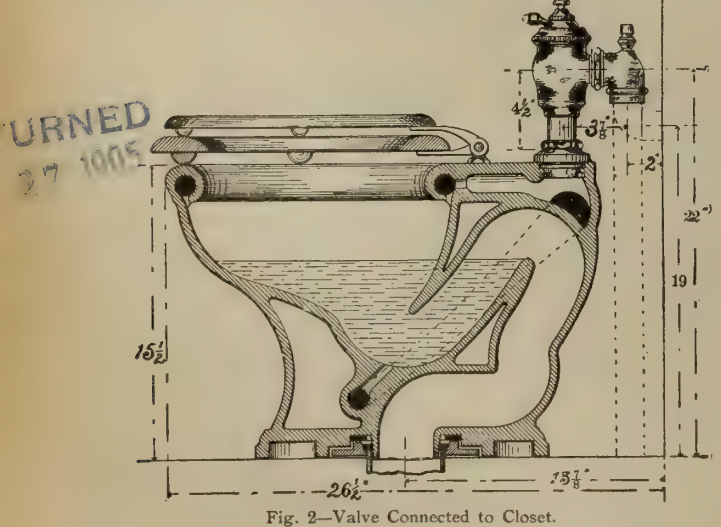


Fig. 2—Valve Connected to Closet.

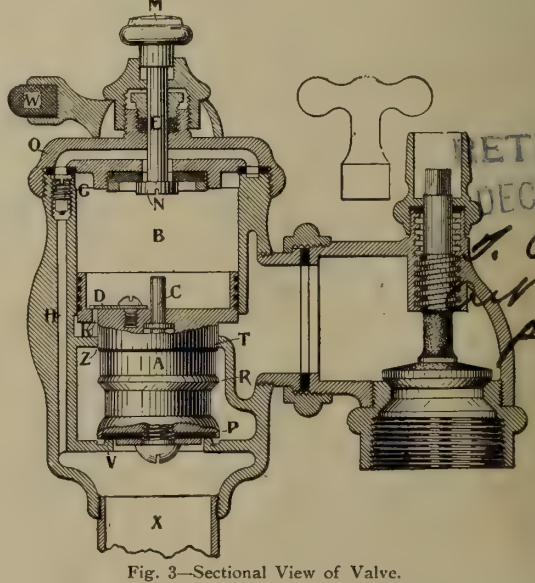


Fig. 3—Sectional View of Valve.

RETURNED
DEC 27 1905

PENBERTHY BRASS SPECIALTIES.

SULTAN gas engine cylinder oilers, illustrated herewith, are manufactured by the Penberthy Injector Co., Windsor, who make a specialty of brass fittings such as back pressure oilers, stationary oilers, plain grease cups, automatic grease cups, unions, air cocks, etc.

The "Sultan" is made in sizes varying from 2 to 3 1-2 inches in diameter. One of the best features of this cup is the simple method employed in regulating the ball valve in the sight feed shank. All gas engine manufacturers know that the piston action in gas engine cylinders differs very materially. In small motor engines the piston moves very rapidly, where in large stationary machines the stroke is slow, and this variation occurs as the innumerable styles and sizes of gas engines increase.

After the female end of the shank has been threaded its whole length, a steel ball is dropped in and a regulating plug

screwed from the bottom, thus holding the ball in the chamber. The play that the ball has depends on the rapidity of the piston. The faster the explosions occur the smaller space should the ball occupy, and this regulating is simply done by taking a screw driver and giving

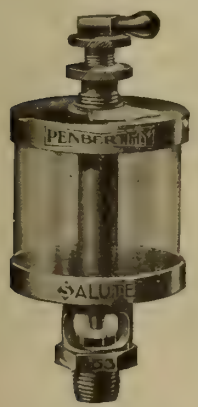


Silex Automatic Grease Cup.

the plug, which is slotted for that purpose, a turn or more as the case may be, thus lessening the play of the ball.

The top of the regulating plug is slotted in four sections so that when the ball drops on it there is ample space around for the oil to pass down. The sight feed glass is packed both top and bottom, and when the shank is screwed on the cup the glass is held secure, thus avoiding any possible chance of leakage.

From the body of the cup a pressure tube passes down along the centre through the base of the cup and directly into the sight feed chamber. This tube is so arranged as to take up any gas that may have escaped through the oil passage, and conveys it to the top of the cup thus creating more or less pressure, for unlike most other oiling devices this chamber must be perfectly tight. In the case of the "Sultan" the filler plug is fitted with a leather washer which absolutely prevents any leakage of oil



Salute Stationary Oiler.



Sultan Cylinder Oiler.

when properly screwed down. Another good feature in connection with the filler plug is the means taken to prevent its getting lost. A small wire, a couple of inches long, is looped at the one end, the other passing through the oil hole in the cover from the under side where it is fastened to the filler plug. Instead of fumbling with a loose plug and nine times out of ten losing it, one simply unscrews this and lets it hang suspended by the wire until the cup is filled, when it is put back without any delay whatever. The "Sultan" is fitted with a snap lever top which tells by its position in an instant if the cup is feeding or not. As it stands vertically it shows the oil feeding, and when turned horizontally the feed is shut off.

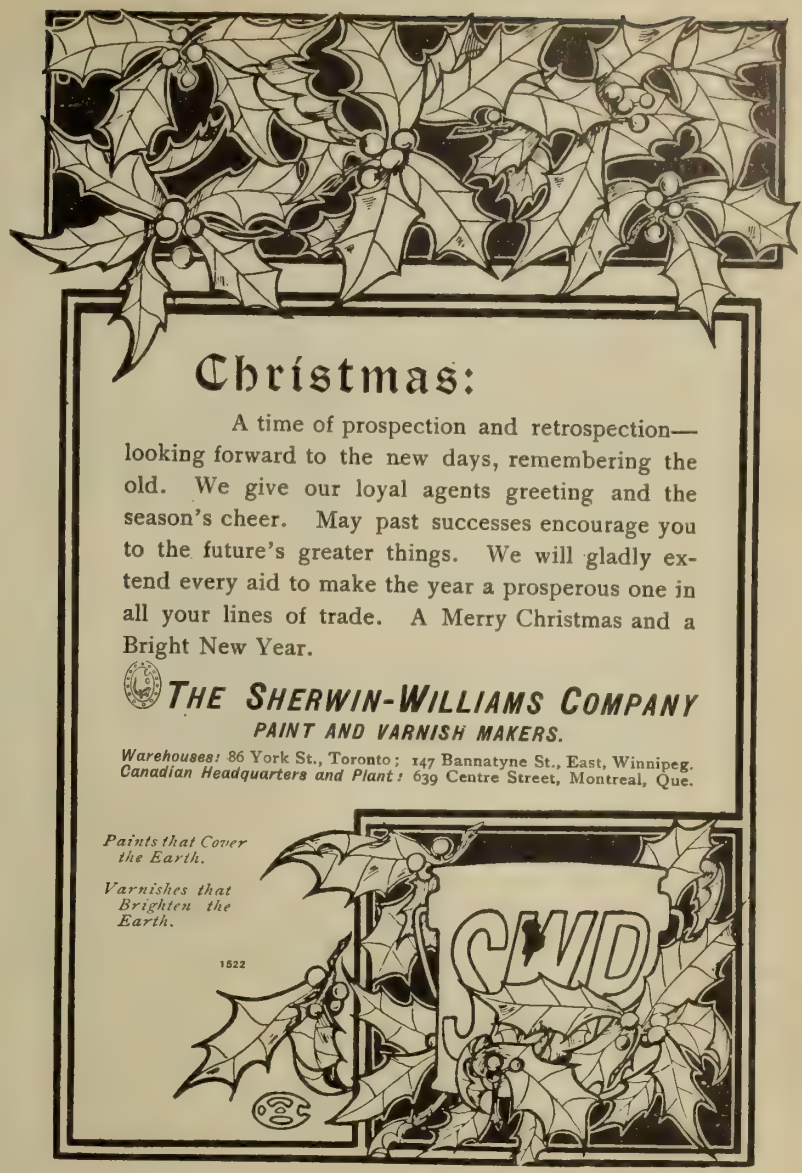
The metal used in making these oilers is the best red brass that can be made. It is claimed that the workmanship and finish is not surpassed by any other makers, and the careful engineer will find that the outcome of his experience with a Penberthy "Sultan" cup will be a perfect cylinder oiler.

Their "Salute" or stationary oiler is made exactly after the pattern of the "Sultan" excepting that it has no ball valve or pressure tube. It is so constructed that by putting the snap lever at an angle of 45 degrees the cup flushes, thus enabling the engineer to give a bearing an extra amount of oil at any time without disturbing the regular feed.

Their "Silex" automatic grease cup will be found to give less trouble and better satisfaction than other cups of its kind on the market. Made of red metal, highly finished, and the working parts carefully formed and assembled, the "Silex" grease cup will be found to be most economical and satisfactory for use by engine builders.

In making the particular styles of air cocks used by different gas engine builders, special care is taken in the grinding of those that are to be used for gasoline connection. These air cocks are also made from the best red metal and finished either brass or nickel-plated.

Readers of Hardware and Metal interested in these goods and manufacturers of gas engines and automobiles can secure copies of the Penberthy catalogue, describing these lines at greater length by mentioning this paper. A post-card will bring the book.



CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

CONDUCTOR PIPE ELBOWS.

A CATALOGUE devoted exclusively to conductor pipe elbows has been issued by Ferdinand Dieckmann, Cincinnati, Ohio. These elbows are manufactured under patents obtained in 1893, 1895, 1898 and 1901. They are made of six different materials, in many angles and sizes, and comprise 1,225 different varieties. These are manufactured in immense quantities, and the manufacturer certainly has an advantage in the purchase of materials in such large quantities. If you want to learn all about conductor pipe elbows, do not fail to ask for this catalogue, mentioning Hardware and Metal.

Cycle Skates.

Automobile cycle skates are illustrated in several styles in a small booklet issued by the Cycle Skate & Sporting Goods Co., 37 Park street, New York. The cover shows a skater defeating an automobile, the illustration being in two colors. This line should be a good seller in many districts, particularly in Pacific Coast cities. Mention Hardware and Metal when sending for one of the books.

The Fairbanks Standard.

The second issue of the "Fairbanks Standard" has been issued. It contains much interesting matter, and any dealer who desires to keep in touch with the Canadian Fairbanks Company should forward their name for a copy of the "Standard" to the Montreal office of the above company. Mention Hardware and Metal.

Electrical Supplies.

John Forman, manufacturer of electrical supplies, 708-710 Craig street, Montreal, has issued several illustrated catalogues descriptive of some of the goods he handles. Empire miniature lamps, for decorative purposes, are illustrated in all sizes, shapes, styles, etc., plain, frosted, and in all colors. A very handsome and convenient device is shown for obtaining the candle effect on fixtures fitted with standard sockets, by simply screwing it into the socket of the ordinary 16-candle power lamp. Any of the many styles of colored silk shades made for candles can be used. Illuminated signs and other lines are also fully described. Mention Hardware and Metal when sending for any of the catalogues.

Handsome Calendars.

Mackie & Ryan, hardware merchants, plumbers, etc., Pembroke, Ont., and T. McOuat, founders, machinists, hardware merchants, etc., Lachute, Que., have gotten out neat calendars of the hanging type, about twenty-four inches by twelve in size. On the calendars are reproductions of paintings by well-known artists. The designs are taking ones, and should secure for the calendars a prominent position on the walls of every customer's home.



TRADE INQUIRIES.

Correspondents desiring to get in touch with any o the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

1161. A London firm in the oil trade has requested to be placed in touch with reliable firms connected with oil wells and refineries in Canada.

1162. A Bradford firm wishes to develop trade in Canada in woollen and other yarns and also in tops, and is prepared to appoint suitable Canadian resident agent to handle their goods.

1163. A Midlands manufacturer of varnishes, paints, colors, dryers and greases is prepared to appoint resident Canadian agent.

1164. The manufacturer of a new patented post card album wishes to arrange with a Canadian firm to undertake the sale of this article.

1165. A gentleman is desirous of acting as agent for any Canadian firms exporting to Great Britain.

1170. A Japanese firm wishes to be put in communication with Canadian merchants with a view of importing Japanese wall paper into Canada.

1178. A London firm is prepared to represent Canadian manufacturers of office furniture, cabinets, files and also of wall papers suitable for the United Kingdom trade.

1180. A Birmingham firm wishes to buy sheet and pig lead.

1181. A Birmingham firm wishes to get in touch with Canadian firms open to sell pick handles.

1182. A Cradley firm wishes to buy clothes pins and broom handles.

1185. A Birmingham firm wishes to appoint an agent in Canada for the sale of electroplated wares.

1186. A large firm in Birmingham wishes to appoint an agent in Canada for the sale of their trowels, augers and bits.

1188. A Birmingham firm wishes to appoint an agent in Canada for the sale of their brass fenders, fire-irons, etc.

1189. A Birmingham firm wishes to find an opening in Canada for the sale of incandescent gas mantles.

1190. A large Walsall firm wishes to find a market in Canada for all kinds of saddlery goods.

The Canadian Niagara Power Company has applied to Washington and Ottawa for permission to string cables across the Niagara River for the transmission of electrical energy from Fort Erie to Buffalo. The request is now under consideration by the Canadian section of the International Waterways Commission, but will not be ruled on by this body until the commissioners have consulted the Minister of Public Works. It is for the Government to say whether there is any objection to the idea of exporting power to the States that has been generated on our side of Niagara.

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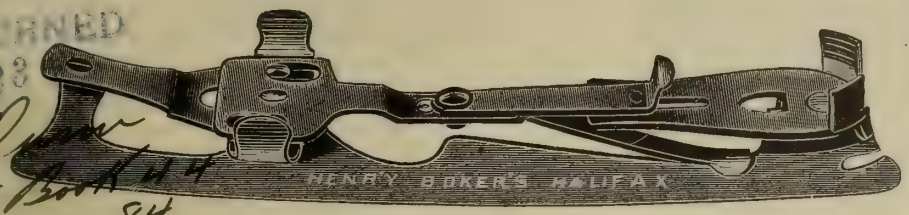
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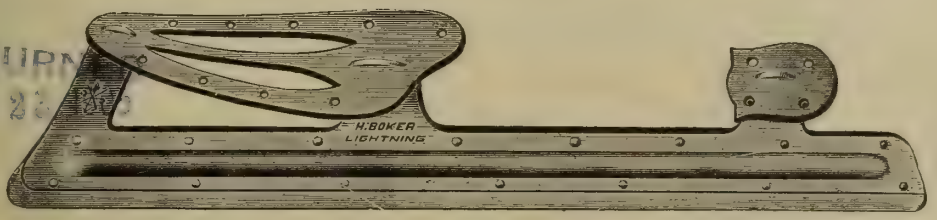












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SPRING SKATES

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5	Boker's Bright Finish	7-12
9	" Plated	9-12

STARR MANUFACTURING CO.

No.		
90	Steel Blades, Bright Finish	
95	" Plated	

BOKER'S LADIES' SKATES

No.		Size
415	"Crescent" Ordinary Quality, Plated	9-10½
447	"Pride" Light Runners, Plated	9-10
1422	"Charm" Best Quality, Plated	9-10
1424	"Beauty" Best Concave Runners, Plated	9½-

STARR MFG. CO'S LADIES' SKATES

No.		Size
25	"Beaver" Plain Runners, Plated	8½-10

BOKER'S HOCKEY SKATES

No.		Size
530¼	"Hockey" Ordinary Quality	7½-12
515	" " " Plated	8-12
1535	"Gem" Ordinary Quality, Plated	9 and 12
531	"Royal" Best Blued Tops	9-11
532	" " Plated	8½-11
534	"Daisy" Concaved, Plated	9-10½

With Puck Stop

1635	"Advance" Ordinary Quality, Plated	9-12
631	"Perfect" Best Quality Blue Tops	10-12
632	" " " Plated	10-12
634	"Model" Concaved, Plated	10½-12

BOKER'S HOCKEY SKATES
Double Enders

No.		Size
4597	"Stadacona" Extra Quality, Full Plated	10-12

STARR MFG. CO.'S SKATES

No.		Size
10	"Regal" Nickel Plated on Copper	10-11¼

BOKER'S HOCKEY SKATES
Double Ender with Puck Stop

No.		Size
685	"Peerless" Best Quality, Plated	10-11½
692	"Dominion" " "	10½-11½
694	"Victor" Ex. Quality, Plated	10½ and 11

STARR MFG. CO.'S SKATES

No.		Size
10	"Mic Mac" Featherweight	10-12

BOKER'S TUBULAR SKATES

No.		Size
9597	"Lightning" Double Ender	10-11½

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J. A. DEMERS
A. ROCHETTE

RETURNED
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DUFFERIN TERRACE AND CHATEAU FRONTENAC, QUEBEC

No Bad Stock on Your Shelves



"LEWIS" BUILD

H. H. VALLIERE
R. LAMBERT



PARLIAMENT BUILDINGS, OTTAWA

C. L. DEVITT
G. N. GRAY
W. O. LABELLE
B. S. LEAK
J. R. McMILLAN
M. MORELLL

WAY DOWN EAST TO NOVA SCOTIA,
AND WEST O'ER THE MIGHTY HILLS,
WE WISH YOU ONE AND ALL, FRIENDS,
GREETING AND GOOD WILL.

HE
PRESENTATIVES
OF
.OS., Limited
R MANY FRIENDS
OM
TO THE PACIFIC
S OF THE SEASON.



MORAINE LAKE, VALLEY OF THE TEN PEAKS, CAN. ROCKIES

A. O. CAMPBELL
G. W. DUNN

RETURNED
DEC 23 1905
To Montreal
out Book 44
Page 80



BLEURY ST., MONTREAL

E. N. COTE
C. M. STRANGE
(Sales Manager)

No Bad Debts in Your Books



REVERSIBLE FALLS, ST. JOHN, N.B.

B. SAUNDERS
G. W. CHARLES
N. A. WYLIE
W. R. TAIT

RETURNED
DEC 23 1905

WE WISH YOU A MERRY XMAS,
AND A HAPPY AND PROSPEROUS NEW YEAR;
SAVE US ALL YOUR ORDERS,
FOR WE'LL BE BACK AGAIN, DON'T FEAR.



THRESHING THE HARVEST, CANADIAN NORTHWEST

N. J. DINNEN **W. J. MILLER**
A. R. HART **GEO. C. YOUNG**

PAINT, OIL AND BRUSH TRADES

THE LIFE OF PAINT.

PAINT-MAKING is not a mere mixture of solids and liquids, but a scientific process involving technical knowledge, skilled labor and expensive and powerful machinery, says Paintographs. Herein we hope to make plain why linseed oil is used as the principal vehicle or thinner in paints, and point out briefly how its value may be lessened or destroyed.

Good paint is made chiefly of linseed oil, in which solid coloring matter or pigments are ground—not simply mixed. The pigments serve a triple purpose—they thicken the paint (oil alone would run off); they beautify surfaces, and protect the oil from the sun and rain. Turpentine, driers and some other materials are added to paint for specific purposes, but they have little or no value as paint.

Linseed oil is so important a part of paint, that it is often called "the life of the paint." It may well be so regarded for just as long as the oil lasts the paint has life. When the oil from chemical action or long exposure is no longer present, the paint is dead. Dead paint—a lustreless, dry, chalky coating—has no protective qualities, and disintegrates rapidly, the pigments having no cohesive attraction, after the departure of the oil.

The property which gives linseed oil its peculiar paint value is that it absorbs oxygen from the air when it is exposed in thin films, as in painting. This film, from oxidation, begets the valuable properties of being practically neutral in its reactions, more or less transparent, and quite elastic. The property of absorbing oxygen is increased by heating linseed oil, and is still further increased by adding to the oil, while it is being heated, certain bodies known as driers. While boiled oil dries more quickly than raw oil, and leaves a more lustrous surface, the film is less elastic, and liable to crack.

Anything added to the paint to unduly hasten its drying, will destroy the elasticity and toughness of the oil film. Therefore, all driers should be used sparingly and with caution.

Furthermore any pigment, chemically active, will not make an enduring paint. If used at all, it should be in combination with more stable or inert pigments, to neutralize as far as possible its chemical activity.

It is chemical activity that lessens to a marked degree the value of white lead as a paint pigment. Strictly pure white lead carries but little oil, and the little it does carry soon ceases to be linseed oil, by reason of the chemical change that takes place when the lead and oil are united and exposed to the elements. To correct this serious defect in the lead and oil mixture, modern paint-makers have added various pigments in varying formulae, and years of experience have proven that of these combinations, those carrying the greater amount of oil make the better paint, when they have good opacity or covering qualities.

CANADA PAINT CO.'S BANQUET.

ON Thursday evening of last week the St. Lawrence Hotel was the scene of a jolly informal banquet, given by the travelers and officials of the Canada Paint Co., Montreal.

Promptly at 6 o'clock seats were taken at the tables and after the hungry looks had disappeared from all the faces at the table, Mr. H. W. Aird, treasurer of the company, who acted as toast master, in the absence of Mr. Robt. Munro, the managing director, proposed the health of the King, which was drunk with enthusiasm. Mr. Craig astonished his friends by the ability he displayed in leading "God Save the King." Mr. W. H. Evans then proposed a toast to the Canada Paint Co., which, he said, was a kind of alma mater to those present. Response was made by Mr. Aird and Mr. Allan Munro, the former of whom announced that 1905 had been the record year in the company's business, reading figures which spoke volumes for the management of the company and for the prosperity of the country. Mr. Allan Munro, who spoke on behalf of his absent father, was very warmly received. He told "the boys" that his father's health had greatly improved during his stay in the Old Country.

These were the only toasts of the evening, but before adjourning the emblem of the Mystic Order of the Elephant was presented to the representative of Hardware and Metal, who, in reply, thanked the gentlemen especially for their kindness in providing him with a trunk which he would use on his Christmas vacation.

Hutchinson Bros., Victoria, B.C., have installed an electric plant at the whaling station at Sechart, on Vancouver Island.

This Journal has three classes of readers. First, those who are already customers of ours; second, those who are not our customers but should be; third, the few left over from the above.

To you all we extend a hearty Christmas Greeting, and may the year 1906 be the most successful that has ever been.

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

Straith's Decorative Enamel

A genuine enamel. Imparts a hard, lustrous, non-absorbent surface that remains bright and attractive. It is admirable from a sanitary standpoint. Adapted to Woodwork, Furniture and Earthen and Metal Ware of all varieties. The colors of this enamel harmonize nicely with draperies, etc.

To be had in nineteen colors, every one a salable line. Have you a copy of our Catalogue?

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

METAL NOVELTIES AND ADVERTISING UTILITIES

HERBERT J. RODGERS

of Saracen House, Snow Hill, London, E.C., Eng., visits Canada in March, representing British Manufacturers of up-to-date metal and aluminum fancy goods, photo frames, calendars, match boxes, ash trays, advertising novelties, etc. of high-class. Appointments from Jobbers will be valued.

ONE CENT

Is it worth one cent to know well not only the paints and brushes you are selling but also those your competitor is selling? A Post Card sent to our advertisers will bring you full information about their goods.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Sharratt & Newth's Glaziers' Diamonds

are unequalled for cutting and wearing qualities.

To be obtained from the principal Hardware Dealers and Glass Merchants.



Agents for Canada: **A. Ramsay & Son Company, Montreal**

OILS

Raw Linseed
Boiled Linseed
Pale Boiled Linseed
Pale Refined Linseed

"DOMINION" BRAND

OILS GUARANTEED GENUINE.

Canadian Agents—
J. A. BERNARD,
21 St. Peter Street., Quebec
HOMER TAYLOR,
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FRED'K FENNER & CO., LTD.
PENINSULAR HOUSE, MONUMENT ST., E.C.
LONDON, ENGLAND.



That Eight Hours.

Guaranteed not to crack nor blister

"Island City" Brand

house and floor paints ***will dry in eight hours.*** There's quality for you! Do you think you can carry better paints than ***"Island City" Brand?*** The proof of the paint is in the ***service,*** isn't it? ***"Island City" Brand Varnishes*** are as good as ***"Island City" Brand Paints.*** Order both.

P. D. DODS & CO. Toronto, Montreal, Vancouver, Winnipeg

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

we know to be the best value obtainable in paint.
They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers, and the world's best white lead—BRANDRAM'S B. B. GENUINE

BRANDRAM BROS & CO
BRANDRAM'S B.B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 22, 1905.

STOCK-TAKING is the order of the day in the local paint houses. Travelers are all off the road, and shipments are, naturally, few and far between. The manufacturers generally are well satisfied with their year's business and are making plans to branch out more widely in 1906.

But one change in price has been recorded, this showing an advance of 1c. on linseed oil. All other lines are strong and at the same prices as before.

Linseed Oil—We are quoting this week an advance of 1c. Price is now: Raw, one to four barrels, 47c.; five to nine barrels, 46c.; boiled, one to four barrels, 50c.; five to nine barrels, 49c., f.o.b. Montreal, net 30 days.

Turpentine—Conditions are this week the same as last, no further decline having taken place. We are still quoting: Single barrel, 93c. per gallon. Two barrels or over, 92c. For smaller quantities than barrel, 5c. extra per gallon is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Ground White Lead—Our quotations are as follows: Best brand Government standards, $5.65 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—Prices are: Barrels, $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—We quote as follows: Pure dry in casks, 7 1-2c.; in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.; in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We quote: 25-lb. irons, 8c. to 10 1-2c.; No. 1, 6 3-4c.; No. 2, 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—The local market remains steady, with prices unchanged, in spite of advances to importers. We are quoting as follows: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—We quote: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75; and smaller quantities, $5.50.

Gum Shellac — We still quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Shellac Varnish——The demand is fair for the season and prices are well maintained. We quote prices as follows: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Our prices are from $1.20 to $1.40 per gallon.

Castor Oil—Recent advices from India state that as the result of a drought there, the crop will probably be short and this article is likely to be considerably higher in the near future. In the meantime we are quoting: 7 1-2c. to 8 1-2c., according to lots.

Refined Petroleum—We still quote: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—Bookings have commenced in the east and are about of normal volume. The probability is that the existing prices will remain unchanged until next Spring. The market is at present very firm at the following prices: First break, 50 feet, $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6,50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Dec. 22, 1905.

LINSEED oil is advancing in all markets owing to firmer conditions in England and the higher prices asked for seed in India. As frost is said to have injured the seed in Argentina there does not appear to be much prospect of cheaper oil being on the market during the Winter. This will benefit the Canadian crushers as well as the farmers who have seed to sell. Quotations range from 49 to 52 cents for raw in single barrels and 52 to 55 cents for boiled in the same quantities.

Turpentine is still quoted at last week's figures, but a rise of 4 cents is reported from the south where the "Big Four" are said to have bought up all opposition and now control the whole present output. This development of the past week is likely to hold up prices

for rosin and turpentine until new stock can be procured next Spring. Rosin will likely revert to its former high figures if any credence can be given this report.

Business for the week before Christmas has been quite satisfactory.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560 lbs., $4.75; ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V.. M., in casks, $6.50: in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gallon lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Paris Green (for 1906)—We quote as follows: Barrels, 600 lbs., 15 1-4c. for Canadian Government standard, to 15 3-4c. for Berger's English; kegs, 250 lbs., 15 12c. to 16c.; drums, 25 lbs., 16 1-2c. to 17c.; drums, 50 and 100 lbs., 16c. to 16 1-2c.; 1 lb. packets, 17c. to 17 1-2c.; 1 lb. tins, 18c. to 18 1-2c.; 1-2 lb. packages, 19c. to 20 1-2c. per pound. Terms, 2 per cent. off on Berger's English.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 49c. to 52c.; boiled, 52c. to 55c.; 5 to 9 barrels, raw, 48c. to 51c.; boiled, 51c. to 54c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, 95c. f.o.b., point of shipment, net thirty days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Trade continues normal. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

THE LEAD SITUATION.

SEVERAL adverse circumstances have combined of late to bring about the recent advance in pig lead and to put lead consumers in a position of great uncertainty as to the future of the market. As the new year approaches, it becomes of the utmost importance to know what supply of lead may be relied upon and about what prices are to prevail, so that the cost and the selling price of lead products may be determined in advance for as much of the new year as possible.

The present uncertainty on this point is the occasion of no little inconvenience to the white lead trade, among others, and especially to large users of the lead pigments. The trade has been accustomed to a fairly steady lead market, but at the rate of change that has prevailed of late there is no telling what 1906 may bring forth in this important staple. The cause of the advance is the falling off in production as compared with increased demand. In other words, as stated by a contemporary, lead consumption has overtaken the production of the metal, and the causes are various, says the Paint, Oil and Drug Review, which goes on to discuss the difficulty in securing sufficient lead in the Western States and Mexico and the likelihood of western smelters securing lead ores in British Columbia now that the Canadian lead bounty has been withdrawn. The article concludes: From this outline of the lead situation it is evident that there is more behind the present lead market than appears at first glance. It is not a matter of manipulation or control, primarily, but is the result of many circumstances, of which not the least important is the mining of the precious metals, as well as the lead ores. The present prospect seems favorable to continued firm and advancing prices for pig lead.

LARGE SHIPMENT OF PAINT.

Carter Brothers, hardware merchants, Picton, have forwarded Hardware and Metal a clipping from a recent issue of the Picton Gazette, showing that they are both large and shrewd buyers in view of the almost certain advance in mixed paints after the New Year. Carter Brothers read Hardware and Metal closely and state that they "do not know how they would get along without it." The item referred to, follows:

"Carter Bros. received per Str. Alexandria, on her last trip, one of the largest shipments of ready-mixed paints ever brought to Picton. It consisted of over 7 3-4 tons of Sherwin-Williams paints. Their first shipment last Spring by the same steamer, was 1 3-4 tons, and their shipments between times have amounted to two thousand three hundred and fifty-four cans, which all goes to show the wonderful popularity of this great paint.



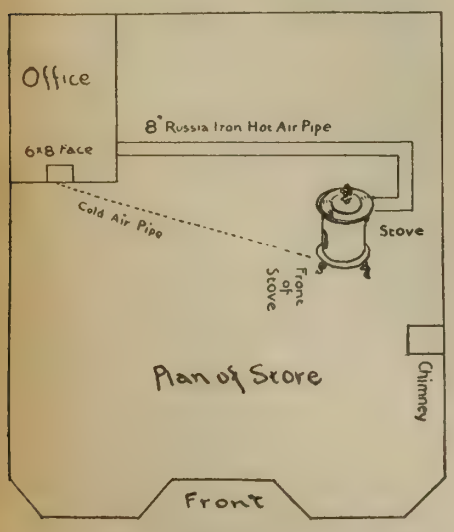
STOVES AND TINWARE

HEATING A STORE.

STOVE and furnace men often encounter some interesting problems as to how best to properly heat stores and offices with stoves. Where to locate the stove and pipe in order to secure proper draft and comfortably heat the large area contained in the four walls of the store building oftimes requires close study.

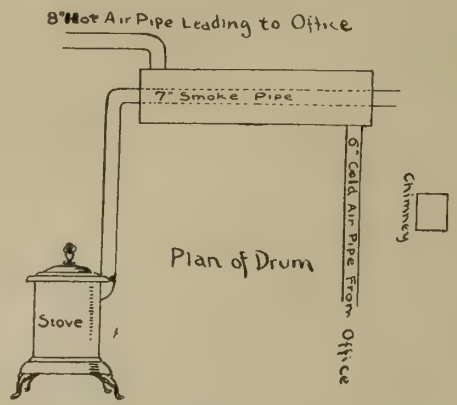
The accompanying illustrations show a store in a Montana city sent to the American Artizan by a Butte stove merchant who asked for advice on how to improve the heating as shown in the plans and described as follows :

"The store is at present heated by a large Round Oak stove, which is ample to heat the building in cold weather with the exception of the office. The office is located in the extreme northwest corner of the building, being 7x10 feet in size, and enclosed by a glass casing, which only runs up 7 feet. There is an opening for a door but no door ; consequently some heat gets into the office, but in real cold weather it gets uncomfortable. The stove being a direct draft stove much of the heat goes up the flue. In order to save some of this heat we intend to enclose part of the horizontal pipe with a drum, bring the cold air from the office through a 6x8-inch register face and 6-inch pipe under the floor until we get the drum, connect with collar on one end by bringing 6-inch pipe through the floor ; on the opposite end will take an 8-inch hot air pipe and lead to centre of office. All the pipe will be of planished iron on account of tin pipe being colored from the heat. From floor to ceiling is 11 feet,



from top of smoke pipe entering chimney to ceiling is 2 feet, from centre of office to stove is 17 feet. We are in doubt as the glass casing surrounding the office does not run to the ceiling."

A correspondent in replying to the request for advice said the Butte merchant was trying to do the impossible, as the partition does not extend to ceiling and the warm air cannot be induced to descend to floor unless the room has a door, and partitions extend to ceiling. Neither will cold air be removed from floor of office, unless the space between base of stove and floor is



made almost airtight. This must be done and a 12-inch draw used, or it will be a failure. The better way would be to place a hot water radiator in office of sufficient size to heat it, and use a water attachment in stove, run the supply overhead and bring return pipe back under floor. The floor of office will then be heated instead of ceiling. This is on the supposition that the stove is at least 18 inches in diameter.

Has any Canadian heating man any similar problems to offer ?

THE WORLD'S RICHEST TIN MINE.

Mount Bischoff, the great tin mine of Tasmania, has by its last-declared dividend reached the $10,000,000 point in the distribution of profits. No other tin mine in the world can show even approximate results. In the Malay Peninsula there are enormously valuable deposits of the metal, but there is no Malay "mountain of tin," as Bischoff may be truly described. The mine was discovered about thirty years ago by a prospector known as "Philosopher" Smith. He sold it in Launceston, the principal town in the north of the island and there the stock is mostly owned to this day.

WESTERN HEATING CONTRACTS.

Thos. Poole, hardware dealer in Baldur, has recently installed a Pease Economy furnace in a new four-room school in Baldur, plans of which were prepared by W. A. Elliott, architect, Brandon.

E. H. Johnson & Co., of Brandon, are installing Pease Economy furnaces in the Indian school near Brandon.

Cotter Bros., of Winnipeg, are busy installing the heating and plumbing in the new premises of the Bank of Hamilton in Moose Jaw. Specifications call for a Florence boiler.

A CINDER SIFTER SHOVEL.

A combined ash, cinder and coal sifter, and ash, coal and snow shovel is the latest invention to be put on the Canadian market. It is named the "Bonanza," the framework of the shovel being made of 18-gauge expanded metal while the bottom is a strong wire screen, enabling the operator to sift the ashes from the cinders inside the furnace pit. The Collins Manufacturing Company, 18 Adelaide street, Toronto, are the manufacturers. Write them for discounts and descriptive matter and mention Hardware and Metal.

NEW STOVE FOUNDRY.

Mantel coal grates and cast iron cook stoves are to be the two specialties put on the market during the coming season by the Whittaker Stove Works, Windsor, a young concern under enterprising management. Grey iron casting will also be made for the custom trade. In the past a large percentage of the mantel coal grates sold in Canada have been imported from the United States. The new Whittaker line, made in Canada, should, therefore, meet with a strong demand. Dealers in these goods are invited to write for particulars, mentioning this paper.

AGENCIES WANTED

We wish to represent manufacturers and provision dealers in Manitoba, Saskatchewan and Alberta. We have well established sales agents in every important town. At Winnipeg we have first-class warehouse accommodation. Interested parties are referred to The Eastern Townships Bank of Canada.

CANADIAN CO-OPERATIVE CO., Limited
Box 559 WINNIPEG, MANITOBA
Capital $250,000.

E. T. WRIGHT & CO., Hamilton, Canada

Comfort Foot Warmers



The secret of an enjoyable drive in cold weather is to have a foot warmer. Why not get one at this price?

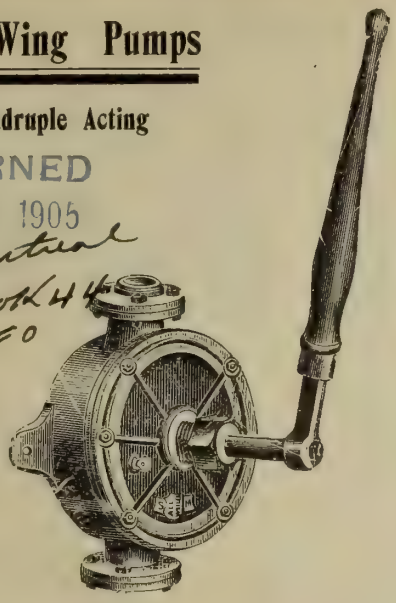
$1.00 Each

25 Carbons with each Warmer.

Semi-Rotary Wing Pumps

Double and Quadruple Acting

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Send in your specifications for Spring delivery, and get the right quotations from

F. W. LAMPLOUGH & CO.

MONTREAL



A Convincing Opinion

Hartman Bros, Hardware Merchants, Midland, Ont., have this to say of

THE EMPIRE QUEEN RANGE

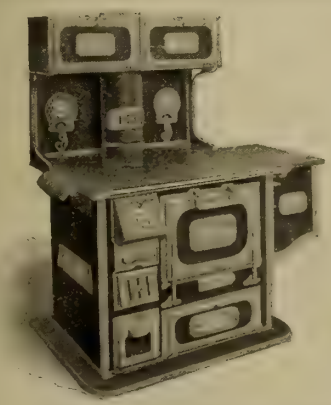
"In handling The Empire Queen Range, this last year, we find it a very quick stove to sell. It is giving good satisfaction to all whom we have sold to, and the demand for them is rapidly growing. Although we handle other different makes, we find **The Empire Queen** is taking the lead."

The merchants who sell **The Empire Queen Range** should be the best judges of whether or not it is the favorite range.

Think over the testimony here given. It's worth your consideration. **We have a Booklet.**

The Canadian Heating & Ventilating Co.
OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.
THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.



HAVING SHOWN THAT THE BODY OF

THE JOY MALLEABLE AND STEEL RANGE

is made of the best material for such work in existence, we now want to draw your attention to the **FIRE BOX** which next to the body is of first importance.

The **FIRE BOX** is long, narrow, deep and straight; lined with sectional iron linings and having **DUPLEX GRATES**, reversible for either coal or wood with the cogs on the outside of the body. Grate bars may be removed without disturbing the water front or linings.

Ashes will not adhere to the sides of the fire box—a turn of the grate gives a clean, bright fire.

Opportunities for securing the agency are growing less daily. Be wise.

THE JOY MANUFACTURING CO.
32 William Ave., - - TORONTO

AN IDEA THAT MADE A HIT.

IN Providence there were two rival department stores that made a valiant struggle for the business. They were located in the centre of the city on opposite corners at the junction of two busy thoroughfares. New advertising schemes were constantly devised by each. One day one of them put into operation a good thing. Beautiful and artistic moving pictures were displayed in the windows. The performance was given every evening and the street was thronged with people, who, after the display, crowded into the store of the merchant giving it. During the show they stood against the great windows of the store across the street, which was deserted all evening. The proprietor thereof suffered much uneasiness. He consulted the subordinates.

"I must do something. Blank is getting all the custom," he said.

"I have an idea I think might help us," an ingenious clerk responded. "The view of their place from our windows is admirable. Why not—"

And an enthusiastic discussion among the proprietor and subordinates followed in which the clerks all participated. At its conclusion there was much chuckling and "Mr. Jones," the bright clerk, was patted on the back until he felt four inches taller.

Then there followed a great activity among the force and a ringing of telephone bells and summoning of mechanics. The next morning the raised curtains disclosed rows and rows of circus-like seats in the great show windows, from which all the goods had been removed, and the morning papers contained a big display advertisement reading:

"The beautiful art display given nightly in Blank's department store can best be enjoyed from our great show windows. We have arranged seats for you free. All are welcome. Come and see a truly meritorious performance."

And thereafter while the show across the street lasted the rival department store was busier evenings than a beehive.—New York Commercial.

The Breton Coal Company are preparing to develop their property at Port Malcolm, N.S. Their areas are extensive, embracing between twenty-five and thirty square miles.

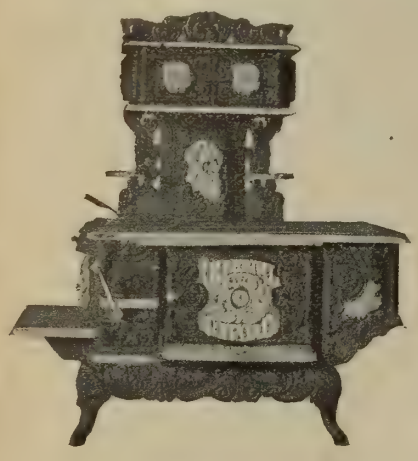
PERMANENT SUCCESS

is the goal all business men make for. Various methods are employed to reach that goal—all more or less ingenious—but there is only one sure, reliable way of getting there.

The hardware dealer who handles ordinary, second-rate wares starts on the journey with a **no-through** ticket.

If you want permanent success in the hardware business, you must handle quality wares.

The Oxford lines are Quality lines. You can secure and keep the high-class range trade of your town by placing the



Imperial Oxford Range

on your floor.

The Imperial Oxford is the highest class cooking apparatus ever manufactured at any price, and our price places it within the reach of every housekeeper.

It has many advantages and improvements not found in any other range, and the commoner features of capacity and efficiency are more in evidence.

The Draw-Out Duplex Grate and Frame prolongs the life of the fire-box, because repairs can be easily effected without disturbing the linings.

The Diffusive Oven Flue, exclusive to this range, delivers a column of super-heated air into the oven and maintains an even temperature very pleasing to the most particular cook. The economy produced by this flue is readily apparent to all practical men.

The oven is full-sized and square.

The Fire-box is accurately proportioned, deep and straight.

The Imperial Oxford on your floor will do more to achieve permanent success for your establishment than any other article.

Send for Catalogue 61

WE also manufacture Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO **WINNIPEG** **VANCOUVER**

80

The Gurney-Massey Co., Limited, Montreal, Que.

The Gurney Standard Metal Co., Limited, Calgary, Alta.

If you are in business to make money and are desirous of selling an article that will make satisfied customers for you and attract their trade in other lines, get the agency for

Walker Stoves and Ranges

"SUCCESSFUL EVERYWHERE"

About our Walker Pilot Range. An enamelledware tank in a solid cast casing—duplex grates for coal or wood, removable without disturbing the linings—oven thermometer—Seymour Patent slide draft along the entire length of the grate—cast iron flue back—and a large square oven, are a few features that make

Easy Sales and Satisfied Customers.

GET OUR CATALOGUE AND PRICES ON MONDAY.

The Walker Steel Range Company, Limited

Grimsby, Ont.

A BRIGHT STORE

PLEASES YOUR CUSTOMERS
ATTRACTS BUSINESS
SAVES TIME

A modern Acetylene plant will light your store perfectly and economically. Ask us about it.

THE CONTINENTAL HEAT & LIGHT CO.

MONTREAL



When Subjected to Heat

Sterne's Asbestos Stove and Furnace Cement

vitrifies without shrinking or becoming porous. It is odorless and effectually prevents the escape of smoke, gas or dust, thus ensuring a good draft.

It is invaluable for lining Furnace Doors of Steam Boilers, or as a protection for any work exposed to direct heat, flames, etc. You ought to have a supply. Secure full particulars from

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



"VICTORIA" IMPROVED COAL GRATE

24½x30½. Dump Grate. Double Damper.

Mantel Coal Grates

We are making a special run on this coal grate.

Finished in Oxidized Copper, Brass, or Dull Black.

WRITE FOR QUOTATIONS TO-DAY

Whittaker Stove Works

WINDSOR, ONT.

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

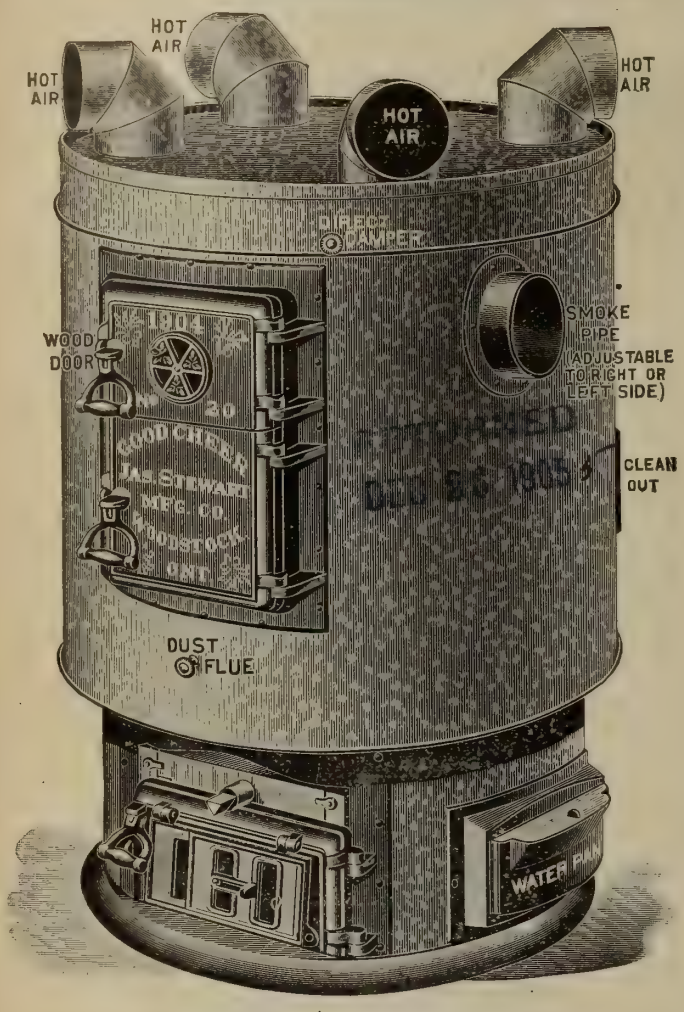
THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** **CALGARY**

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

THE "GOOD CHEER" FURNACE

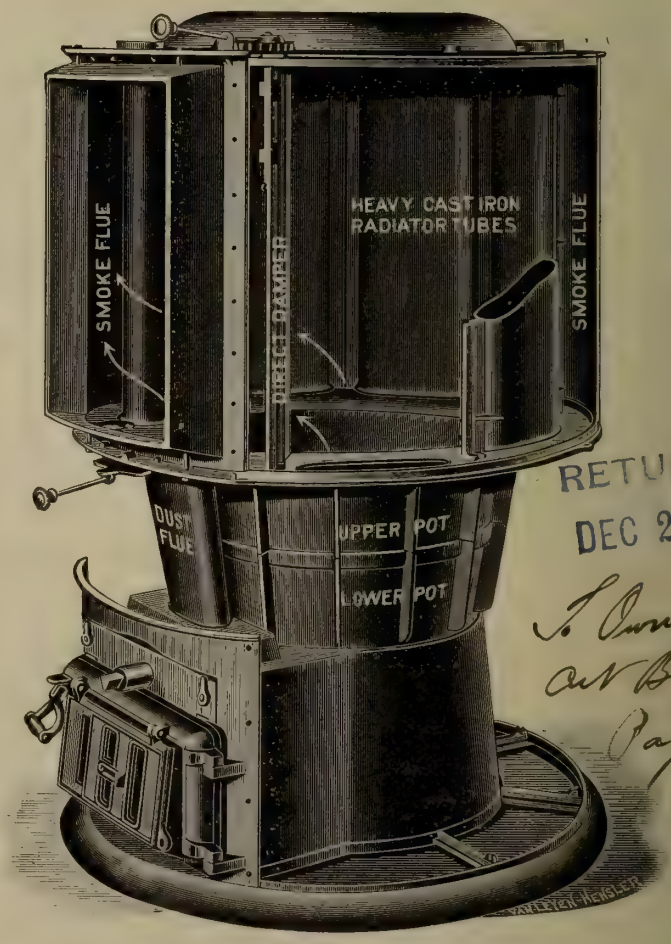
PATENTED



A POWERFUL AND ECONOMICAL HEATER OWING TO ITS IMMENSE RADIATING SURFACE.

A FIRST-CLASS FURNACE IN EVERY RESPECT.

BURNS WOOD EQUALLY AS WELL AS COAL—NOTE THE LARGE FEED DOORS.



Made in 2 sizes.

No.	Diameter of firepot	Height to top casing ring	Heating capacity
20	20-in.	53½-in.	20,000 Cubic ft.
24	24-in.	55½-in.	35,000 " "

SECTIONAL RIBBED FIREPOT. SOFT COAL GRATES SUPPLIED IF REQUIRED. SMOKE PIPE COLLAR ADJUSTABLE TO EITHER RIGHT OR LEFT SIDE. LARGE, ROOMY ASH PIT.

RETURNED DEC 26 1905

The Jas. Stewart Mfg. Co.

WOODSTOCK, Ont., and WINNIPEG, Man. LIMITED

CONDENSED OR "WANT" ADVERTISEMENTS.

SITUATIONS WANTED.

ENGLISHMAN, exceptional Canadian and British experience; capable reliable worker; hardware office or store; used to managing working business. Palmer, 122 McGill, Toronto, Ontario. [52-2]

WANTED—By retiring hardware merchant, position in wholesale house. Write Box 279, HARDWARE AND METAL. [52]

WANTED—Position as salesman by hardware man; five years' experience; strictly temperate; A1 references. Address Drawer E, St. Marys, Ont.

SUPERINTENDENT WANTED.

FIRST-CLASS man to take full management of Furnace and Stove plant; would prefer if he would take a financial interest in the business, which will bear the closest of investigation. Address Room "C" Confederation Life Building, Toronto. [52-2]

FOR SALE.

$2,500 TINSMITH, Stove, Eavetroughing, Plumbing and Furnace Stock in good natural gas town in Niagara district of twenty-seven hundred population; annual turnover twelve thousand; net profits, twenty-five hundred; fine trade; owner must sell on account of ill-health. Address Box 736, St. Catharines.

HARDWARE business, stock practically new, good paying business; liveliest town in Ontario with prospects of a boom; good reasons for selling. Address, Box 230, HARDWARE AND METAL. [52]

HARDWARE and Stoves in good manufacturing town; population 3,900; one opposition; stock $5,000. Box 298, HARDWARE AND METAL, Toronto. [52]

TIN and Stove Business for sale in the best market town in Ontario; 45 miles from Hamilton; the leading tin business in Dunnville; also a large stove and furnace trade; a good chance for a quick buyer; ill-health cause for selling. C. J. Werner, Dunnville. [51]

AGENT WANTED.

ENERGETIC and first-class business man wanted to push the sale of Machine-made Kettle Spouts; state commission required, ground covered, what connection amongst buyers of this article, and full particulars. Apply, Ernest Stevens, Stour Works, Cradley Heath, England. [52]

SITUATIONS VACANT.

TINSMITH, capable of making cheese vats and all kinds of good bench work quickly; large furnace and some plumbing experience; must work overtime when necessary; state wages, experience and references; drunks or loafers don't answer. Box 232, HARDWARE AND METAL, Toronto. [52]

EXPERIENCED hardware salesman; a pusher with a taking manner; send references; state salary; when can come; also clerk with two years or more experience, same qualifications. Box 233, HARDWARE AND METAL. [52]

WANTED—Two first-class tinners for furnace work; $3.25 per day, eight hours; steady employment. Apply The Wm. Ralph Co., Vancouver, B.C. [51]

WANTED—Traveler for the North-West; experienced in Hardware, Stoves and Tinware; about 30 years of age preferred and an A1 man; no other need apply. Write, stating experience, salary expected, etc., Box 231, HARDWARE AND METAL, Toronto. [51]

Important to Babbitt Users

Why pay for a name? Be up-to-date and have your babbitt made according to your own Formula, or if you have no formula send a sample of what you are using and we will quote you price on same quality. All formulas made to order.

Long Distance Telephone Main 4315

CANADA SMELTING CO.
Limited

STANDARD *Babbitt Metal, Phosphor Tin, Needle Metal, Type Metal, Etc.*

Cor. Brennan and Ann Sts., MONTREAL

B. A. GRAUTOFF & CO.

8 Fenchurch Buildings, London, E.C.

Import and Export.

Old established house with highest connections in Great Britain and on the Continent of Europe.

Cable Address, "Grautoff London," Liebers Code.

SCISSORS AND POCKET CUTLERY

HERBERT J. RODGERS

of Saracen House, Snow Hill, London, E.C., Eng., visits Canada in March, representing Solingen makers of scissors, razors and pocket cutlery, etc. Newest lines, competitive prices.

Appointments from jobbers will be valued.

Buy the Best.



HERCULES
Sash Cord.

Star Brand Cotton Rope

Star Brand Cotton Clothes Lines

Star Brand Cotton Twine

For Sale by all Wholesale Dealers.

WELLAND CANAL.

Tenders for Supplies for the year 1906.

SEALED TENDERS for Supplies addressed to the Superintending Engineer, Welland Canal, St. Catharines, will be received until 16 o'clock, on Tuesday, the 2nd of January, 1906, for the supply and delivery of various articles of Timber, Hardware, Castings, Fuel, Paints, Oils, etc., for use on the Welland Canal and its branches for the year 1906.

Specifications, forms of tender and other information may be obtained at the Superintending Engineer's Office, St. Catharines, on and after Monday, the 11th December, 1905.

The lowest or any tender not necessarily accepted.

By order,

L. K. JONES,
Secretary.

Department of Railways and Canals,

Ottawa, 11th December, 1905.

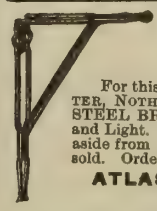
Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (721)

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables— "Machinery," Newport. Emlyn Engineering Works NEWPORT, MON., ENGLAND



COVERT MFG. CO.,
TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

USE
"HERCULES" BRAND PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

THE IMPERIAL CEMENT CO., Limited
Makers of the Celebrated Brand
"IMPERIAL" PORTLAND CEMENT
OWEN SOUND, ONT.

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
WE MAKE THEM.
SEND FOR CATALOGUE TO
Americana Shearer Mfg. Co., Nashua, N.H., USA
Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

...FULL STOCK...

Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

Consolidated
Plate
Glass
Company
of Canada
Limited

WINDOW
GLASS
PLATE
GLASS

TORONTO
MONTREAL
OTTAWA
LONDON
WINNIPEG

BUILDING AND INDUSTRIAL NEWS

HARDWARE AND METAL would be pleased to receive from any authoritative source building and industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

A FREIGHT special of 28 cars took the machinery and stock of the Henry K. Wampole Co., manufacturing chemists, from Toronto to Perth last Friday. Nearly 200 men will be employed in the new works at Perth.

The Canada Glue Co. has changed its headquarters from Toronto to Brantford.

A winding-up order has been made regarding the Carleton Foundry Co., of New Brunswick.

Stonehouse & Schuman have began the manufacture of broom handles at Collingwood Corners, N.S.

McGregor, Gourlay & Co., Galt, are advertising their factory building for sale, and may locate in another city.

Owing to a large increase in business the Canadian General Electric Co. are to erect a large warehouse at Montreal.

The Patent Roofing Company is being organized at Brantford, to establish a factory to manufacture roofing materials.

The Massey-Harris Co. have closed their branch at Stratford, and will remove the plant to Toronto, in order to centralize their business.

The new Banwell-Hoxie Wire Fence Co. have installed their plant on Princess street, Hamilton. The new company is capitalized at $100,000.

The B. C. Electric Railway Co. are to spend $36,000 for new rolling stock. All of the cars are being made at the company's shops at Vancouver.

An electrical transmission line is to be constructed from Copper Cliff to the new Craighton mine, and a power house is to be erected for the electrical machinery.

Portage la Prairie is to vote on the question of granting inducement to the London Wire Fence & Machine Co., who propose to erect a $30,000 factory in the west end of the city.

W. K. Vanderbilt inspected the Ontario Power Company's plant at Niagara Falls this week. the New York Central having decided to electrify their railway lines in Western New York.

Two by-laws have been carried at Winnipeg, one being to grant $150,000 to the hospital and the other authorizing the expenditure of $650,000 in building and equiping a municipal gas plant.

The Coal Creek coal mines, below Dawson City, will produce 4,000 tons of coal this Winter. The output will be hauled by the trains from the interior to the river and placed in the bunkers ready for shipment to Dawson early in the Spring.

The Eastern Coal Company, at Amherst, N.S., are to equip the mine with the most up-to-date machinery capable of turning out at least three to five hundred tons per day. There had already been upwards of 40,000 tons of coal taken out when the old slope was worked.

The Maritime Gasoline Engine & Supply Co. has been organized at Halifax, with a capital of $50,000, to deal in gasoline engines and power machinery. Agencies will be established in Newfoundland and the West Indies, as well as various places in the Maritime Provinces. Chas. Darlington, Halifax, is to be manager.

The Atlantic Grind Stone, Coal and Railway Co's. properties near Amherst, N.S., are to be still further developed. A new reef of superior grind stone has been uncovered and additional machinery is being installed. New buildings and machinery have also been erected in order to increase the output of the coal mine.

A few days ago water appeared in the Dominion Coal Co's. empty pit at the reserve mines, and now three pumps are engaged in reducing the quantity. About eight hundred gallons per minute are being taken out, and the water is now said to be under control, but it may be some days before normal conditions are restored.

An alliance of great benefit to the "Soo" industries has been formed between the Lake Superior Corporation and the Canadian Pacific Railway. The big railway is now getting over $100,000 a month for hauling the business of the different subsidiary companies of the Lake Superior Corporation. In return, the Canadian Pacific has become the largest and one of the most profitable customers of the steel rail mill of the Algoma Steel Company.

Eighty miles of track has been graded and forty miles of rails laid on the new Temiscaming and Northern Ontario Railway. Twenty miles more will be completed in the Spring, and the whole division in operation next Summer.

Twenty carloads of machinery for a 400 h.p. compresser plant has been shipped to Atikokan Iron Co., by the Canadian Rand Drill Co.; of Sherbrooke, Que. The plant is expected to be installed within three months, and active mining commenced.

There is talk of the starting of a steel rail mill in the Kootenay district of British Columbia. It is said that the iron mines, owned by G. B. McMillan and R. Robinson, of Nelson, on Crawford Creek, have been sold to a syndicate of Cleveland and St. Paul capitalists, headed by Matthias Horsling of Cleveland. The purchase price is in the neighborhood of $75,000, and the new owners will begin active opera-

tions on June 1 next. Their plans include the construction of a mono-rail line from the mines to Crawford Bay. The new properties will be operated in connection with steel works already in existence, either at the coast or in the east. The company propose to expend $150,000 next Summer in putting in rolls, and providing transportation facilities between the mines and the lake shore.

The machinery for the Atikokan Iron Co., Fort Frances, has arrived there, the outfit making a whole train itself, there being twenty cars in all. The four hundred h.p. compressor plant is being installed by the Canadian Rand Drill Co., of Sherbrooke, Quebec, and it is intended that active mining will have commenced within three months time.

The C.P.R. have decided to relay with new steel next year the entire Crow's Nest Pass line from Lethbridge to Kootenay Landing, a distance of 211 miles. The total contemplated improvements will cost $1,250,000. Each mile will take about 125 tons of rails, or say 26,375 tons for the entire distance. Each ton of rails will cost (exclusive of freight) $33, or $869,275. Labor will cost about $120,000, and the ballasting of the road for the new rails will mean an outlay of $211,000. Extra expenses of one kind or another will exhaust the appropriation of $1,250,000.

Conditions which are rapidly driving large manufacturing interests from the United States to Canada are to be considered within a few days by the Illinois Manufacturers' Association. Reports just gathered show that 132 of the leading concerns of the country have been obliged, chiefly on account to tariff restriction, to establish branch plants in Canada. The resulting loss financially is estimated at upwards of $50,000,000. The agitation which the Illinois manufacturers are about to start is expected to assume the form of a national appeal to Congress. The remedy most in favor locally and throughout the country provides for reciprocity legislation which will permit of a freer exchange of American and Canadian manufactured products. It is likely that Congress will be asked during the present Session to take some steps in this direction.

Vancouver's record of bank clearings has been for some time past a most encouraging one, and reflects the great expansion of trade in that western city. Not only is Vancouver showing great industrial expansion, but other British Columbia cities are having almost unprecedented prosperity. Mining, lumbering, timbering, fishing, fruit, dairy, general farming, and many other lines of production and manufacture are enjoying the greatest of activity. Vancouver as a shipping point is naturally growing in importance with the rapidly increasing trade with the Orient. This trade will give an impulse to every city on the Pacific Coast, and also to those a considerable distance inland. The increase in bank clearings of Vancouver is enormous, and for the past few weeks gives an average increase of almost fifty per cent. over the same period of a year ago. The last record published showed a thirty-five per cent. increase, the previous week was thirty-

SIMPLICITY

That's it. That's what characterizes

MODEL No. 23

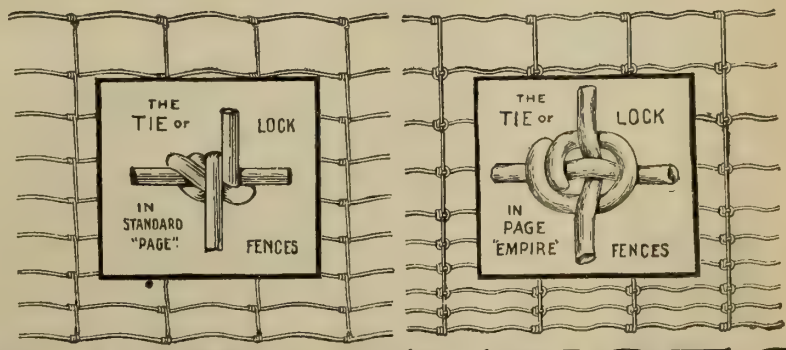
THE HAMILTON RIFLE

Designed for ready use. No intricate contrivances to get out of order. No superfluous parts. Just a rifle made correctly, without a flaw, without one drawback. The price **Model No. 23** sells at is $3.50. Cheap enough—the cheapest rifle of the kind to be had. And yet for that $3.50 the buyer receives a rifle that is guaranteed against any imperfection of material or workmanship, a rifle for regular service, sure aim, constant satisfaction.

And have you let your jobber go by without asking him about **The Hamilton Rifle, Model No. 23?**

THE HAMILTON RIFLE CO.

DEPT. 71 **PLYMOUTH, MICH.**



PAGE FENCES

The WHITE Brand

Two Styles—"Standard Page," and "Page Empire."

Double strength Wire; coiled for elasticity; Wire is not injured at joints; joints cannot slip; best galvanizing; all painted. 3,290,000 rods in use. Fences supplied in two weights—medium and extra heavy.

All Fences painted WHITE—Our Brand

THE PAGE WIRE FENCE CO., Limited, WALKERVILLE, Ont.

Branches—Montreal, Toronto, St. John. 402

"PAGE FENCES WEAR BEST"

MACHINE MADE

TEA KETTLE SPOUTS

In self colour or Bright Tinned. Perfect shape and quality. Made in 5 sizes. Write for samples and quotation and state quantity required. **AGENTS WANTED.**

ERNEST STEVENS, STOUR WORKS,
CRADLEY HEATH, ENGLAND



BEST ELBOWS

— FOR —

CONDUCTOR PURPOSES

BEAR

TRADE MARK

F. Dieckmann

CANNOT BURST

— from —

ICE PRESSURE

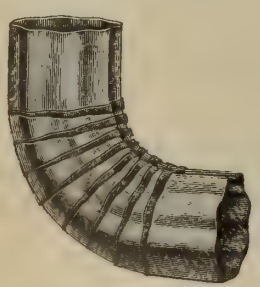
Made in . . .

6 Materials.

5 Angles.

14 Sizes.

1,225 Varieties.



For Sale by the TRADE in Canada. Write for catalogue and samples to

FERDINAND DIECKMANN

1180-82-84 HARRISON AVE.

CINCINNATI, O., U.S.A.

six per cent. in excess of the same week a year ago, and the four weeks before that time the increases were, respectively, twenty-six per cent, fifty-five per cent., sixteen per cent., and fifty-five per cent. There is a fair prospect—in fact, it is now assured—that Vancouver will at no distant date be a considerable factor in the flour-milling business. Already there are numerous projects in hand to look after the flour trade with Japan and China. The recent successful experiment in the cultivation of Fall wheat in Alberta has opened up several outlooks for profit to the more western province, all of which will reflect favorably on the business of Vancouver.

Companies Incorporated.

Economical Mfg. & Supply Co., Toronto; share capital $40,000; purpose, to manufacture and deal in engineers' and steam users' supplies. The directors are H. L. Brown, W. J. Boland, Samuel Behan and T. J. Walsh, all of Toronto, and W. H. Crow, of Welland.

Stinson-Reeb Builders' Supply Co., Montreal, share capital $20,000; purpose, to engage in the manufacture, etc., of cement, lime, bricks, sand etc. The incorporators are J. K. Stinson, E. H. Stinson, and F. J. Curran, of Montreal; J. A. Reeb, of Port Colborne, and H. W. Macoomb, of Welland.

Canadian Forty Mile Gold Dredging Co., Toronto, share capital $600,000; purpose, to carry on the business of a mining, milling, reduction and development company. The incorporators are J. S. Lowell, W. Bain, R. Gowans, E. W. McNeil, S. G. Crowell, W. F. Ralph, all of Toronto.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Metallic fittings for Post Office Department, Ottawa, Ont.," will be received at this office until Wednesday, January 3, 1906, inclusively, for the construction of metallic fittings for Savings Bank Branch, Ottawa, Ont., Post Office.

Plans and specifications can be seen and forms of tender obtained at this Department.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p.c.) of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, December 21, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (52)

WANTED.

WANTED—To buy a small established hardware business, Ontario preferred. Write Box 80, HARDWARE AND METAL. [52]

STOVE MANUFACTURERS

IF you intend opening up a branch in Canada for the manufacture of stoves, it will be to your interest to communicate with A. B., Room C, Confederation Life Building, Toronto. [52-2]

BUILDING NOTES.

J. K. Fleming, Hartland, N.B., is fitting up a lathe manufacturing plant.

E. J. Lepatroul, Hamilton, is erecting a brick dwelling to cost $1,900.

The Morris Implement Co., Winnipeg, are to establish a branch and build a warehouse at Regina.

The Newville Lumber Co. are rebuilding near Parrsboro, N.S., which was recently destroyed by fire.

The Maple Leaf Milling Co. contemplate building a mill between Keewatin and Kenora next Summer.

In addition to a new depot at London the Grand Trunk are intending to build new freight sheds next Summer.

W. W. Lachance, Regina, is preparing plans for a new four-storey hotel building to be erected at Regina.

The Galt Wagon Works Co. are to enlarge their plant. A site has been secured and new buildings are being planned.

Mr. Hannah, a farmer at Griswold, Man., has purchased a site at Brandon and will erect a large hotel there next Summer.

The J. D. Duncan Milk Co. has purchased a site in Montreal, and will erect a three-storey brick and stone building, to cost $50,000.

Plans are being prepared for two business blocks to be erected at Fort William next year, to be erected by Messrs. Hitchcock & McGregor.

P. McCulloch, Hamilton, is to build two brick houses to cost $2,600; John Slater two more to cost $3,000, and Roy Isbestor one to cost $3,000.

The Canada Cycle and Motor Company have started work on the erection of a brick building for manufacturing automobiles at Toronto Junction.

F. B. Robins, has purchased 140 acres of land at Hamilton and proposes to dispose of part of it for manufacturing sites, and build residences on the remainder.

New Hampshire and Massachusetts capitalists have secured 30 square miles of timber lands in British Columbia, and will construct a large saw mill near Vancouver.

A $50,000 steel and concrete bridge will be erected over the Bow River at Calgary, by the Alberta Government. A Normal School, to cost $60,000, will also be erected at Calgary.

The Grand Trunk Railway Co. have announced that they intend to spend $6,000,000 on a new station, to be erected in Montreal. The tracks are to be elevated and other improvements made.

Heintzman & Co., Toronto, have purchased a site on Yonge street, where McDonald & Willson's stove store now stands, and will erect a ten-storey building, which they will use as piano warerooms. The site cost $120,000, being at the rate of $3,000 per foot. McDonald & Willson have the right to remain in their present store for three years longer.

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Look up your **ALABASTINE** stock. Do it this fall. Order now, from jobber or manufacturer. Spring dating.

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have nothing in common with the shoddy American locks. They are honest-made, honest-price locks.

The building trade round about you is something worth catering to. If you will write for **Catalogue No. 7** and **Supplements**, you will see why other Hardwaremen believe that **Gurney Cylinder Locks** are the locks builders want.

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PLUMBING AND STEAMFITTING

THE CONSPIRACY TRIALS.

ON Tuesday the conspiracy trials of members of the various plumbers' organization were continued, the joint charges against 156 individuals being proceeded with after the case against Mr. James Hardy, secretary of the various hardware associations, was enlarged to the 28th instant. Secretary Meredith was in the witness box all Tuesday and Wednesday morning, Crown Attorney Curry taking up the membership roll of the Master Plumbers' Association from A to Z, and proving through the secretary the activity and knowledge of each individual as to the workings of the association.

* * *

"Was John Jones a member of the association in June, 1905?" "Did he take the obligation in October, 1904?" and "Had he a general knowledge of the workings of the association?" were questions asked by the Crown Attorney as each name was considered, and if a person was shown to have been a member and to have had an opportunity of attending the meetings and making himself conversant with the doings of the organization the charge against him was pressed. In some cases, however, names of plumbers already fined, who had acted as witnesses in previous cases, or for other reasons, were considered as not being deserving of punishment, and the charges against these were withdrawn. Of the original 156 about 40 were fortunate enough to go free, a list of these including Messrs. Fred. Armstrong, Robert Ross, James H. Wilson, J. J. McKitrick, and Geo. H. Cooper, already fined; S. J. Greer and J. M. Haydon, witnesses in the Assize Court trial: Alex. Fiddes, dead; J. E. Gray, who was expelled from the association; A. J. Hutchinson, who was only a short time a member and resigned to take a Government position; Alfred Richards, Jas. V. Fullerton, Jas. T. Power, Chas. Robertson, F. Gates, W. J. McGuire, W. J. Macnamara, Herbert Johnston, F. J. Nixon, J. W. Oran (deceased), W. Parmenter, Alex. Purdy, P. Mansell, Wm. Bush, Henry Drummond, W. B. Malcolm, Jacob Raine, J. H. Thorn, W. M. McConnell, H. Tweedy, and James Westwood.

* * *

The most interesting feature of the proceeding was the cross-examining of Secretary Meredith by John J. Power, of Power Bros., who said he had difficulty with the association in June, 1904, and decided to withdraw. Finding, however, that he would have difficulty in securing supplies, he allowed his name to continue on the list without taking any part in the workings of the association. Mr. Power said he had resigned and had endeavored to defeat the association in any possible manner. This came as a surprise to association members, but it failed to secure the withdrawal of the charge against him.

Another point brought out was the statement of Secretary Meredith that the association was still in existence, although no meetings were being held, no moneys being received or contracts being tendered upon.

* * *

On Wednesday afternoon Secretary Morris, of the Central Supply Association, was put in the box, and the various supply men charged with conspiracy had their cases considered individually, the charges against Messrs. W. C. Gurney, L. L. Anthes, J. M. Taylor, and A. Saunders being withdrawn, the court adopting the rule throughout the trial that where two members of one firm were charged only one would be proceeded against, unless both were equally active. Messrs. A. W. Mann and T. A. Stevens, of London, were also relieved because of giving evidence in previous cases.

* * *

One effect of the trials for conspiracy is that master plumbers are finding it difficult to collect outstanding accounts. One firm in Toronto, Messrs. Harrison & Robertson, who have about $10,000 on their books, state that since Mr. Harrison's conviction, customers are refusing to pay their bills and fully $1,000 is already considered uncollectable unless legal action is taken. This will be done and every customer disputing his account will be sued. In this firm's case the situation is peculiar, as in August last Hardware and Metal announced that Mr. Harrison had resigned his offices in the association. After endeavoring to have an internal investigation and the methods used by the larger concerns in taking business away from their smaller competitors, Mr. Harrison sent in his resignation as a member of the association and paid no further commissions into the organization. Had he desired he could have freed himself from prosecution as others have done, but in the general interest of the trade he allowed himself to be convicted for wrong doings which he had fought inside the association. It is unfortunate, therefore, that his collections should be stopped and the necessity of suing customers forced upon his firm. Other master plumbers heard from are not so firm in their position, cases where customers having come in and offered to pay $8 for a receipt in full for a $10 account having been heard of, the master plumber being unwise enough to accept the offer, thus practically acknowledging his guilt.

* * *

The life of the association does not seem nearly so secure also, as it is now the general opinion that the trade will revert back to the disorganized condition of cut-throat competition of a few years ago. Members of the trade are accepting this view with little thought of what it means, and with no apparent intention of trying to avert the calamity. And a calamity it will be to allow the organization to disband altogether. Before the association came into existence nearly every master plumber in Toronto, outside half a dozen large firms, was rated nil in commercial reports, each owing from $100 to $10,000 to the supply houses, according to the amount of business done. Business was often taken for less than the cost of material and labor, and few bosses earned as much as the journeymen they employed. Surely another such era is not a pleasant prospect to look forward to! A few men talk of retiring from business rather than wear their lives out in such a struggle. Even under the conditions brought about by the association, the smaller firms found it difficult to exist in the fierce competition of their stronger competitors. The thing to do, if after the trials are completed there are any left with stomach enough to tackle the job, is to re-organize the association on a basis which will meet every requirement of the law. But what will be done is a matter to be decided when the cases are concluded. The trade throughout the province will watch future developments with interest.

The Tack "Combine."

Informations have been sworn out charging "that James Hardy and Thomas Jenkins, both of Toronto; E. J. Fry, J. Mowat, J. C. Robertson, W. Bruckoff and E. Perkins, of the Portland Rolling Mills Co., St. John; H. M. Blacklock, W. H. Woodall, J. R. Kinghorn, A. H. Huff, W. McMaster and A. F. McPherson, Montreal Rolling Mills Co., Limited, Montreal; F. W. Knowlton, United Shoe Machinery Co., Montreal; F. H. Whitton, the Ontario Tack Co., Hamilton; Jas. H. Peck, T. Edmund Peck, W. T. Cumming, E. T. Sinclair and M. A. Irwin, of Peck-Benny Co., Montreal; Jas. Pender, St. John; W. W. Near, the Pillow Hersey Co., Guelph; G. Boyd, G. A. MacAgy and R. Hersey, Pillow Hersey Co., Montreal; in the years of our Lord, 1892, 1893, 1894, 1895, 1896, 1897, 1898, 1900, 1901, 1902, 1903, 1904 and 1905, at the city of Toronto, did conspire, combine, agree and arrange, the one with the other, and others of them, and with the Portland Rolling Mills Co., Peck Benny Co., Pillow Hersey Co., Montreal Rolling Mills Co., the Ontario Tack Co., the United Shoe Machinery Co., Jas. Pender & Co., and W. T. Woodall, and other persons and corporations to the complainant unknown, to unduly limit the facilities for producing, manufacturing, supplying and dealing in tacks."

The trial will not commence until the 28th, as so many of the witnesses will have to come from a distance.

FACTORY HEATING.

By S. R. Sheldon, of Sheldon & Sheldon, Galt, Ontario.

AMONG the many marked improvements in manufacturing methods which have been called to the minds of the public, one of the most striking advances has been made in the heating and ventilation of factories, mills, and other large buildings. More attention is continually being devoted to obtaining the best means of maintaining a healthy atmosphere in the factory, and naturally the problem becomes more difficult in many instances, owing to overcrowding and the increase in vitiation due to the process of manufacture.

Evolution of Systems.

The old wood stove of our grandfathers was superseded by the hot air furnace, the furnace by direct radiation with either hot water or steam, and now direct radiation is discarded for a combined system of heating and ventilation obtained by a forced circulation of warm air. This system is what is known as the "Fan or Blower System," and comprises a fan, or blower, usually of the centrifugal type, a heater, and a system of distributing ducts or pipes more or less extended according to the conditions of each individual installation. In ordinary practice the fan wheel is enclosed in a steel plate case, or "housing," as it is usually called, and is arranged to draw air through a steam heating coil constructed with closely spaced pipes. From the fan the air is discharged into the distributing ducts, which deliver the air to the desired points within the building.

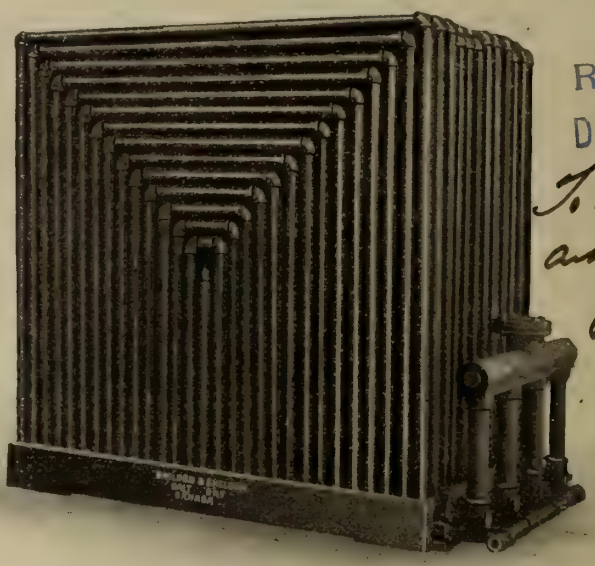
When a building is heated by direct



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Fig. 1

radiation with steam pipes strung along the walls, the wall itself close to the heating surface is maintained at a comparatively high temperature, so that the temperature difference between it and the external air is great, and a rapid loss of heat is the result. With the direct radiation suspended from the ceiling the loss is somewhat less, but still of considerable magnitude. With the low air velocities resulting from the natural circulation of the air across such direct heating surfaces, the hourly condensation per square foot of surface with low pressure steam is only about .3 (3-10) of a pound of steam. As the velocity of the air across the heating surface increases, so does the rate of condensation of the steam and of the heat transmission. It is, therefore, evident that the heating surface required to transmit a given quantity of heat may be decreased in proportion as the velocity, and consequent volume, of air passing across the surface are increased.



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page 88

Fig. 2

Fan and Blower System.

In the hot blast system the heating surface is massed in one location, a decided contrast to the almost unlimited extent of pipe required for a system of heating by direct radiation. This massed surface is usually made up in sections, each consisting of a cast iron base with suitable partitions or diaphragms, so arranged that the steam, admitted at one end, passes up, over, and down a series of steam pipes (as shown in Fig. 1), and finally escapes in the form of water of condensation from an outlet immediately below the point

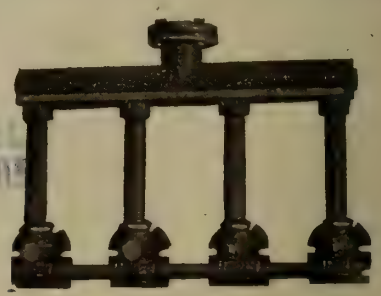


Fig. 3

where the steam enters. These sections are put together in groups (Fig. 2) and the inlets and drips of several sections are connected together by means of cast iron headers (Fig. 3), the heating effect with constant air velocity being proportionate to the depth of the heater. The more rows of pipe across which the air must pass, the higher is the resultant temperature. This massing together of the heating surface eliminates the constant danger of the pipes freezing and of damage from leakage as well as from fire where high pressure steam without

proper insulation is employed. Insurance rates may thus be reduced and convenience secured in the control of the temperature throughout the building.

The design of the fan must depend largely upon the conditions of each installation. As usually constructed, it can be arranged to discharge in any given direction, and may be built either with a full casing or with a portion of the scroll formed in the brick foundation. This latter is known as the three-quarter housing type. The fan wheel is constructed as shown in Fig. 4. The hub of the wheel is of cast iron, cast around steel tee arms, to which are firmly rivetted the blades, to the edges of the blades are rivetted the side plates which stiffen the construction of the wheel. The shaft is of steel, carefully turned and polished, and the bearings are of the self-oiling, self-aligning type, capable of running an almost indefinite time without attention.

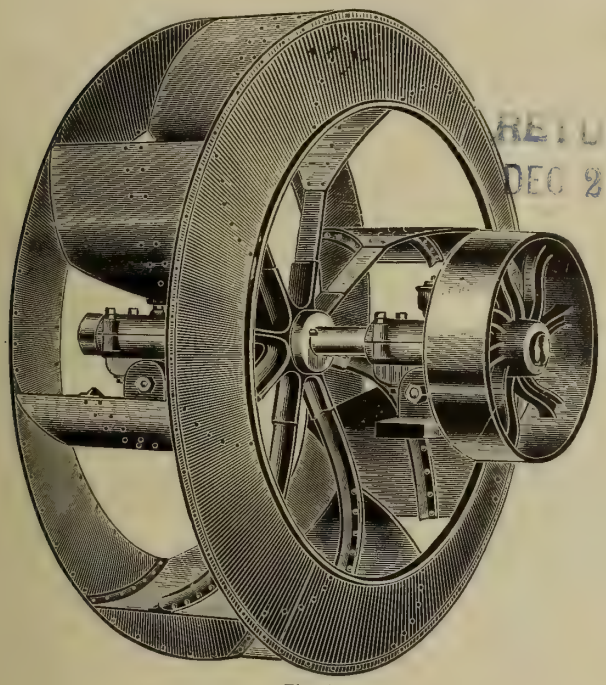


Fig. 4



Fig. 5

In Fig. 5 is illustrated a full housed steel plate fan, up discharge, as used for this system of heating, and in Fig. 6 is shown a three-quarter housing fan with direct connected engine, the inlet of fan being connected to the heater. This engine-driven fan makes the most convenient arrangement, as the heating system is thus rendered entirely independent of any other source of power and may be started up at any time. This is particularly desirable in the matter of heating up in the morning, or for continuous operation during the night.

From the fan outlet the air is conducted by galvanized iron pipes or underground brick ducts to its proper destination. In the ordinary type of factory heating, such as a foundry, boiler shop, or machine shop, the usual and most efficient arrangement is secured by extending the galvanized iron pipes overhead and almost entirely round the interior of the building, outlets being provided at regular intervals so that the air is discharged outward toward the walls and slightly downward. A barrier of warm air is thus maintained along the outer walls of the buildings, which prevents any bad effects from the cold walls, and provides ample circulation and ventilation. The usual inward leakage of cold air through cracks and crevices is prevented by the fan keeping a constant pressure in the building. All the outlets from the galvanized iron or underground hot air ducts should be arranged with dampers or blast gates (Fig. 7) so that any or all of them can be shut off at will.

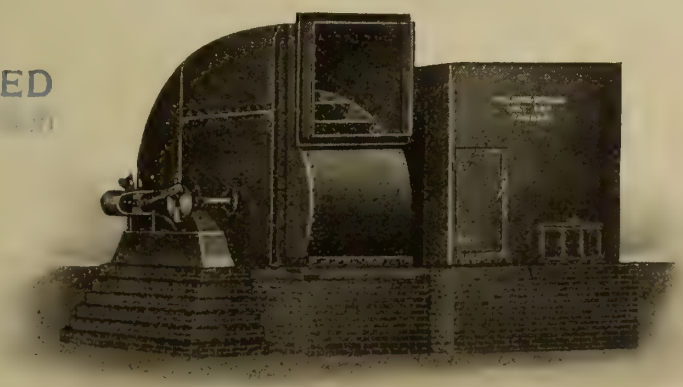


Fig. 6

The ordinary type of heater uses exhaust steam, but it can be so arranged that if necessary in very cold weather additional heating power may be secured by admitting comparatively high-pressure steam to one or more sections across which the air of highest temperature passes. This can be arranged by inserting valves in the connections shown in Fig. 3.

The actual cost of operation of an engine-driven fan is very slight, for the exhaust steam can be utilized in the heater, the steam by passing through the engine only losing about 10 per cent. or 15 per cent. of its heat efficiency.

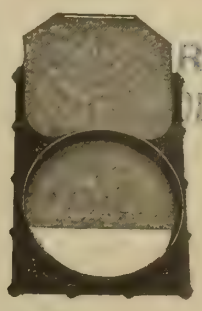


Fig. 7

In the ordinary hot blast piping system allowance must be made at all turns and branches for the resistance these offer to the air. As a rule the total area of the outlets should range from 25 per rent. to 40 per cent. in excess of the area of the outlet of the fan. The entire air supply can be taken

from outside, or during the coldest weather, the air may be returned from the building itself in any desired proportion, and can, in this way, be continuously re-heated.

In ordinary factory heating a complete change of air every 15 or 20 minutes would be ample, but for schools, hospitals, etc., the air should be changed much more frequently, usually in from 8 to 12 minutes, but in this class of building the air supply is calculated from the number of occupants in the rooms.

Where Applied.

The blast system of heating has been applied successfully to schools, colleges, audience halls, textile mills, paper mills, machine shops, foundries, car sheds, and roundhouses. In paper mills and dye houses there is an excess of moisture which renders the atmosphere foggy and unbearable; by introducing this system large volumes of warm air discharged into the rooms will absorb the moisture and prevent the deposition of the moisture on the ceiling, and the consequent dripping which is annoying and causes, in many cases, considerable damage. In the foundry equipped with the fan or blast system, large volumes of air at moderate temperatures can be forced in while the iron is being run off, thereby clearing the atmosphere and rendering it more healthful and comfortable for the men. In other classes of buildings where more or less objectionable odors, vapors or gases, result from the process of manufacture, the admission of large volumes of air tends to materially reduce the inconvenience and possible danger. Numerous adaptations occur where the convenience of the massed heating surface or the effects of perfect ventilation have a considerable commercial value. Of course the individual conditions must control the method of application and installation, and for this reason each plant has to be carefully checked over, and the heating system should be designed by a competent engineer or manufacturer of these articles.

UNSCIENTIFIC HEATING APPLIANCES.

THE elementary principles of such branches of physical science as sound, light, and heat, have been so universally taught during the last half century, especially since the revival in technical education of the last few years, that one might reasonably imagine it would be impossible now to find up-to-date specialties, of domestic or public utility, which are constructed in flagrant violation of the elementary laws on which the efficiency of such articles depends.

I recently saw a window full of beautiful specimens of the metalworker's art, in copper, brass, and iron. All were highly finished in various styles and generally, no doubt, in harmony with the purpose in view; but among them were beautifully polished and nickel-plated radiators. Absurd as it may seem, there they were sure enough in various styles of polish.

So flagrant a breach of the laws of radiation might pass with a smile were it an isolated case, but judging from the number exhibited in certain quarters the glitter seems to have caught on and the growing anomaly calls for correction.

The use of radiators in various forms is extending so rapidly that it is important for both maker and dealer to understand the elementary laws which tend towards efficiency. Makers and fitters alike will be forwarding their own best interests by leading clients in this matter. Clients look to the trade for efficient service from the apparatus supplied.

Let them know that radiation and polish are antagonistic; that a rough, unpolished surface is the best radiator, and that a smooth, bright surface is the very worst. Every stroke of labor put upon a radiator in the direction of polish is money spent in destroying its heating power.

A polished, plated surface will not give one-third the radiant heat which is given from the same radiator in the rough, thinly coated with a flatted color.

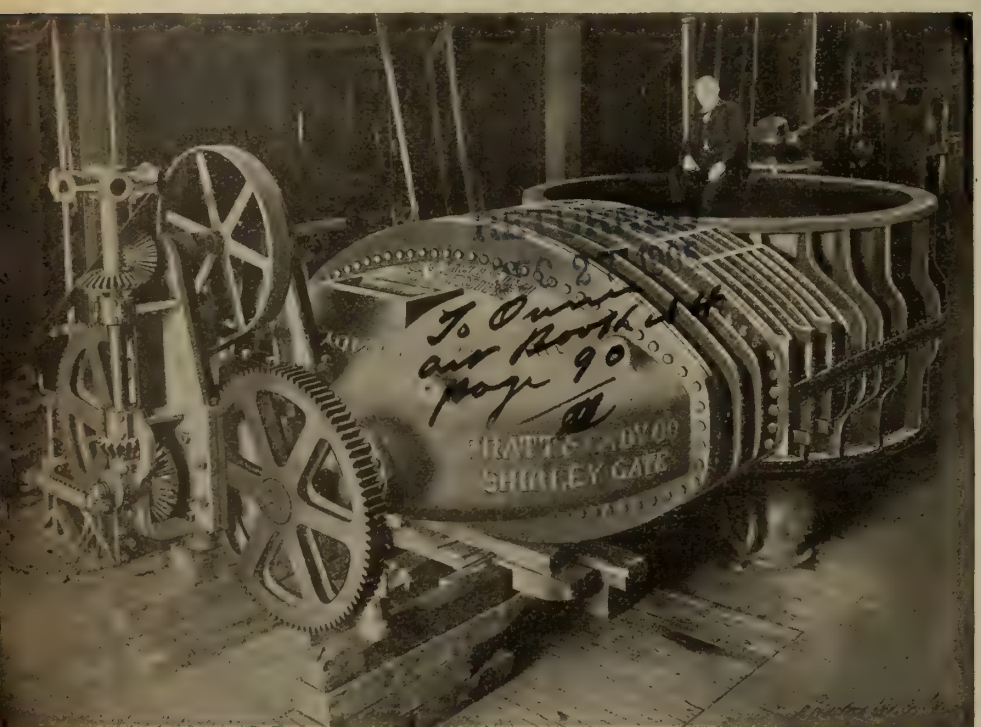
A simple way of testing this is to place a thermometer at a given distance from an urn full of boiling water. Take the temperature first from the polished side, and afterwards from the other, which should be coated with whiting or lampblack: the difference will convince the sceptic.

How often has one touched a hot polished surface and got burnt because it gave no warning by radiation.

An instance of misuse of the science of heat on the opposite extreme of application is seen in the cheap, single-cased gas cookers now so extensively used. Here the object should be to conserve the heat within the cooker, allowing none to escape by radiation, instead of which the outer sides of the cooker are specially adapted for efficient radiation, thus throwing away heat which should be helping the cooking, and causing discomfort by heating a room which is required to be as cool as possible.

The only reason why such anomalies as these remain so long uncorrected seems to be that we get our fuel so easily and cheaply, and that—in the latter instance—we look at economy in first cost of the appliance for "misusing" the fuel and ignore the far greater economy which a more efficient appliance would effect by its saving of fuel every time it is used.

Attention to details such as these—which should be persistently exposed until corrected—will in the future, as in the past, be the surest "protection" possible for home industries.—W. H. Sherburn, in the Ironmonger.



The Largest Valve in the World, Installed in Ontario Power Company's Plant at Niagara Falls by the Canadian Fairbanks Company.

LARGEST VALVE IN THE WORLD.

WE present on this page an illustration of the largest valve in the world, which has just been installed in the plant of the Ontario Power Co., at Niagara Falls, Ontario, by the Canadian Fairbanks Co., of Montreal and Toronto. This valve will control the water power generating approximately 10,000 horse power. This valve is 108 inches in diameter, and weighs 126,000 pounds. The largest valve formerly in operation had a diameter of six feet, and weighed 55,000 pounds.

The Canadian Fairbanks Co. have a contract to supply another valve of the same size to the same company.

Boring for natural gas will be commenced at Calgary shortly. Calgary is also to secure electrical power before long. The C. P. R. has arranged to develop power from falls in the Bow River, sixty miles west of Calgary.

The Paint For The Coming Year



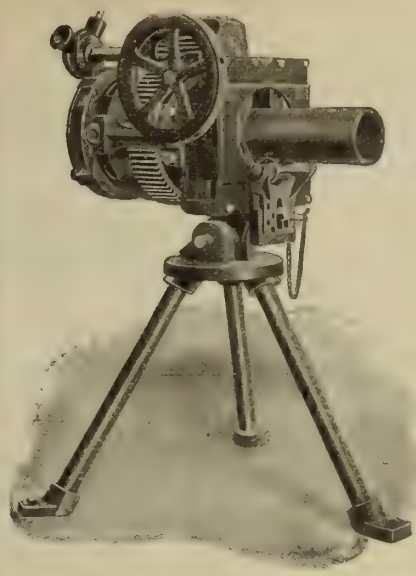
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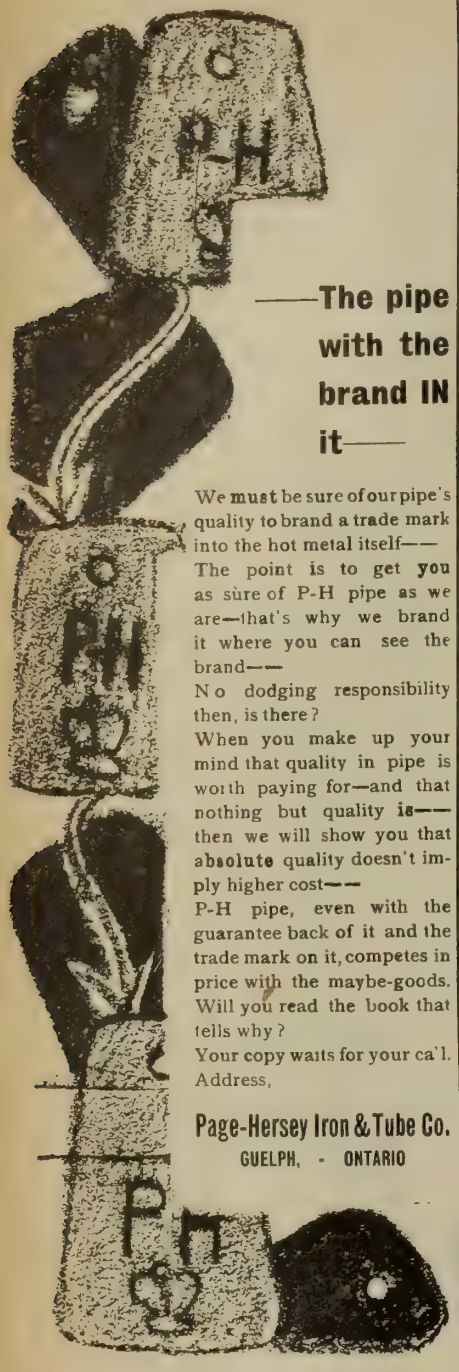
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No dodging responsibility then, is there?
When you make up your mind that quality in pipe is worth paying for—and that nothing but quality is——then we will show you that absolute quality doesn't imply higher cost——
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Will you read the book that tells why?
Your copy waits for your call.
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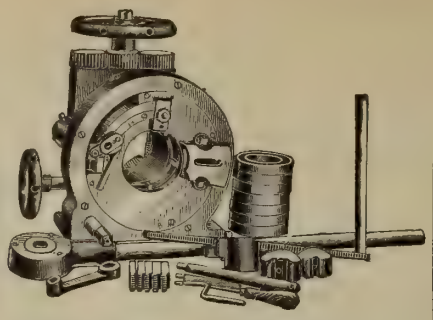
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NEWMAN'S INVINCIBLE FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

GUARANTEED 5 5 5 YEARS 5 5 5 YEARS GUARANTEED



At the Same Price

Isn't it Best to use the Kind that are

GUARANTEED FOR 5YEARS 5 YEARS 5 BY

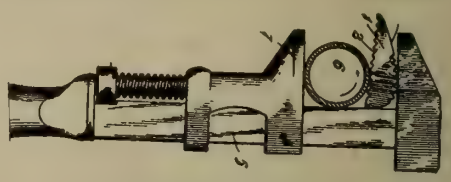
GLAUBER, CLEVELAND, OHIO, U.S.A.

GROWTH OF ACETYLENE LIGHTING.

A COMPARATIVELY new invention, when contrasted with other popular methods of lighting, acetylene gas continues to increase in popularity as an illuminant and is constantly being more generally employed. The German Acetylene Association, the leading organization of the kind in the world, has recently given out important statistics, gathered with great care, which fully establish the truth of this statement. These statistics show that there are about 75 places in Germany, 202 in the United States, 16 in the United Kingdom and 19 in the British colonies provided with public lighting supplies. In Germany alone there are 25,000 smaller installations. So new is this great industry that there is small uniformity in the employment of the gas in various countries. Incandescent mantles for acetylene are extensively, almost universally, employed in Germany, where they give great satisfaction, but are practically unknown in this country, and the practice of purifying the gas varies widely. There is no longer any doubt as to the decided success of acetylene lighting.

A CANADIAN INVENTION.

Emmerson Thompson, Gamebridge, and Thomas A. Brown, Toronto, have been granted a United States patent for the wrench pipe jaw shown in the accompanying illustration. The invention appears to have considerable practical value and should meet with a considerable demand on account of its simplicity and utility.



A New Wrench Pipe Jaw.

CLASS INTERESTS PLUMBERS.

The Master Plumbers' Association of Montreal, desiring to interest itself in the work pursued by the Council of Arts appointed a delegation composed of Messrs. H. Mundy and Joseph Thibault, to visit this class, held in the upper part of the St. Lawrence Market. The first visit was made last week, and the delegation found 100 pupils working under the charge of their instructors. It is the intention of the Master Plumbers' Association in order to encourage the pupils in their work, to offer prizes at the end of the season.

The Dominion Iron & Steel Co. are to lay a 36-in. pipe line from Sydney River to their works at Sydney. They will also install a Tribune pump, to be operated by electricity. The total cost of the work will be at least $100,000.

Premier Gouin of Quebec has announced that there is at present no intention of starting an investigation of combines in that province.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, Dec. 22, 1905.

MONTREAL jobbing houses continue to feel gratified at the good volume of business which is keeping up very close to the Christmas season this year. Many travelers are still on the road and are sending in good sized orders in every mail. In fact, dealers here report that their staffs are being kept so busy shipping goods that it has not been possible, as yet, to do any stock-taking.

Prices in all lines keep very firm, and no changes have been made since our last report.

Range Boilers—Normal conditions prevail, the influence of the holiday season not being felt as yet. We quote: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Last week's discounts hold good again, though a slight easing off has taken place in the primary markets. Our prices are: Discounts 25 per cent. f.o.b. Montreal, Toronto St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—The scarcity reported has been overcome to a certain extent, but it is still difficult to obtain deliveries. Our prices are: Discounts on all sizes of nipples up to 6 inch, 67 1-2 to 70 per cent.

Iron Pipe—The demand keeps very strong and prices are steadily maintained, which we quote as follows: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings—A trade that shows no let up, is most gratifying to the local supply houses. Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder — We still keep the following prices: Bar solder, half-and-half, guaranteed, 22c.; No. 2 (wiping solder), 18c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Dec. 22, 1905.

A MARKED falling off in trade has taken place, although the business being done is still ahead of this time a year ago. The supply houses are engaged in stock-taking and it is predicted that when all the jobbers have completed this work advances will be made in several lines. The continued advances in copper have not been followed by equal rises in brass goods as manufacturers have had large stocks of raw material bought on a low market. Unless an unexpected drop takes place, therefore, in copper, higher prices on brass goods can be expected. Prices continue the same as last week.

Lead Pipe—Trade is active and the recent advance firmly held to. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 20 per cent.

Soil Pipe and Fittings—No falling off is reported as yet. Prices continue firm. We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Business is lively and the market is strong. We quote the following prices: Black, 1-4 inch, $2.09; 3-8, $2.09; 1-2 inch, $2.45; 3-4 inch, $3.05; 1 inch, $4.37; 1 1-4 inch, $5.96; 1 1-2 inch, $7.15; 2 inch, $9.54; 2 1-2 inch, $15.00; 3 inch, $19.35; galvanized, 1-4 inch, $2.91; 3-8 inch, $2.91; 1-2 inch, $3.27; 3-4 inch, $4.20; 1 inch, $6.02; 1 1-4 inch, $8.22; 1 1-2 inch, $9.86; 2 inch, $13.14; 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade is quite active owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Prices continue unchanged with trade quite active. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $4.75; extra heavy, $7.50; 35 gallon, standard, $5.75; extra heavy, $8.50; 40 gallon, standard, $6.75; 40 gallon, extra heavy, $9.50; 52 gallon, $11.00; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Business continues lively with prices well maintained. We quote as follows: Bar solder, half-and-half, guaranteed, 21 1-2c. and wiping at 20c.

Enameled Ware—Shortages are being relieved and many jobs are being completed. We quote as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

PLUMBING AND ELECTRICAL ITEMS.

A by-law to spend $150,000 for water works has been defeated in the town of Owen Sound.

The Stuart Machinery Co., Winnipeg, has installed an electric lighting plant at Swan Lake, and are canvassing Treherne, Man., with a view to installing a plant there.

The Acetylene Construction Co., of St. Catharines, have arranged to instal plants at Manitou and Yorkton. This company have already six plants in Western Canada.

All the connections have been made at Galt to admit of the Dominion Natural Gas Co. turning on their product. Gas will be supplied at a minimum of 35c., and a maximum of 55c., per thousand.

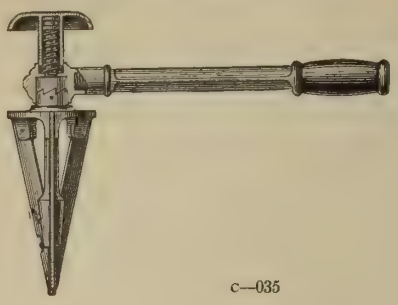
Messrs. Green & Lidster, of Winnipeg, have the contract for installing the steam heating and electric lighting plant in Harty & Smith's new hotel at Fort Frances. The cost of the heating plant and electric apparatus will exceed $3,500.

The new Western Canada Flour Mills, at Winnipeg, will be operated by electricity. A contract for the necessary equipment has been given to Allis-Chalmers-Bullock Co., Montreal. The order is one of the largest given for this class of work in America.

H. H. Dryden, Surrey, N.B., has secured the contract to install heating system in the new school building at Chipman, N.B. Two Kelsey hot air generators will be used. Mr. Dryden has also the contract to install a Cumberland furnace and bathroom in the new hotel being erected by Mrs. Darrah, Chipman, N.B.

MUELLER PIPE REAMERS

Ratchet Handle Pattern



c—035

While it requires steel of good quality to make good reamer blades, it also requires good tempering to utilize the quality of the steel.

Mueller Pipe Reamer Blades are made of steel of good quality and tempered in a manner to make the best use of its quality in the strength of the blade and the durability of its edge.

Mueller Pipe Reamers ream all sizes of pipe from ⅜ to 3 inch, and are made in plain handle and ratchet handle patterns. The reamer illustrated is the ratchet handle pattern.

Each reamer is given a working test as near like actual service use as possible, bears the Mueller trade mark, and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

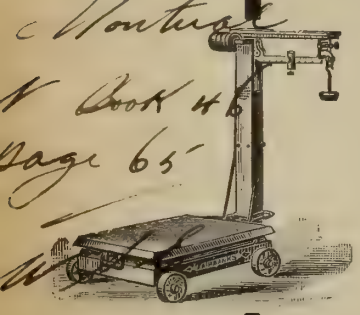
SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

THE ERROR OF YOUR WEIGHS



continues as long as you have a cheap or poorly made scale around your store.

¶ A scale that is not extremely sensitive and accurate is a source of daily loss to you.

¶ No matter how small the loss is, at the end of a year it will surely amount to considerably more than the price of a new scale.

¶ Remember that Fairbanks Standard Scales have been the world's standard for over three quarters of a century.

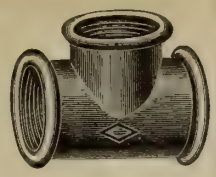
¶ If your scales are giving you trouble, get a Fairbanks and you won't have to worry about any drain on your profits. A Fairbanks Scale will last a life time.

THE **CANADIAN FAIRBANKS CO.** LTD.

MONTREAL TORONTO WINNIPEG VANCOUVER

RETURNED FEB 17 1906





DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

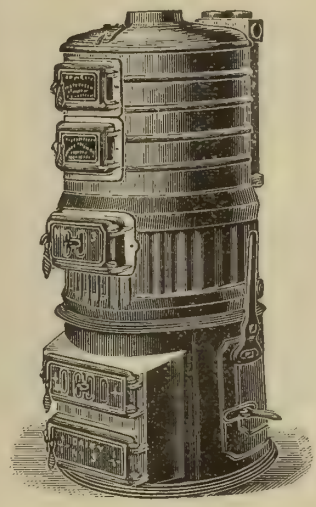
Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL



TRADE PENBERTHY MARK

BEAR IN MIND!

That you are to always keep well stocked with



AUTOMATIC INJECTOR

PENBERTHY BRASSES

Write your Nearest Jobber . . .

Injectors, Gauge Mountings, Oil Cups, Grease Cups, Air Cocks, Radiator Vents, Plain Lubricators, Whistles, Etc.

Brass and Copper Pipe

Our Stock comprises

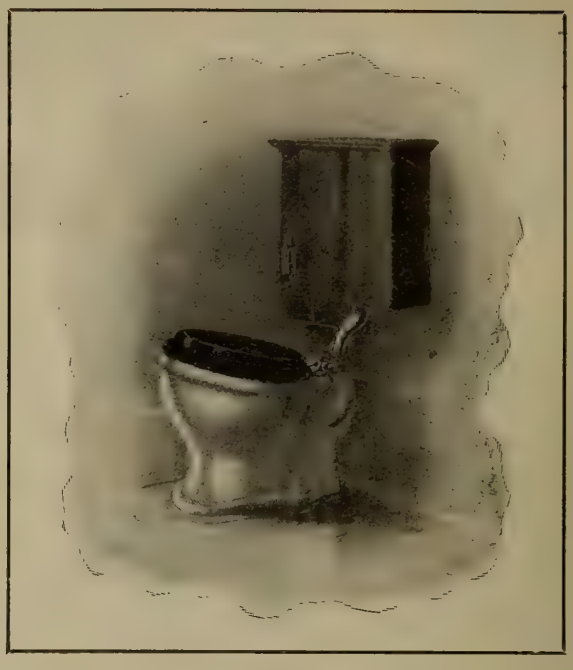
BRASS: ⅛-in. to 3-in. in Iron Pipe sizes

COPPER: ⅛-in. to 2-in. " " "

All orders shipped promptly. **Correspondence solicited**

WM. STAIRS, SON & MORROW, Limited, HALIFAX, N.S.

Don't Trust to Dumb Luck



Pin your business future on something that contains, at least, an element of certainty.

Few things are absolutely sure, but

THE NATURO CLOSET

stands out pre-eminently among these few.

This is helping to make the fortune of many plumbers—why not let it swell yours?

As one of our customers—there are some things, we do for you, you might as well know about.

THE NATURO COMPANY

C. H. MUCKENHIRN
President

Salem, N.J.







Catalogue and discount sheet sent on application.

JENKINS BROS.

35 High Street, ***Boston, Mass.***

New York ***Philadelphia*** ***Chicago*** ***London, E. C.***

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MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

J.C.M.

Galvanized Dead Flat Sheets

made from British Siemens Martin Steel only; most reliable for working up. Apply for samples and prices to:

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

Swedish Neverturn Screw Drivers

BO-RAS-IC STEEL—With steel ferrule, rosewood finished handle. Will neverturn in the handle.



Ask your Jobber or Dealer for Swedish Neverturn Screw Drivers. Write for Carpenters' Section of Green Book.

Canadian Sample Room:
215 Coristine Bldg., MONTREAL.
A. C. JENKING, Canadian Mgr.

SMITH & HEMENWAY CO.,
296 Broadway, Dept. 214, New York City

There are various methods employed in tempering springs.
The up-to-date concern is

THE

WALLACE BARNES CO.

BRISTOL, CONN.

Send specification for prices. Ask for latest catalogue.

The most light for the least money

C. G. E. INCANDESCENT LAMPS

LONG LIFE EFFICIENCY RELIABILITY

Write for prices and quantity discounts.

CANADIAN GENERAL ELECTRIC CO., LIMITED
HEAD OFFICE: TORONTO, ONT.
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THE

METALLIC ASH-SIFTER

is made of sheet iron and metal lath—a strong combination. It is light yet durable. But our **PATENT DOUBLE LOCK FOLD** is the attraction. It ensures absolute permanency to the sifter—something you can never vouch for in the wooden ones. There is a big business being done in **METALLIC ASH-SIFTERS** and **YOU** should share in it. Write and get one of our Booklets.

C. M. CUTTS & CO., Toronto Junction, Ont., Sole Makers

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO



Kerr's Weber Iron Body Gate Valves
Are recognized as the leading Gate Valves
"MADE IN CANADA."
Every valve is tested and packed before shipment. Send for Catalog.

The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE, ONT., CANADA

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

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Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not gotthem, write direct to

R. E. THORNE

768 Craig Street MONTREAL — 29 Melinda Street TORONTO

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HERBERT RODGERS & CO.

Saracen House, Snow Hill, London, Eng.

Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

EXPERIENCED ADVERTISEMENT WRITERS

who are open for a situation are requested to register their names with the MacLean Publishing Co., at any of their offices. Inquiries are occasionally made by manufacturers and wholesale houses who contemplate establishing their own advertising department.



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.

182 Adelaide Street West

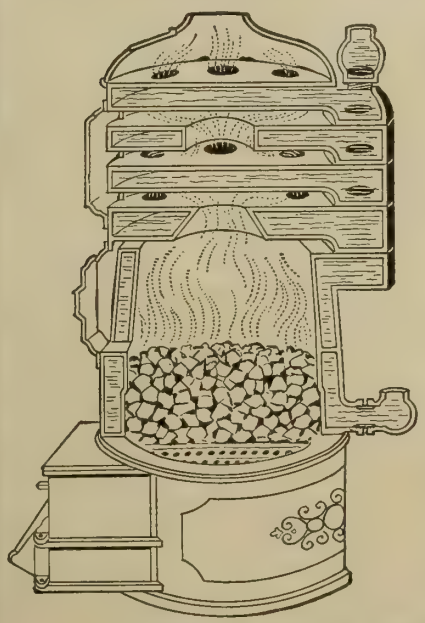
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A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

The Oxford Hot Water and Steam Heating System

means a difference to you—a big difference. When you figure on a heating system you allow a reasonable margin for profit. Your margin develops into actual profit when you instal the

OXFORD HEATING SYSTEM

because when the job is finished it is finished.



There are lots of new buildings going up in your town, and new heating systems are being installed all the time. The Oxford Heating System is so strong and convincing a proposition that if you say for it all you can truthfully say, you won't have to worry over slow business.

The Oxford ("B" Series) Boiler is the most modern, powerful and economical heat generator in existence. A glance at the cut will convince all practical men of its immense superiority.

The unparalleled success of this boiler is largely due to the scientific construction of the fire pot.

The fir pot is wider at the bottom than the top. This prevents the accumulation of dead fuel around the most active surface of the boiler. The upper walls of the fire-pot overhang the fire. This construction forces the heat to impinge and adds to the area efficiency of the heating surfaces and the power of the boiler.

The first water section is double the depth of the others and has bell-shaped flues, thus repeating this principle and still further increasing the power of the boiler.

A no-leak joint. The old method of making connections with gasket or washers was the source of much trouble. The Oxford tapered steel nipples pressed into smooth tapered holes makes a permanent iron-to-iron joint.

OXFORD STEAM AND HOT WATER RADIATORS

used with an Oxford Boiler assure economy and comfort to your customers and lots of good words for you.

Send for the Gurney Oxford Book of Steam and Hot Water Heating Apparatus.

WE also manufacture Cast Iron Stoves and Ranges, Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges and all kinds of Cooking and Heating Apparatus, Plumbers' Supplies.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que. 137

The Gurney Standard Metal Co., Limited, Calgary, Alta.

ARE YOU AWARE

that "BLACK DIAMOND"

READY ROOFING
WRAPPING PAPER



BUILDING PAPER
TARRED FELTS

are the best selling and most satisfying goods to be had? Order a supply.

Then there are our two brands of **SHEATHING**—**CYCLONE** and **JOLIETTE**—known throughout the trade for their excellent qualities.

We will gladly send you full details. Drop us a line.

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Dec. 22, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$39 00 $40 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, 14 x 20 base	$6 50
IX 14 x 20 "	8 00
IXX, 14 x 20 base	9 50
Famous, equal to Bradley—	
I C, 14 x 20 base	6 50
I X, 14 x 20 "	8 00
I X X, 14 x 20 base	9 50
Raven and Vulture Grades—	
I C, 14 x 20 base	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C, 14 x 20 base	5 50
I X, 14 x 20 "	6 50
I X X, 14 x 20 "	7 50

Allaway's Best"—Standard Quality.

I C, 14 x 20 base	4 75
I X, 14 x 20 "	5 75
I X X, 14 x 20 "	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., 14 x 20 base	4 00
I.C., special sizes, base	4 25
20x28	8 00

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 00
IX., Terne Tin	8 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

2x30 up to 24 gauge	7 00	7 50
" " 26 "	7 50	8 00

10c. extra for squares and odd sizes.

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 97½	2 00
Forged iron "	2 22½	2 43
Refined " "	2 37½	2 40
Horseshoe iron "	2 37½	2 40
Hoop steel, 1¼ to 3 in. base		2 75
Sleigh shoe steel "	2 17½	2 20
Tire steel	2 27½	2 30
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality, best warranted		0 18
"I" " warranted		0 14
"BQ" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 65
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 16
" Silver steel		0 12
" Black Diamond	0 08	0 09
Thos. Jowett & Sons B P.L. tool steel annealed		10½
Self-hardening		45
Rapid self-hardening		75
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

Canada Smelting Co., Limited.

Hard Genuine Babbit	0 40
Standard Anti-Friction Babbit	0 30
" Special Babbit	0 25
Car Box Babbit	0 20
Extra "	0 15
No. 1 "	0 12
No. 2 "	0 07
No. 3 "	0 05½
Standard Phosphor Tin	0 40

On large orders special discounts given.

BLACK SHEETS.

	Montreal.	Toronto
14 gauge		2 55
16 gauge	2 40	2 30
18 "	2 35	2 35
20 to 24 gauge	2 30	2 50
26 "	2 30	2 70
28 "	2 40	2 90

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary, 52 sheets	2 60
All bright "	3 85
Galvanized Canada Plates, 52 sheets	4 10

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 25	
22 to 24 gauge	3 50	3 75
26 "	3 75	4 00
28 "	4 00	4 25

Apollo.

10¾ oz. (American gauge)	4 15
28 gauge	4 00
26 "	3 85
24 "	3 75

	Comet Bell.	Queen's Head.
16 to 20 gauge	3 25	
22 to 24 gauge	3 50	3 75
26 "	3 75	4 00
28 "	4 00	4 25

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "		5 60
"	5-16 "		4 45
"	⅜ "		3 85
"	7-16 "		3 70
"	½ "		3 55
"	9-16 "		3 45
"	⅝ "		3 35
"	¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots		20 50

Bars.

Cut lengths, round, ½ to ¾ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	23 00
Plain, 14 oz	24 00
Tinned copper sheet	25 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 25	7 50
Domestic " "	7 00	7 25

ZINC SHEET.

5-cwt. casks	8 00	8 00
Part casks	8 25	8 25

LEAD.

Imported Pig, per 100 lb.	4 30	4 50
Bar, "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 05½
Sheets, 3 to 6 lb. "		0 05½

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c 1is. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.		14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Net list. Prices are f. o. b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$19 15	17 15
5 feet	"	20 15	18 15
5½ "	"	21 65	19 65
6 "	"	24 40	22 40
Plate E II			
5 feet	2½ in. "	18 65	16 65
5½ "	2½ " "	20 15	18 15

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c.	30 & 10 p.c.
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality		2 55
" " " " " B "		2 40

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 09
⅜ "	2 09
½ "	2 43
¾ "	3 05
Black pipe—	Per 100 feet.
1 inch	4 37
1¼ "	5 96
1½ "	7 15
2 "	9 54
Galvanized pipe—	
⅛ inch	2 91
¼ "	2 91
⅜ "	3 27
½ "	4 20
¾ "	6 02
1 "	8 22
1¼ "	9 86
1½ "	11 14
2 "	13 14

Lead Pipe discount 20 per cent.

Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
12 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock	net	1 90
No. 4 " "	"	1 75
No .7 Fuller's	"	2 10
No. 4½, "	"	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 65 per cent	
" " iron " " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
0	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND LADIES' SCISSORS

Fully Warranted



Our Eastern Pattern Ladies' Scissors. This is an exceptional scissor, adapted for clean-cutting work where stiffness of blade is required. Hand forged from finest steel. Ask for discounts.

The Clauss Shear Co., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb. Montreal	Toronto
Bar, half-and-half, guaranteed	0 22	0 21½
Wiping	0 18	0 20

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.
Pure	5 50 5 80
No. 1	5 10 5 25
No. 2	5 05
No. 3	4 12½
No. 4	4 05
Munro's Select Flake White	5 65
Elephant and Decorators' Pure	5 50
Tiger brand, pure	5 75
Decorators' Special for exterior use	5 00
Monarch	5 75
Decorator's Pure	5 50
Essex Genuine	5 00
Sterling Pure	5 75
Island City Pure	5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06 0 08
French V. M.	0 06½ 0 07
Lehigh	0 06 0 06½
Pure	0 07½
No. 1	0 06½
No. 2	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 40
" " " ½ gal.	1 35
" " " gal.	1 30
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

	Per lb. Canadian	English
Petroleum, barrels	0 15½	0 15¾
Arsenic, kegs	0 15½	0 16
50 and 100 lb. drums	0 16	0 16½
25 lb. drums	0 16½	0 17
1 lb. paper boxes	0 17	0 17½
½ lb. tins	0 18	0 18½
¼ lb. paper boxes	0 19	0 19½
1 lb. tins		0 20½

Terms 2 per cent. off 30 days or 90 days.

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08 0 08½
French medal	0 10 0 14
White, extra	0 18 0 22
Gelatine	
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	
Ground	0 12 0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.

	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

	Per M.
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior 'chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¾

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.	

Farm.

American, each	1 35 3 00

House.

American, per lb.	0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65 0 90
Diamond, Shell, per doz.	1 00 1 50
Nail and Spike, per gross	2 25 5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½ 0 12

BOLTS AND NUTS

	Per cent
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 0
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M. 4 25
Small heel	" 4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz. 1 00	1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross 50 6 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt. 0 60	0 65
Red	0 05	0 06
Crayon	per gross 0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English	per doz. 2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz. 5 00	9 00
man	" 0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz. 0 55	1 00
Axle	" 0 22	0 33
Screw	" 0 22	1 00
Awning	" 0 35	2 50

PUMPS.

Canadian cistern	1 40
Canadian pitcher spout	1 80

A Profitable Investment

is made when you lay in a stock of Paterson's Building Papers and Wire Edged Ready Roofing. These goods have the Quality and Reputation that make them popular with your customers.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 22
7-inch	"	1 48

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
100 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	.... 9 00
Rope, ½ "	"	.... 12 00
Rope, ⅝ to ¾-inch	"	.... 14 00
Leather, 1-inch	per doz.	.... 4 00
Leather, 1¼ "	"	.... 5 20
Web	"	.... 2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	.... 4 50
12 in. up	"	.... 3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	.... 0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"P.B." Brand, 55 to 60 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

Discount 50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	.... 0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to	$5 00
Star, 12 to 16-in cut	2 75 to	3 05
Daisy, all sizes	....	2 50

Woodyatt, ball bearing, 12 to 20-in 5 60 to 7 45
Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.
Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz.

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen -

Gem	each	.... 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 50 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	.... 6 75
Plumbers	"	.... 3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 45 per cent
Flaring pattern, discount 45 per cent.
Galvanized washtubs, discount 45 per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	... 7 80
" "	"	.... 9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ 40 per cent.

NOW !

IS THE TIME TO PLACE ORDERS FOR ALL KINDS OF

Send Specification.

We make all kinds.

Oil Tempered SPRINGS

Prices are advancing.

Also **Iron, Steel and Metals** for Import.

J. A. HENDERSON, - - - - - **MONTREAL**

PUNCHES.

Saddler s .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 40 per cent.
Copper Burrs only, discount 30 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 10½
Pure Manilla		0 15
"British" Manilla.....		0 11½
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅛ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord. 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's....per foot	035	0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.		
Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... .... 0 31

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect.....	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	...	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German .....per doz.	4 75	00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 52½ per cent. off the list.
Copper wire, discount 52½ per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15 —No. 9, $2.55 — No. 10, $3.20 to $3.20 —No. 11, $3.25 to $3.25 — No. 12, $2.65 —No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure, F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 75
Galvanized, plain twist	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

COILED SPRING WIRE.

High Carbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

Frequent attempts have been made to imitate

Storm King Track



without success, and it stands to-day in a class by itself—**The most perfect Barn Door Track** made in Canada.

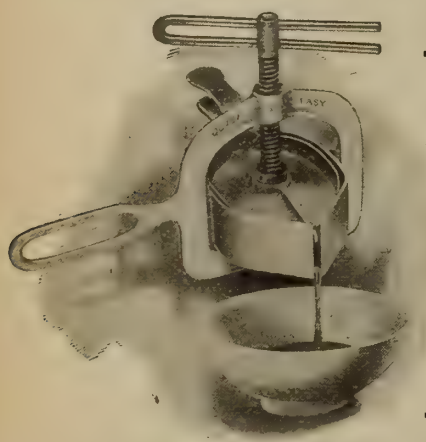
Every piece stamped "Genuine Storm King" with our name.

Insist on getting, **Storm King Brand.** You will find it pays.

Ask Your Jobber

MADE BY

SAFETY DOOR HANGER CO., - Hamilton, Canada



Walker's Quick and Easy Meat and Fruit Juice Press

Made to clamp to the table or hold in the hand. They are made in three sizes and three styles of each size; capacity, one-half pound of meat at a press full.

As all the juice is out as soon as screwed down, several pounds can be pressed in short space of time. The real capacity is equal to others of larger and more expensive prices.

ERIE SPECIALTY CO., ERIE, PA., U. S. A.

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Ash Sifter.
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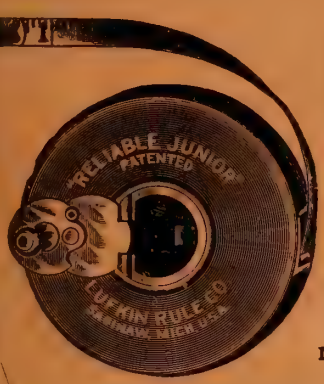
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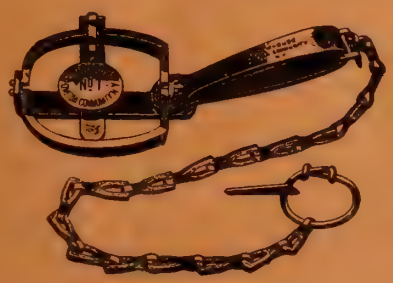
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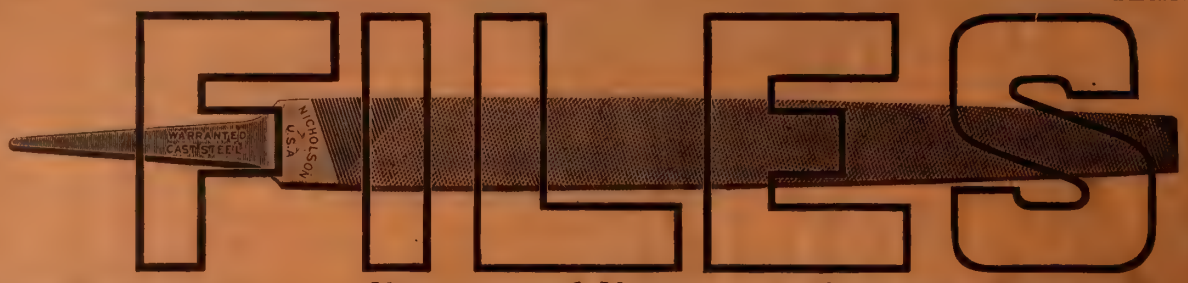
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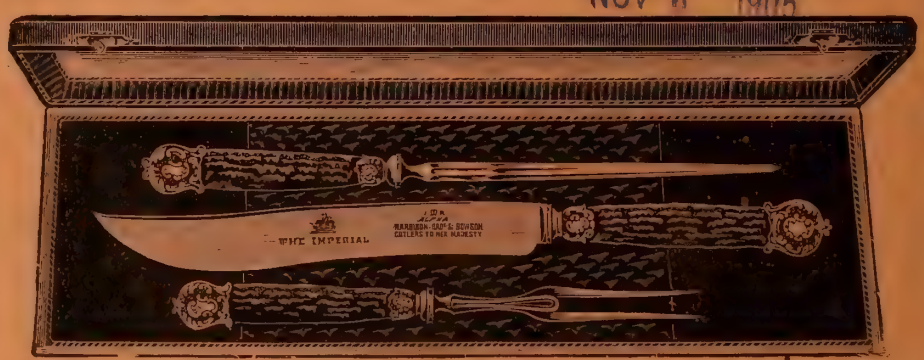
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Pair in Leather Case $4.50
Carbo-Magnetic Strop $1.00



NO HONING **NO GRINDING**

NO NEW BLADES **NO ANNUAL TAX**

FIRST PURCHASE PRICE THE ONLY EXPENSE

If you will send us your dealer's name and let us know whether he handles the Carbo-Magnetic razor, we will send you our **booklet, "Hints on Shaving," Free,** and also make you a proposition whereby we will arrange with your dealer that you can test and use one of these razors **without any risk** or obligation on your part. The booklet illustrates the correct razor position for every part of the face, and gives much needed information to all self-shavers. The Carbo-Magnetic razor is for sale by most good dealers who guarantee it—we back their guarantee. Send for book to-day.

Firm of A. L. SILBERSTEIN, 459 Broadway, New York

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

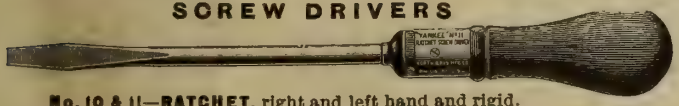
THOS. BIRKETT & SON CO.,
LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

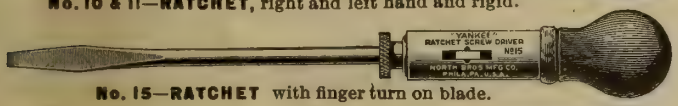
OTTAWA, ONT.

Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET—right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.



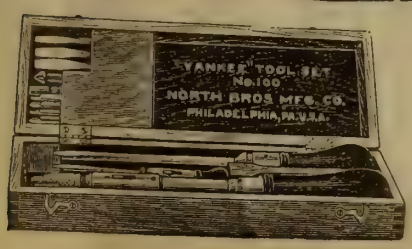
No. 12—RATCHET, with stub blade.



No. 60—POCKET SCREW DRIVER.

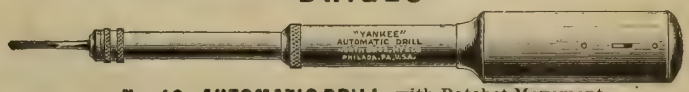


Countersink, for spiral ratchet screw driver.

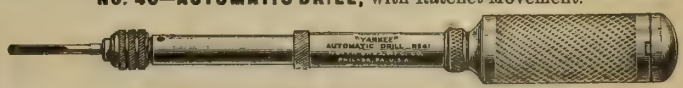


The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

DRILLS



No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



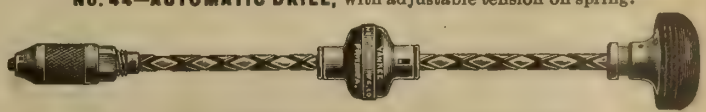
No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

New Year Greeting

We wish all our customers and friends a Most Happy and Prosperous New Year.

THE THOS. DAVIDSON MANUFACTURING CO., Limited

Montreal and Winnipeg

M. & L. Samuel, Benjamin & Co.

have removed their offices and warehouse to 54-56-58 Front West.

M. & L. Samuel, Benjamin & Co.

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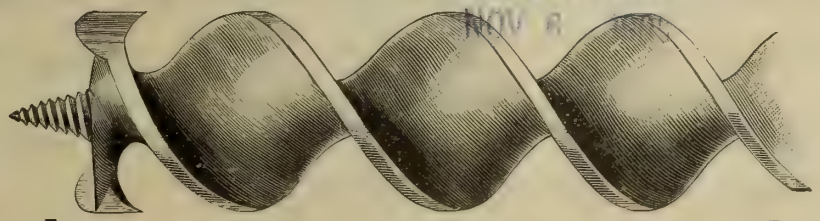
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Our Prices =
Large Profits

TWIST DRILLS

Good Goods + Our Prices = Large Profits

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Bates Auger Bits
all sizes



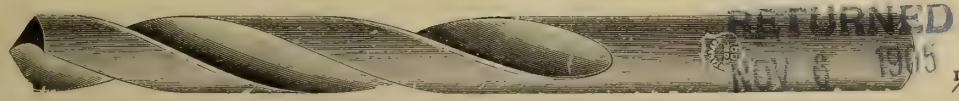
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Cook's Plug and Sugar Bits
6-16 to 9-16 inches inclusive



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Twist Drill Bits
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Twist Drill Bits
No. 104B. Straight Shank, Taper
Shank Lengths



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Brace Bit for
Wood or Metal.



No. 111
½-in. Shank Drill

It will pay you to take advantage of our prices on these lines.

LEWIS BROS. Limited
MONTREAL

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TORONTO
WINNIPEG
VANCOUVER
CALGARY

They are low at present, but are liable to advance in the immediate future.

THEY CUT TO THE POINT

REGISTERED W TRUE TRADE MARK

"TRUE" BRAND SCISSORS

AND EVERY PAIR IS FULLY GUARANTEED

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BARBED WIRE CALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

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Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
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ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
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Manufacturers of all Kinds of

GOLD, SILVER, ELECTRO PLATE ON NICKEL and BRITANNIA METAL GOODS, SILVER and PLATED CUTLERY, STEEL CUTLERY, OAK and INLAID GOODS
WITH SILVER AND PLATED MOUNTS

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

We want to mail our Catalogues to all Canadian Dealers, will YOU send us YOUR name?

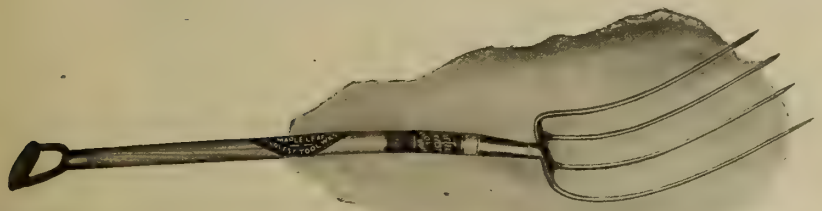
HOTEL and SHIP'S OUTFITS, special goods for hard wear. Special designs for all purposes supplied free.

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

Showrooms and Warehouses: - Coristine Building, MONTREAL

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



No. 122. Manure Fork



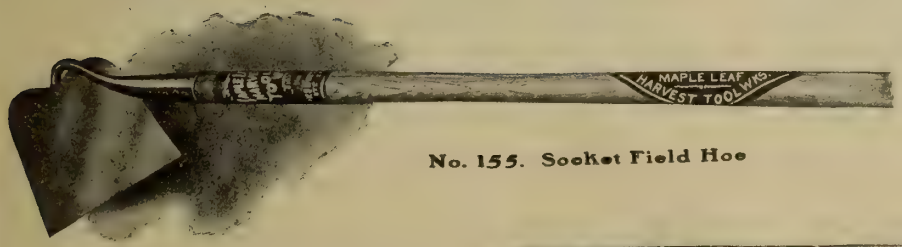
No. 138. Spading Fork.



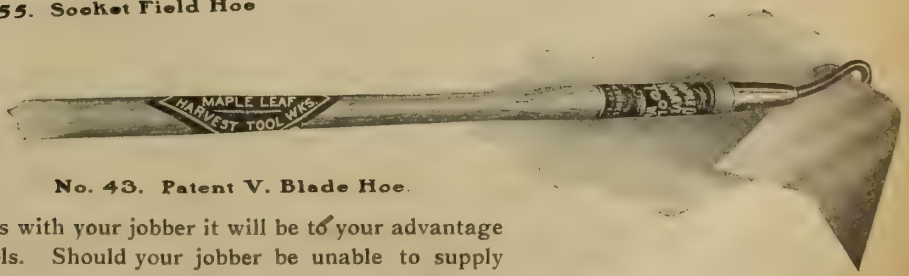
No. 245. Beet Fork



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

TO THE HARDWARE TRADE:—

When placing your order for harvest tools with your jobber it will be to your advantage to specify for the "**Maple Leaf**" Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.



Pink's Lumbering Tools

MADE IN CANADA

THE STANDARD TOOLS

in every Province of the Dominion, New Zealand, Australia, Etc.

We manufacture all kinds of Lumber Tools

Pink's Round Bill Peavys, Handled in Split Maple

Pink's Duck Bill Winter Cant Hooks, Handled in Split Maple.

Finest Quality Split Maple Cant Hook and Peavy Handles, Car Load or Dozen.

Boom Chains, Pike Poles, Skidding Tongs, Boat Winches, etc.

Sold throughout the Dominion by all Wholesale and Retail Hardware Merchants.

I Can Furnish You with the

Brazil Patent Snow Plough and Road Maker;
also **The DesJardin Patent Log Sleighs**

Send for Catalogue and Price List

THOMAS PINK & CO., Pembroke, Ont., Canada

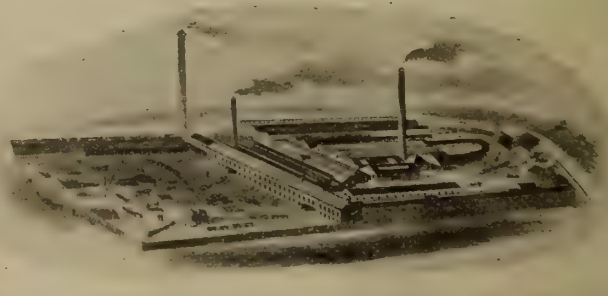
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John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

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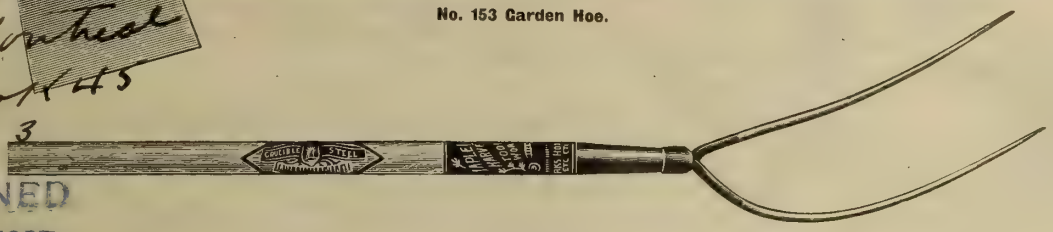
One year's production from these works would put a girdle of Galvanized Sheets right around the earth.

Agent: F. Hankin, Montreal

YOUR ORDER for harvest tools might better be placed now than later.
Consult your records of what you bought last year, and what this year's inventory shows



No. 153 Garden Hoe.



No. 98 Hay Fork.

you have on hand.
These are the surest guides as to the quantity you need to order.
Then place your order with us.
We give good service.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants

FOUNDED 1809 MONTREAL, CANADA

F. & W.

PERFORATED SHEET METALS

IN

Brass, Copper, Steel, Etc.

All sizes of perforations and thickness of metals for

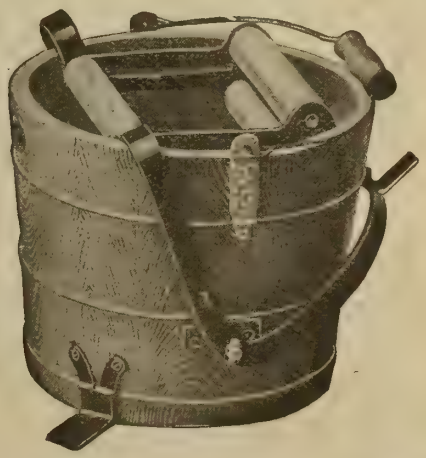
Miners' Use,
Grain Cleaning Machinery,
Bee Keepers,
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THE B. GREENING WIRE CO.

LIMITED

HAMILTON, ONT. MONTREAL, P.Q.

QUALITY COUNTS



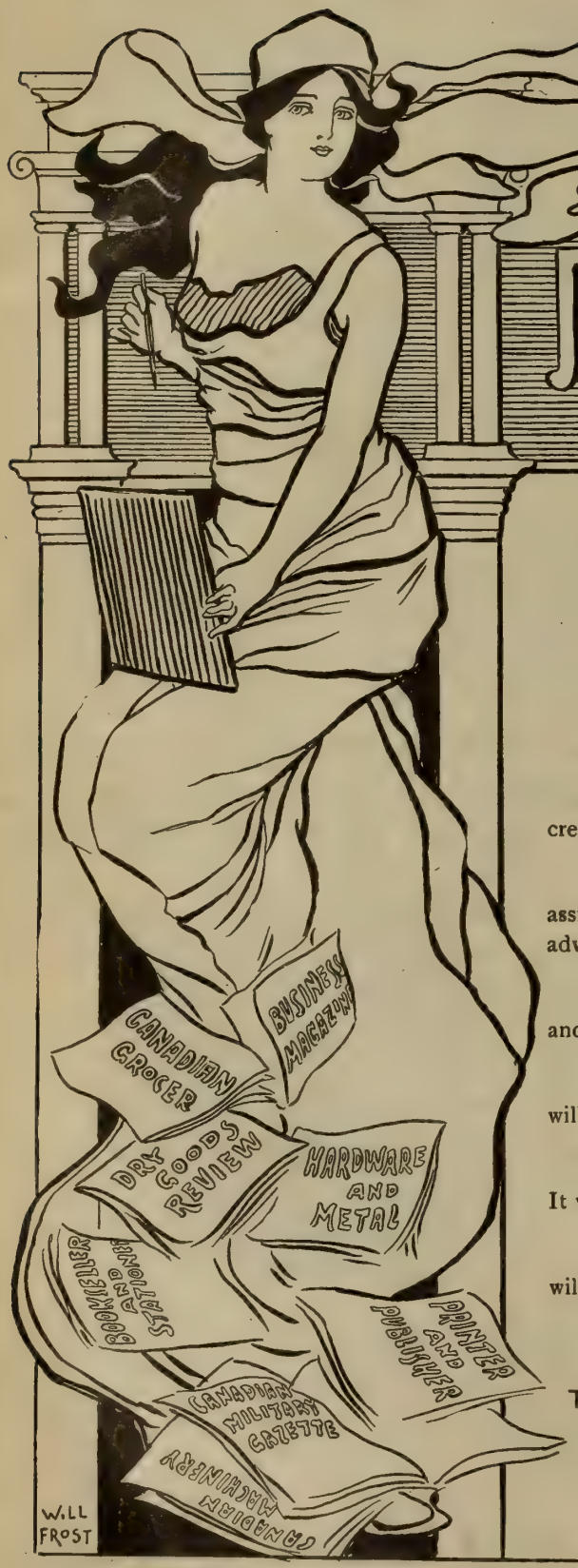
That's why there are more **"EAGLE MOP WRINGERS AND BUCKETS COMBINED"** sold than any other make.

Are made right in every particular. Made to give perfect service and long wear.

ASK YOUR JOBBER OR WRITE US FOR PRICES.

EAGLE COOPERAGE WORKS

CIRCLEVILLE, OHIO, U.S.A.
Sole Manufacturers.



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A bright design often goes a long way to increase the effectiveness of a good advertisement.

Our Pictorial Ad. Department is designed to assist our patrons to improve the quality of their advertising at the lowest possible cost.

Our artist will submit sketches to suit any trade and finish sketches when approved.

Just the actual work of artist and cost of plate will be charged for.

Your advertisement will stand out distinctively. It will be exclusive. It will pay.

Don't hesitate to ask for what you want. We will see that you get it promptly.

Pictorial Advt. Dept.

THE MacLEAN PUBLISHING CO., Limited

Montreal Toronto Winnipeg



JAN 2 1906
RETURNED
To Montreal
Can Book 45
Page 4

RETURNED
JAN 2 190

We desire to express our hearty greetings to all our customers and friends, and hope that they, one and all, will enjoy

A Happy and Prosperous New Year

We would take this opportunity to thank them for past favors and would respectfully solicit a continuance of same for 1906. All orders entrusted to our care will command every attention.

Caverhill Learmont & Co

OF MONTREAL AND WINNIPEG

We manufacture Cordage and Binder Twine of every variety.
We solicit your 1906 business for the following brands:

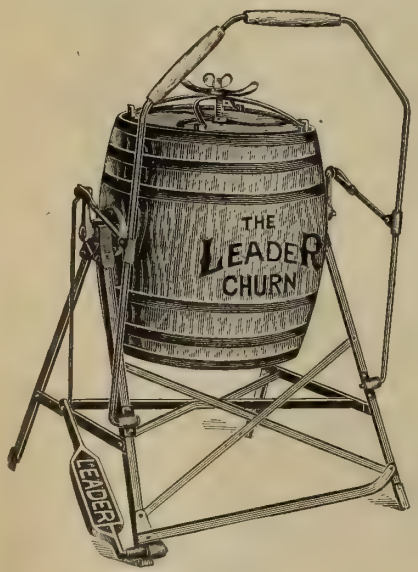
Blue Ribbon,	650	ft.	per lb.
Red Cap,	600	"	"
Tiger,	550	"	"
Standard,	500	"	"
Golden Crown,	500	"	"

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX

BRANCHES:

W. A. C. HAMILTON, 11 Front Street East, Toronto, Ont.; F. H. ANDREWS & SON, Quebec, P.Q.;
MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.
MERRICK, ANDERSON & CO., Winnipeg Distributors of our Binder Twine for Northwest.



Style "F"

The Very Newest

Combination, Bow Lever and Side Pedal drive; operated from a sitting or standing position. Bicycle Ball Bearings. Very easy running. Barrel quickly detachable from frame.

The Best Ever

Easiest running and highest grade Rotary Washer made.

Test proves best. Try it and profit. Nothing like it on the market.

Gears enclosed. Impossible for children to get their fingers caught.



THE "SNOWBALL"

THESE ARE TRADE BRINGERS

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MONTREAL,
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THE DOWSWELL MANUFACTURING CO., Limited
HAMILTON, ONTARIO

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MONTREAL AND TORONTO LIMITED

BARB WIRE AND PLAIN GALVANIZED WIRE

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BRIGHT—BRASS
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TINNED WIRE for Mattress, Broom, Bottling and Binding

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ALL MADE IN CANADA

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White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

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For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

Here Is A Seller!

You can sell a pair of **S. & S.** Cogged Scissors to every one in your town who works with such materials as **leather, rubber, packing, linoleum** and **asbestos.**

The lower blade is cogged, thus holding the material in place for the sharp upper blade to cut it.

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This design a guarantee of quality.

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SMOOTH, TOUGH, BRIGHT, CLEAN
ALL SIZES AND WEIGHTS

Fibre Paper
THE TOUGHEST OF THE TOUGH
ALMOST WATERPROOF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

We Manufacture CHAIN

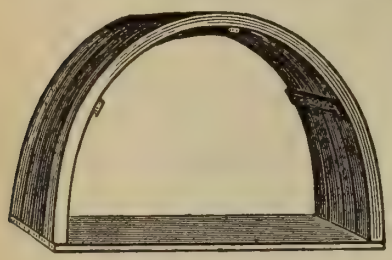
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ESTABLISHED 1867

J. S. LOUGHEAD & SON
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Mnfrs. of
HUBS, SPOKES
BUGGY AND WAGGON RIMS
SLEIGH RUNNERS
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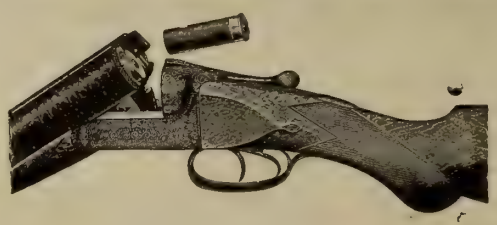
We use nothing but the very best Hickery and Oak in our stock, and we are prepared to guarantee all our goods. We carry an exceedingly large stock on hand and will ship promptly.

YOUR ORDER SOLICITED.

Quebec Agent: J. A. BERNARD, 21 St. Peter St., Quebec, P.Q.

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THEY SHOOT WELL!
THEY SELL WELL!
THE PROFITS ARE RIGHT!



Sole Manufacturers—
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WORKS—
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THOS. C. IRVING, Gen. Man. Western Canada. Toronto.

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Feed Boiler and Crescent Steel Sled Circulars

are well worthy your consideration. Write

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The Largest Manufacturers of Feed Boilers in Canada

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GUELPH AXLE WORKS

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Solarine Metal Polish
Makes a brilliant shine quick that lasts.
Raven Harness Composition
Produces a jet black polish on leather.
Falcon Enamel Top Dressing
Will not chip. Dries in 8 to 10 hours.

H. F. FALKINER,
Wholesale Harness, Hardware and Supplies
60 George St., TORONTO

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22 St. John St., - Montreal
Manufacturer's Agent and Hardware and Metal Merchant

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented. Representing now

LEEDS FIRE CLAY CO., Lt'd.
Fire Bricks, Glazed Bricks, Stable Bricks, Cruciblo Steel Wire.

T. JOWITT & SONS, SHEFFIELD.
Files, Cast Steel, Hammers.

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Cutlery and Plated ware. Agents for Norway Iron, Steel, Galvanized Iron Chains. Sheet Iron, Hoop Iron, Machinery Steel, PEN-DAR Metal Lockers.

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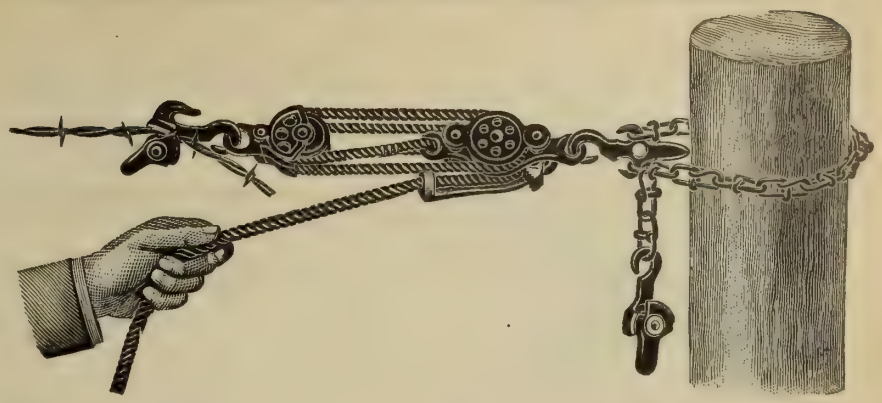
of dropping us a card a few days before you start for Montreal or Toronto on a business trip telling us where you are going to stay. We want to print it in the "Buyers in Town" department before you arrive.

THIS IS THE
OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

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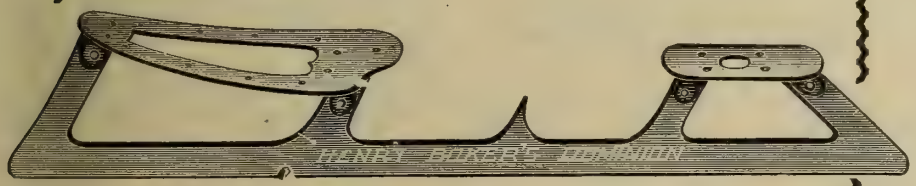
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LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

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SKATES

FOR SPEED, QUALITY AND FINISH



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The Fisher Tube Skate

HOCKEY PLEASURE



STRONG LIGHT NEAT

Dealers

DON'T MISS BUSINESS. You may not have stocked our skates.

We have provided for the rush season.

WE CARRY FULL LINE OF SHOES with our patent hook. We can give mail orders quick despatch.

Skates attached to shoes complete.

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POWERFUL, PERFECT, PRACTICAL

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BUILT FOR BUSINESS
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Power for sewing machines, lathes, scroll saws and other small machines.

For grinding edge tools and polishing silverware or other metals.

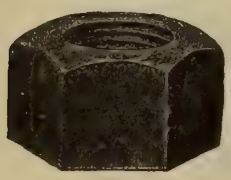
⅛ horse power on 80 lbs. pressure, attached to any faucet.

Price, COMPLETE, including emery, buffing and pulley wheels, faucet connection, polishing composition, etc., **$4.00.**

$3.50 and this ad. will get the motor complete.

DISCOUNT TO THE TRADE.

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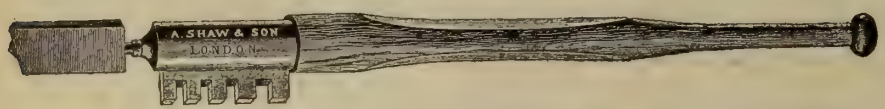
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Manufacturers of

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GLAZIERS' DIAMONDS



Ahead of all others in **quality** and **workmanship.** If **sparks** of **fine quality,** set by **experts,** are what you require, buy Diamonds of **A. Shaw & Son's** make.

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CELEBRATED **HEINISCH** SHEARS

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ACKNOWLEDGED THE BEST.

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Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

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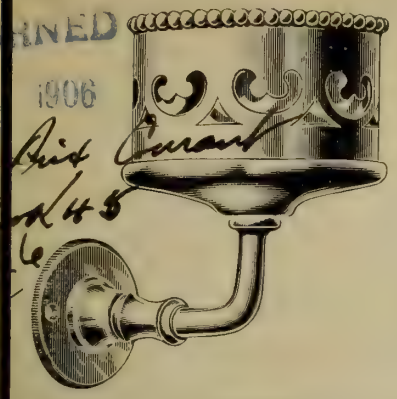
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HAMILTON CANADA

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are now made in Canada by

THE CARRIAGE MOUNTINGS CO., LIMITED
TORONTO

Catalogue B shows attractive styles of

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(Continued)

Daylight passing down a light shaft 105 feet high, gathered and diffused throughout a room 40 feet long ; 8,300 windows placed in buildings in the period of a few months, is pretty good evidence of the capability of **Maximum Light Glass** and the tangible way in which it is being endorsed.

"Complete Illumination" in a room, the windows of which were entirely below the pavement line and the area wall only 30 inches from the glass, shows that while there may be hopeless cases with "other" systems, none can baffle **Maximum Light Glass.**

No builder, etc., ever regrets installing

MAXIMUM LIGHT GLASS

It reduces artificial light bills 20 to 30 per cent.

Architects by specifying **Maximum Light Glass** for use in the sashes need never include a "dark" room in their plans.

Isn't this wonderful glass worth enquiring about ?

Sole Canadian Agents :

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HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our Illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

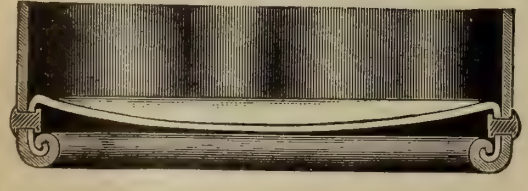
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KEMP'S Factory Milk Can Trimmings

With roll rim bottoms are the kind that stand the wear and tear.

They are made to last



SECTIONAL VIEW OF BOTTOM

All sizes of tinned iron in stock. We can ship promptly.

KEMP MANUFACTURING CO., TORONTO

THE KEMP MFG. CO. OF MONTREAL
58 McGill St., Montreal, Que.

THE KEMP MFG. AND METAL CO., Limited
McDermot Ave. East, Winnipeg, Man.

THE WESTERN HARDWARE ASSOCIATION.

AS 1905 draws to a close hardwaremen in all parts of the country are commencing to take stock or are planning to do so. The Western Retail Hardware Association has also been taking stock of the progress made during the year, and it is fitting that Hardware and Metal should present its readers with the results of that stock-taking. The best evidence of the actual strength of the Association is afforded by the membership list, and hence no apology is necessary in presenting the entire membership list to date. It is as follows:—

Winnipeg District.—The J. H. Ashdown Hardware Co., Ltd., Leon Abramovich, Anderson & Thomas, Allaire & Bleau, Baskerville & Co., A. E. Dykes & Co., E. G. Flook, Graham & Rolston, Gilmer & Co., Glenwright Bros., Macdonald & Fleming, McLean Bros., Lennox & Butt, N. Lightly, J. E. Riley, Jas. Sinclair, W. A. Templeton, R. Wyatt, Weir & Wilson, Watt & Gordon, C. A. B. Whiting, Wyatt & Clarke, Winnipeg Paint & Glass Co., Hudson's Bay Co.

Souris Line District.—Dean & Co. and J. Rinn, Elm Creek; Beuttner Bros., R. J. McConnell, and Walton & Clea, Carman; A. Forbes and Carswell Bros., Rathwell; L. F. Sherrin and D. Spear, Holland; C. A. Hamilton and Geo. Huston, Cypress River; Doig & Wilcox and E. C. Irving & Son, Glenboro; R. W. Middlemis, Nesbitt; J. W. Graham, Carrol; Currie & Mitchell, Souris Hardware Co., and W. McCrory & Co., Souris; Hamelin Bros. & Co., Lauder; Gaudin, DeWitt & Co., Napinka.

Morris, Brandon and Hartney District.—Phillips Bros. and A. E. Coade, Morris; D. Phillips, Dominion City; J. E. Birch & Son and Jas. Mawson, Roland; Leggitt Bros., Rosebank; Lawrence & Campbell, Miami; J. A. Decose, Somerset; A. E. Downey, Swan Lake; T. E. Poole, Baldur; F. F. Sparks and J. Smith, Belmont; R. J. Neithercut and C. E. Neads, Wawanesa; Jas. Martin, Rounthwaite; J. Yellowlease, Ninette; J. A. Dunlop, Dunrae; E. T. Johnson, Minto; D. Gibson, J. W. Maguire and Robertson Bros., Elgin; H. Hunter and Hartney Hardware Co, Hartney; C. D. Sparrow, Fairfax.

Estevan Line District—H. V. Morse, Hamelin Bros. & Co., Melita; J. F. Dandy, Pierson; F. G. Elliott and W. R. Burke, Gainsboro; Coade & Hughes and S. Shannon, Carievale; J. P. Shannon and R. J. Porteous, Carnduff; Hames, Wylie & Co., and E. Crossley, Oxbow; McKeen Bros. and Riddell & Co., Frobisher.

Deloraine Line District.—W. & J. Stewart, Plum Coulee; W. & J. Stewart, Winkler; A. P. Brown, Morden; Coleman Bros., Darlingford; R. J. Chalmers and D. Gunn, Manitou; M. Keating, La-Riviere; Chalmers & Watson and D. B. Graham, Pilot Mound; G. R. Taylor and McNamee & Argue, Crystal City; H. McLean and Moore & McIntyre, Mather; L. H. Phillips and Moore & Hills, Cartwright; Cairns Bros. and D. Bradley, Holmfield; J. McNaughton, Killarney; C. A. Landon and E. F. Johnson, Ninga; H. S. Price and Davis & Wilson, Boissevain; The McKay Co., Whitewater; A. J. Falconer Co., and Wm. Chalmers, Deloraine; W. H. Dandy, Medora; Campbell & Ferguson and G. R. McLean, Waskada; I. P. Cheney and M. A. Boyd, Lyleton.

Soo Line District.—Stockwell & Perry, F. J. Musgrave and Estevan Hardware Co., Estevan; Macoun Hardware & L. Co., Macoun; Weyburn Hardware Co. and Thompson & Axworthy, Weyburn; A. S. Baker and S. Taylor, Yellowgrass; W. H. Pain and A. E. Jones, Milestone.

Dauphin District—F. N. Smith, McCreary; J. Seve, Laurier; A. Douglas, Makinak; W. A. Oliver, Ochre River; A. J. McPherson, Dauphin; Sutherland & Stelck, Dauphin; C. F. Turner, Dauphin; C. C. Baker, Gilbert Plains; W. C. Inglis, Gilbert Plains; Allis & Weidenhammer, Grand View; W. W. Ruttan, Melfort; Ashdown & Bossons, Swan River; Morse Hardware Co., Swan River; W. Bristo, Glensmith.

Arcola District—J. G. Rattray, Pipestone; Manitoba Hardware & Lumber Co., Reston; D. Flumerton, Reston; J. M. Stephenson, Sinclair; Porteous Bros., Carlyle; H. Cochrane, Carlyle; J. R. Mears, Arcola; J. G. Hopper, Arcola; E. Dalquhest, Forget; Moose Mountain Lumber and Hardware Co., Forget; Doull & Banbury, Stoughton; Mountjoy & Glover, Heward; Morrison & McLeod, Fillmore; Hulbert & Biden, Fillmore; J. Lamb, Francis; J. Transyke, Francis; O. Edwards, Sedley.

Minnedosa and Yorkton District—Williams Bros, Gladstone; J. A. Gilhuly, Arden; G. L. Forester, B. R. Hamilton, Skelding & McElroy, Geo. Killington, Neepawa; Black Bros., W. H. Sparling, Mair & Burton, Minnedosa; Scott Bros, Geo. Clarke, W. R. Lavery, Newdale; Eakins & Griffin, D. McDonald & Co., J. D. McLean, Smellie Bros., Limited, Shoal Lake; Taylor & Mitchell, Birtle; Denmark & Burton, Langenburg.

Hamiota Branch—Butchart, Adkins & Haslem, J. A. Moxley & Co., Rapid City; W. Chambers, Hamiota; Waukle & Barr, Oak River; R. J. Brown, Crandel.

Kirkella Branch District—E. Webster, Welwyn; Schwantz Bros., Rocanville; Blythe & Clements, Esterhazy; D. Lamont, Stockholm; Stewart Bros., Grayson; Newdorf Trading Co., Edwards & Co., Newdorf; Lemberg Hardware Co., Lemberg; Hunt & Ross, Abernethy; H. E. Chaplin, Balcarres; Jas. Dillon & Co., F. Schofield, Lipton; Jas. Dillon & Co., Fort Qu'Appelle; G. Meldrum & Co., Cupar; H. B. Devine, Strassburg; R. W. Hodgson, File Hills.

Prince Albert District—J. B. Kernaghan, T. J. Agnew & Co., O. Manville, Prince Albert; J. M. Hackney & Co., I. P. Freisen, Weibe & Epp, Kehler & Abrams, Rosthern; Hilderbrant & Harder, I. P. Freisen, Hague; Geo. McIntosh, Osler; M. Isbester & Son, S. A. Clark, Oliver & Kempthorn, Jas. Clinkskill, Saskatoon; Irving & Clare, Nutana; W. H. Taylor, Dundurn; Prestholdt Bros., Hanley; E. R. Mann, S. H. DeWolfe, Davidson; E. Troughton, J. Brock, Lumsden.

Macleod and Calgary Line— A. F. Grady, Macleod; R. & R. Laughton, Leavings; L. A. Ostrum, Stavley; Nanton Trading Co., C. H. Marshall, Nanton; Stinson & Smith, Cayley; Heslip, Kelly & Young, High River Trading Co., A. H. W. Thompson, High River; A. R. Auger, W. J. Thompson, Okotoks.

Main Line, West—J. O. Cadham, Babb & Kirkland, Portage la Prairie; W. H. Glover, McGregor; W. T. Speed, Austin; Brown & Armstrong, W. B. Shannon & Co., Carberry; Brandon Hardware Co., Johnson & Co., H. Smith Hardware Co., Brandon; D. A. McElquham, Jas. Forman, Alexander; T. J. Parsons, Oak Lake; Manitoba Lumber & Hardware Co., Frame & Miller, Virden; George Thompson, Elkhorn; F. Chappel, Fleming; J. L. Lamont, Whitewood; A. R. Colquhan & Sons, Paul Bros., Broadview; Grenfell Milling Co., A. E. Walker & Son, Grenfell; A. G. Thompson, Hulbert & Biden, Wolseley; F. L. Mackay, A. V. Gerry, C. T. Laird, Indian Head; D. Brown, Qu'Appelle; Smith & Ferguson, Western Hardware Co., Regina; McGillvery & Kinnon, Pense; R. Bogue, G. K. Smith, Moose Jaw Hardware Co., Hockin & Siddons, A. Latham, Moose Jaw; Swift Current Trading Co., Swift Current; S. Hulme, Williamson & Fleming, Maple Creek; Jas. Rae, W. B. Marshall Co., Medicine Hat; C. F. Comer, Ashdown Hardware Co., T. R. Stewart & Co., Linton & Hall .

Calgary and Edmonton Line— J. A. Sutherland, Crossfield; William Bradley, Carstairs; Duff & Clemens, Earle & Wolfe, Olds; W. H. Luckhardt, Bowden; Innisfail Hardware Co., Currie & Constantine, Innisfail; Smith & Gaetz, Stephenson & Illsey, F. H. Tallman, Red Deer; Morrison & Johnson, Western Hardware Co., Lacombe; J. H. Webster, Morningside; R. K. Allan, W. H. Spackman, Ponoka; C. W. Gaetz, Martin & Prenze, Leduc; W. E. Ross, McLean & Co., Strathcona; Revillon Bros., Limit-

ed. Ross Bros., Limited, J. Sommerville & Sons, J. Henderson, Edmonton.

Stonewall District—W. Montgomery, G. Brown, Stonewall.

Main Line East—E. A. Dugard, Beausejours.

* * *

From the above list readers may judge for themselves the scope and influence of the association. In the vast majority of towns included in the list every hardwareman is a member of the association. In almost every case where not all hardwaremen have joined, those familiar with the territory will bear unhesitating testimony to the fact that the association has the most substantial and most progressive dealers. The association, started in fear and trembling, perhaps, in the Summer of 1904, has grown to such proportions that it commands the respect of jobbers and manufacturers in all parts of Canada. Its rapid growth and the character and standing of its members have also silenced the scoffers who predicted the early discomfiture of the few enthusiasts responsible for the movement. He would be a rash man who would examine the membership list, note the names of the most substantial and most progressive hardwaremen of the west and then predict that a movement supported by these men would come to naught. The character of the membership ensures success.

* * *

With the close of 1905 the organization of the three provinces of Manitoba, Saskatchewan and Alberta is practically completed with the exception of the northern portion of the two new provinces. So many new stores are being started in that part of the country at the present time that Mr. McRobie has decided to postpone his trip there until Spring, as it will be necessary then to visit the trade in those towns in any event.

* * *

With the preliminary work of organization so well in hand, the executive now have an opportunity to outline a forward movement in many different directions. For that reason the approaching semi-annual meeting to be held during the Winnipeg bonspiel is of special importance. Western hardwaremen should make their arrangements to attend, for with the forces so well organized there is now opportunity for decisive action in several matters.

ONTARIO READY TO ORGANIZE.

FROM present indications the movement to organize a Hardware Dealers' Association in Ontario is likely to develop large proportions before the date of the proposed preliminary convention next Good Friday arrives. Many hardware retailers are discussing the necessity of the organization and advantages to be gained through association and after the holidays there should be some action taken towards forming a provisional committee to carry the work of organization to a successful conclusion. Dealers will then have more time also to put their ideas in shape in the form of letters to Hardware and Metal.

A most interesting letter has been received from a prominent hardware merchant in Western Ontario, he going into detail regarding the many points which could be discussed and acted upon to advantage by a hardware association. It is letters of this sort, discussing matters of vital interest to the trade, that we like to receive. Space, however, will be given to any correspondence on this subject and we trust our offer will meet with a prompt acceptance. The letter referred to follows:

* * *

"Editor Hardware and Metal,—Please notify us of any action taken toward the formation of a Provincial Retail Hardware Association. The writer, who for the past 10 years has been connected with a large manufacturing concern, has been in a position to get an insight into the workings of associations among manufacturers and wholesalers and we are surprised that a retail association has not long ago been formed.

There are many matters upon which retailers might be greatly benefitted by unity, for instance:

1st. Insurance rates should be reduced.

2nd. Freight rates require attention.

3rd. Selling direct to contractors by wholesale houses should be stopped.

4th. Large general stores are placed on jobber's lists and cause unfair competition.

5th. A central collection department would be a good feature. "Poor payers" are always better for "outside pressure."

6th. Business should be put on a cash basis as largely as possible or a uniform system of credit established.

7th. A central buying office is not absolutely impossible, for some lines at any rate. Very considerable reductions may be obtained in that way.

8th. Have a secretary who will be a "watchdog" on the markets and let members have the benefit of his experience and knowledge.

An association, we think, would be of inestimable value and as for us, we will heartily co-operate in its formation."

B. GREENING CO'S CALENDAR.

AN advance copy of the illustrated calendar for 1906 issued by the B. Greening Wire Company, Hamilton, has been received. This has become an annual feature, and the trade look for it, appreciating the tables regarding wire goods given on the last page. The style has not been altered from last year's calendar, the large figures for the days of the month being considered a decided advantage and the heading being indicative of the style and development of their business. A communication, mentioning this paper, will secure a copy of the calendar.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Cash and Despatch Boxes.

A hardware line which is fast gaining popularity is the one mentioned above. One of the most complete assortments on the market is shown in the catalogue recently issued by T. W. & J. Walker, Wolverhampton, England, whose Canadian sales agent is J. A. Henderson, Board of Trade building, Montreal. The booklet, which contains eight pages and cover 10x7 inches, reproduces in color a great variety of the cash and despatch boxes manufactured by this well-known firm, from the plain popular priced lines to the more ornate and expensive ones. Hardwaremen generally will be interested in this catalogue, which will be sent on request if Hardware and Metal is mentioned.

A Breeze From the West.

Sheppard & Elliott, hardware merchants and plumbers, Fernie, have issued a typical western calendar, the illustration showing a cow-girl, revolver in hand, posing for her picture. The empty bottles in the background would indicate that there had been something doing in the drink line before the artist did his work. The picture is nothing if not western.

Kinsmen Desk Lamps.

A small booklet of envelope size describing the many styles of Kinsmen desk lamps sold by the Canadian General Electric Company, Toronto, has been received. Dealers who handle electrical supplies can secure detailed information from the above named company by mentioning this paper.

A Dramatic Calendar.

Customers of the James Robertson Company have received from this firm a parlor calendar which is in every sense a beauty, it being worthy of a place on the walls of any home. Artistic reproductions of photos of four of the leading actresses of the day were included on four separate pages, the only advertisement being a few words in small letters in a place where it will not be noticed. The company is to be commended for the taste displayed in their selection.

Industrial Opportunities.

The Massachusetts Bureau of Statistics of Labor, Boston, has issued a valuable volume of "Industrial opportunities not yet utilized in Massachusetts." Much data of value to prospective locators is given, the style of the work being such as could be copied to advantage in this country.

Telephone Girl Calendar.

The James & Reid Company, hardware merchants, Perth, have supplied Hardware and Metal with a copy of their 1906 calendar containing a striking illustration of a telephone girl. "If it's hardware we have it" is the terse way of putting forth their claims for business from those receiving the calendar.

OUR AUSTRALIAN LETTER

FROM OUR OWN CORRESPONDENT

CANADA recently made overtures to Australia on the subject of preferential trade between the two countries. Federal Ministers are now studying in what way it would be profitable to develop increased trade with Canada.

From the Victorian Chamber of Manufactures our Prime Minister (Mr. Deakin) has received a resolution asking his ministry to "seriously and immediately consider" the proposal to establish trade relations with Canada, "which," the resolution adds, "this chamber hopefully trusts may be eventuated." Mr. Deakin has not yet received the report of the Customs Department upon the proposal of Canada, but he is considering certain data which is in his own department. The whole matter has yet to go before the cabinet.

* * *

The despatch received from your Dominion Government regarding this momentous matter reads as follows:

"On a report dated 30th June, 1905, from the Minister of Finance, submitting that, under the provisions of the customs tariff, 1897, and amendments thereto, the benefits of the preferential tariff were by orders in council of June 28, 1897, and July 14, 1898, extended by Canada to the colony of New South Wales.

"The Minister states that upon the union of the Australian colonies, New South Wales ceased to have a separate tariff, and came under the operation of a tariff adopted for the Commonwealth generally. In consequence of such change the orders in council above referred to were rescinded on January 23, 1903.

"The Minister of Finance deems it desirable that the Government of the Commonwealth of Australia should be invited to consider the advisability of entering into preferential tariff arrangements between Australia and Canada. The terms which Canada is able to offer at present are set forth in the present Canadian Customs Tariff.

"The Minister observes, that, in accordance with announcement made some months ago, it is the intention of the Canadian Government to cause an inquiry to be made at an early date, into the operation of the Canadian tariff, with a view to making some revision at the next session of Parliament.

"The Minister further observes that while some tariff changes may be brought about, it is not the present intention of the Canadian Government to depart from the principle of British preferential trade already established.

"That the revised tariff may, therefore, be expected to include the preference to the products of the United Kingdom, and to those of such British colonies as may be prepared to make favorable trade arrangements with Canada.

"The committee, concurring in the report of the Minister of Finance, advise that His Excellency be moved to inquire whether the Government of the Commonwealth of Australia would be willing to enter into negotiations with the Government of Canada, with a view to establishing preferential trade relations between the two countries; and, if so, whether the Australian Government would be prepared to offer state tariff concessions by conferences between delegates representing the Australian and the Canadian Governments."

* * *

Our Federal Minister for Customs has decided to enforce the law respecting the invoice value of goods exported to the Commonwealth. According to the Minister's own statements, under the system previously in force, it was estimated that we were losing about £30,000 or £40,000 per year in connection with charges made between the port of manufacture and the port of shipment of Canadian and American goods. The decision to go back to the f.o.b. value was based on that. The Minister remarked that, so far as Canadian goods shipped via New York were concerned, he had decided to allow the f.o.b. value to be stated as if the port of shipment were the Canadian border, but, as a result of certain information which has recently come to hand, he was now seriously considering whether this concession would not have to be also withdrawn.

* * *

Figures supplied recently by our Comptroller-General of Customs are interesting in the light of the above decision of our Federal Ministry to add inland transportation charges to Canadian invoices when tssessing and the madian invoices when assessing value for duty. There are fixed rates of duty on 47 per cent. of the imports from Canada, and ad valorem duties on 43 per cent., while 10 per cent. of the imports are admitted free. As transportation charges are added only to the goods on which there are ad valorem duties, this official points out that about 57 per cent. of the imports are not affected by the new f.o.b. regulation.

* * *

The Minister for Customs stated yesterday that he had received a communication from a Government official in Canada giving details of the practice of exporters there. The writer says the rule is for exporters to prepare two invoices—one for the customs and one for the purchaser, the object being to increase their export trade and to capture the markets of the world. He thinks something should be done to put a stop to this practice, and expressed his willingness to take the position of Australian representative in Canada. Our Minister does not intend to make any appointment.

* * *

No official protest has been received as yet by our Federal Ministry from your Government respecting this important decision of the Customs Department. A cable message recently published here stated that at Ottawa it is feared that the principal Canadian houses may export to Australia via New York instead of via Vancouver, and thus, by withdrawal of freight from the Canadian-Australian mail service, cause this Pacific line to be discontinued. Our central customs authorities admit that this is not at all improbable. Section 143 of our Customs Act provides that "goods exported to Australia from any country, but passing through another country, shall be valued for duty as if they were imported directly from such first mentioned country." Goods sent to Australia via New York would therefore, only have to bear freightage from Montreal to the border of the United States, while, if sent via Vancouver, they would be loaded up with twice the amount of freight, owing to the longer haul. Transportation charges are only added to ad valorem goods, but two-thirds of the imports from Canada come under this head. The probable fate of our Vancouver mail service will be decided directly. Parliament will be asked to ratify the contract which will expire in June next, and many members will endeavor to persuade Ministers to withdraw the Federal subsidy of £26,626 per annum when this agreement expires.

* * *

Regarding the matter of our mutual mail service, negotiations for a new service from Australia to Vancouver are still proceeding between our postmaster-general and the Union Steamship Co. It was stated recently that our Federal Ministry wished to cease paying a subsidy for this service, and to revert to the poundage system, but the postmaster-general says that there is no foundation for this rumor. Canada, Queensland and New Zealand are all interested in the Vancouver line, and it is understood that your Government has raised objections to changes of route which have been proposed by the Queensland and New Zealand Governments.

HARDWARE AND METAL

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JOHN BAYNE MACLEAN

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ADVANTAGES OF ORGANIZATION.

READERS of Hardware and Metal have frequently seen references in these pages to the Retail Hardware Association in the West, and the doings of that body which has done so much to build up the trade in Canada's new provinces. Recently, too, we reported the organization of a Retail Hardware Association in the city of Montreal.

These are moves in the right direction, and Hardware and Metal has been delighted to see these signs of union in the trade. But why do not the dealers of Central Canada follow the lead?

The advantages of union are very obvious, but let us first put the matter in this way. Would you, reader, like to meet, once a year at least, a number of men with the same environment, the same ambitions, and the same difficulties as yourself? Why, you would be surprised at the amount you could learn from them and the number of things, too, that you could teach them. You would come home brimful of enthusiasm and new ideas. You would have cast off some antiquated business methods and acquired some up-to-date but tested schemes for carrying on and enlarging your trade.

Think it over, and let us know whether you would not be willing to support such a movement. We would be glad to receive the names of merchants who favor a provincial or national Retail Hardware Association. No better time for organizing the trade could be found than the comparatively slack period which follows the New Year's season. It's up to you.

A HAPPY NEW YEAR.

TO all the readers of Hardware and Metal we extend our best wishes for a Prosperous and Happy New Year, and express the hope that it may see your expectations fulfilled and your ambitions realized in so far as that is possible within one year.

No people living to-day have greater cause for thankfulness, for the blessings of the past, than the citizens of the Dominion of Canada. No people can look forward into the year upon which we are now entering with greater hope and confidence. All this should go towards making thankful hearts, a contented people and promote a high sense of citizenship. With what the coming year promises the people of Canada generally, there is every indication of a further tide of prosperity and we hope that every reader of this paper may share it in no small measure.

THE VALUE OF PUBLICITY.

REPRESENTATIVES of Hardware and Metal occasionally run across a manufacturer, merchant or traveler who declines to allow his name to be used in connection with an article containing valuable information supplied by him, one who sends an interesting communication and marks it "not for publication," or one who declines to supply a photograph when requested to do so for the purpose of illustrating a brief sketch of the business career of the one solicited. The modesty of those who act as outlined above is appreciated but we believe that it is carried to an unnecessary extreme.

Representatives of business concerns should in many instances sink their personal likings in order to gain advantages and better serve the interests of the house whose success they are interested in. Too often men work along their own lines and form their own associations, when by considering the interests of their firm they would accept opportunities offered of making their firm name better known and more popular. Men should cultivate outside acquaintances and know everyone interested in any business connected in any sense with the one they are engaged in.

It can be said with little reservation that a business house and a commercial man cannot be too well known, or cannot, in other words, have too much publicity. True it is that some men appear to overdo this matter and manage to have their names in print nearly every time they light a cigar. But because such men are over-enthusiastic regarding the value of printers' ink is no reason why others should let good opportunities go past them to acquire publicity in connection with matters which are not trivial.

The series of sketches we are publishing under the head of "Successful Jobbers and Salesmen" has proved very popular, having made it possible for the retail trade to become better acquainted with the men from whom they are buying goods throughout the year. Several salesmen have through modesty hesitated to supply photographs to illustrate personal sketches, but from the number of favorable comments received from subscribers it is certain that this modesty is misplaced. They would be strengthening themselves with their employers and with the trade by allowing the suggested sketches to be published. In one case several large customers were secured by one salesman as a direct result of his inclusion in the series now running weekly on our third editorial page.

In these articles an effort is made to avoid making any flattering or undeserved commendations—all that class of talk commonly known as "hot air" being excluded. What we desire to give is a mere sketch of the experience of the subject of the article together with some personal references to the salesman without saying anything which would be likely to lead customers to believe the salesman is too prosperous and can get along with less business.

Publicity is a good thing for business men and they should cultivate every opportunity to bring their name before their customers in every legitimate manner.

THE 1905 STOVE TRADE.

OPEN weather during the past two or three months has made the present season an unsatisfactory one for many manufacturers and stove dealers. The amount of stock in the hands of retail merchants and being carried over by some manufacturers is larger than any season during the past five years. Of course the buying season is not yet over and a fair movement of goods can be looked for when really cold weather arrives, be it ever so late, but the large stocks being carried now indicate that much of this season's manufacture will remain to be sold next season. This may have its effect on prices, also, as unless manufacturers curtail their output next year's stocks may be too large to allow of an advance in prices, even though iron, steel, copper and other metals maintain their present high prices. A factor which has

much to do with this season's overstock is the enormous quantity of American stoves imported into the Canadian Northwest, a market Canadian manufacturers are especially catering to and trying to hold by the making of stoves designed exclusively for that trade.

Canadian stove founders realize that their competitors in St. Louis, Chicago and other manufacturing centres can produce from 20 to 25 per cent. cheaper than founders in Eastern Canada owing to their ability to purchase raw material to better advantage, but they cannot understand how the Americans can afford to pay the 25 per cent. duty and undersell the home manufacturers in Manitoba and the northwest without coming under the workings of the dumping clause. Freight is slightly less from the cities named to Winnipeg and Calgary than from Toronto, but it is practically certain that the difference in price in favor of the American goods is because of unfair competition.

If Canada is to be built up as a manufacturing country and the iron industry is to be an important one it is evident that higher protection is necessary to keep the northwest market for the home manufacturer.

TACK "COMBINE" INVESTIGATION.

THE second instalment of Crown Attorney Curry's serial of revelations concerning the combine industry in Canada was begun on Thursday in the Toronto Police Court, the evidence submitted being mainly a review of the history, scope and aims of the Canada Tack Manufacturers' Association as revealed by the minute books and correspondence found in the offices of Messrs. Jenkins & Hardy. The exhibits filed showed that the tack manufacturers had proceeded along the usual lines—a detailed agreement as to uniform selling prices, discounts, etc. The case will be continued on Tuesday afternoon next.

The names of W. W. Near, M. A. Irwin, and R. T. Sinclair were withdrawn because these gentlemen were only employes of the Pillow, Hersey Co. Others withdrawn are J. Moat, who now lives in British Columbia; James H. Peck, who is dead; A. F. McPherson, who was not served; R. Hersey, a resident of Chicago; E. Perkins, whose home is in Massachusetts, and G. A. McAlgy, who is dead. The names remaining are James Hardy, Thos. Jenkins, F. H. Whitton, H. M. Blacklock, A. H. Huff, W. T. Cumming, J. R. Kinghorn, T. E. Peck, F. W. Knowlton, E. J. Fry, G. Boyd, W. Buckhoff, Jas. Pender, W. L. Goodall, and Wm. McMaster. W. N. Tilley appeared for the defendants and pleaded not guilty.

Mr. Curry laid down the groundwork of his case by placing before the court the minutes of the Canadian Tack Manufacturers' Association. The story of the organization as revealed by the minutes is substantially as follows:

The association was organized in Montreal in 1892, with the following membership: The Pillow-Hersey Manufacturing Company, the Montreal Rolling Mills Company, the Peck Benny Company, and the Ontario Tack Company, of Hamilton. Wm. McMaster was elected president, T. H. Whitton vice-president, and R. and T. Jenkins secretary-treasurers. The object of the association was declared to be the regulation of prices and terms of sale on tacks and similar goods comprised in the schedules drawn up. The agreement was to remain in force for one year, meetings to be held alternately in Montreal and Toronto. All members were to abide by any resolutions adopted, and "were not to sell the goods comprised in this agreement at prices below or on better conditions than those fixed in the schedules annexed or in future schedules, except always that members of the said association shall be entitled to sell to each other at any price they may see fit." Members were not to consign goods to anyone but bona fide agents, and were not to have recourse to any subterfuge in evading the terms of the agreement. Monthly statements were to be furnished by each firm, and Mr. Jenkins was to be allowed access to each company's books at any time. A fine of $300 was to be imposed for any refusal to allow examination of books or the checking of goods, etc. At first a system of higher and lower discounts had been allowed to jobbers signing the stipulated agreement as to selling prices but this had been superseded by loyalty discounts, in which each company observing the agreement participated.

Later on, "under pressure," other firms joined the association, these being James Pender & Co., Portland Rolling Mills, and W. D. Woodhall Company.

Mr. Curry read a number of extracts from the letter fyles found in Jenkins & Hardy's offices. In one case complaint was made that the Hobbs Hardware Company, of London, were violating the agreement by selling below the schedule prices. "We need not remind you," ran the letter, "that it is absolutely necessary that prices be maintained." Reference was also made to prices current "before the combine went into effect." Another letter read: "We need not remind you of the fact that a certain jobbing house not far from our office has not yet entered the combination. We presume before long their needs will compel them to do so." One Montreal jobber in explaining an inadvertent cutting of prices, said: "There are so many associations that we lose our heads trying to follow out all the agreements laid down."

TRADE AND COMMERCE—WEEKLY REPORT.

PROBABLY there is no instance on record of so rapid and substantial a growth in the industrial situation of any country as that of Canada. That it has not been attained without hard and persistent work goes without saying, especially when it is remembered that comparatively few years ago Canada's possibilities were unknown, and little credence was placed in any suggested commercial possibilities. All has changed, however, and foreign countries are vying with each other for Canadian trade.

A review of the records of trade inquiries received at the Commercial Agencies' Branch of the Department of Trade and Commerce, Ottawa, is most instructive reading in this connection, and reveals the development of a very satisfactory system. Within the past few years this department has done good work. Eight years ago a few inquiries were annually received from foreign houses, but in the absence of any particular system proved uninteresting and unremunerative. In the early part of 1904, however, the system which had in the interval been formulated was brought to perfection by the decision to issue a Weekly Report and Mr. F. C. T. O'Hara took the matter in hand with such a degree of zeal that by the end of that year the number of inquiries had jumped from a modest 19 in the year 1898 to some 566 in 1904, whilst for the 11 months ending November 30, 1905, a total of 759 inquiries had been received with another month yet to come to complete the year. This, however, satisfactory as it is, is only one side of the question at issue; the other side and certainly the most important is as to the number of answers which the publicity of those inquiries called forth, as it is upon this feature that the success really hangs.

A reference to the records reveals the fact that whilst in the year 1898 there were no addresses whatever furnished to the inquirers, and later in 1903 only the insignificant number of 157, during the first year of the publication of the Weekly Report the Department was enabled to place the addresses of nearly 1,200 firms in the hands of inquirers, and better still, during the 11 months ending November 30, 1905, upwards of 2,500 addresses have been already supplied to these inquirers. The Department is to be warmly congratulated upon so favorable a result, which goes to show how much can be accomplished by

the introduction of systematic methods and publicity.

The Weekly Report is always full of instructive and interesting information, and the reader feels he is getting the latest and thoroughly reliable news. Any of our readers who are not getting it would do well to apply for a copy, and be kept by it in touch with the world news of the British Empire.

SEASONABLE SUGGESTIONS

A wonderful pocket knife having 75 blades with a local scene engraved on each is in the possession of Joseph Rodgers & Co., the well known cutlery manufacturers, of Sheffield. It must be a somewhat unapproachable weapon, as the proprietors, it is said, offer £1,000 to any person who can shut all the blades without cutting his fingers.

* * *

We haven't heard of a Canadian hardwareman yet adopting the plan used by a Western States merchant to bring customers to his store, but it's a good one, and as sleighing will soon make the country roads in splendid shape for traveling merchants in various sections should try the plan. The westerner advertised that he would give $10 to the person who, on a certain day, brought into the place, and deposited in front of the firm's store, the largest number of people on one vehicle. All sorts of conveyances appeared, and it seemed certain that the farmer who brought in eighty-six persons on a wagon fifty feet long would gain the prize. But at the last moment there appeared a singular vehicle, eighty-five feet long and twenty feet wide. It moved on eight wheels, and was drawn by eight horses. From it descended 110 people.

* * *

A general merchant in Illinois has hit upon a scheme for attracting crowds to his establishment during the dull season. He buys a large assortment of glassware, ranging in price from 75c to $7 a dozen. This assortment is placed in the show window of his store. In the front of the window, for about a week in advance of the date, a sign is placed announcing that all customers buying $1 or more of merchandise during a stipulated period can have a choice of any article in the window for 5 cents. A notice to the same effect is inserted in the daily newspapers. In some cases, glassware that is ordinarily sold as high as $1 apiece is offered at 5 cents. The fact that much of the glassware is sold at pretty near the ordinary rate is overlooked by the purchasers, who think only of the greater values. The dealer has tried the scheme on numerous occasions and invariably finds it to work handsomely.

SUCCESSFUL JOBBERS AND SALESMEN.

No. 12.

ABOUT a year ago Henderson & Potts Co., Limited, of Montreal, decided that the growth of their business in Western Canada demanded the establishment of a branch in Winnipeg. For the management of this important extension of the firm's business, Mr. J. A. Irwin was chosen, and he insisted that if he were to go to Winnipeg he must have as his first lieutenant on the road Mr. H. V. Lawlor, the subject of this sketch. Mr. Lawlor had no objections; he had heard of the attractions and business possibilities of Western Canada, and as it was one of the few parts of the world in which he had not traveled pretty extensively, he was willing to act in the remotest parts of the newer Canada the part of the commercial missionary preaching the gospel of "English" paints.



H. V. Lawlor,
Representing Henderson & Potts in Winnipeg.

Mr. Lawlor has had an interesting history and when he is in reminiscent mood he can spin some capital yarns, but for the purposes of this sketch his modesty baffled the inquiries of the disinterested seeker after truth.

As he was born in St. John, N.B., it was only natural that the sounding sea should have for him irresistible charms. Moreover, like most Maritime Province people, he had a natural fondness for travel; and so, when he thought he had absorbed all that the schoolmaster could teach him, he set out to see the world. In Hong Kong he bartered with Chinamen for tea, in Japan he mastered the mysterious arts of jiu-jitsu, and in the Fiji Islands he observed the civilizing effects of English manners on the guileless natives. But in the end he decided there was no place like the North American continent and that for him the most appropriate "white man's burden" was the grip of the traveling salesman. For an indefinite period of time he traveled from New Brunswick to Florida in the interests of a cigar firm and later he joined the staff of Henderson & Potts Co., Limited, with which firm he has been connected since its incorporation. Having convinced himself at last that he was tired of the roving life, Mr. Lawlor settled down for a couple of years as city traveler in the shadow of Mount Royal and later he covered Western Ontario with Toronto as his headquarters.

Since coming west he has thrown himself into the work with great enthusiasm and his success has been notable. Mr. Lawlor was the first commercial man to reach Edmonton over the C.N.R., a good part of the distance being traveled in a construction car. Hotel accommodation in the west is not always all that it should be, but although in one town he was forced to spend a night on a pantry shelf in lieu of a bed and in another he had to walk the prairie from sunset until dawn, he has never lost his enthusiasm for the work. Good luck, Mr. Lawlor.

PRIZES FOR XMAS DISPLAYS.

HARDWARE AND METAL, for the encouragement of good window displays, has decided to open a competition for its subscribers. Prizes will be awarded for photos or drawings of window displays of Christmas goods and accompanying descriptions of the same. The prizes will consist of:

First Prize **5.00**
Second Prize **3.00**

and $2.00 for every picture and description which is considered worthy of publication.

The competition, which closes on January 15, 1906, will admit of photographs, pen and ink or wash drawings, with good ideas counting more than the pictures, although, of course, all pictures, in order to receive a prize, must be of sufficient distinctness and good workmanship to admit of their publication.

Mark all manuscripts and photographs intended for this department with the words "Window Dressing Competition."

Care should be taken to avoid reflection in the photograph. The best photos are often taken at night.

HARDWARE TRADE GOSSIP

Quebec.

F. W. Miskelly, tinsmith, of Smith's Falls, Ont., was in Montreal this week.

Mr. Fortye, of the Peterborough Lock Manufacturing Co., was a recent visitor to Montreal.

Allan Munro, of the Canada Paint Co., spent a few days of this week in Toronto.

Geo. E. Delorme, tinsmith and plumber, of Sherbrooke, visited Montreal a few days ago.

The Martin-Senour Company, Limited, have entered into business at 142-4 Inspector street, Montreal.

W. C. Springer, representing the Belleville Hardware Co., called on the Montreal wholesale trade last week.

Darcy O'Brien, of Frothingham & Workman's traveling staff, ate his Christmas turkey at Port Hope, Ont.

P. J. Powers, of Powers & Co., boilermakers, Ottawa, was in Montreal recently in connection with his business.

The traveling staff of the Thos. Davidson Manufacturing Co., Montreal, are holding their annual re-union this week.

E. C. Dingman, of Frothingham & Workman, Limited, Montreal, spent Christmas at his home in Stratford, Ont.

J. Chalmers & Son, tinsmiths and plumbers, Granby, Quebec, have sold their premises and are going out of business.

Alex. Chalmers, of Jas. Chalmers & Sons, tinsmiths and roofers, Granby, was among the out-of-town merchants who came to Montreal to buy during the week.

The travelers and heads of departments of the Canadian Fairbanks Co., from Ontario and Eastern Canada, are in conference at the company's headquarters, Montreal, this week.

W. J. Thompson, who represents Caverhill, Learmont & Co., Montreal, traveling west from Toronto to Windsor, was a visitor at the firm's headquarters on Wednesday of this week.

A warehouse used by the Montreal Rolling Mills Company as a storage for wire was burned to the ground last week, the total loss being estimated by the company at $5,000, which was covered by insurance.

Beauty is written all over a calendar given out by Mr. H. G. Eadie, the well known manufacturers' agent, of 22 St. John street, Montreal. The picture portion represents a tall, handsomely gowned woman, showing delicate coloring and shading in the delineation of the costume. The background would suggest a mantle of snow, and the whole portrait is placed in plaque form upon an oval inset, making a very attractive illustration. The card itself is plain and bears the names of the different firms Mr. Eadie represents, while the calendar part is clear and effective.

Ontario.

A winding-up order has been issued against the Dominion Roller Screen Company, Toronto, on the petition of several creditors.

James G. Lorriman, Montreal, associate editor of Hardware and Metal, spent the Christmas holidays with his parents at Thorold.

Mr. James H. Wilson, of the John Ritchie Company, plumbers, Toronto, is laid up and fears of an attack of typhoid are entertained.

Mr. Ed. Dingman, advertising manager for Frothingham & Workman, Montreal, was a caller on Hardware and Metal in Toronto last Tuesday.

Mr. A. W. Waderlow, of the Waderlow Iron Works, Leamington, was a caller at the Toronto office of Hardware and Metal on Wednesday.

Mr. W. G. Ballantyne, of the Toronto office of the Sherwin-Williams Company, spent the Christmas holidays in Montreal, visiting the plant of the company while in Montreal.

Mr. S. A. Crawford, hardware merchant, has opened up a branch hardware store in St. Thomas. The new branch is evidence of the substantial business carried on by Mr. Crawford.

Mr. Albert T. Wing, senior member of the J. T. Gallivan Building Co., which is erecting the buildings of the Plymouth Cordage Company at Welland, died very suddenly last Saturday morning of heart failure.

Fire did very small damage to the wholesale hardware establishment of D. H. Howden & Company, London, last Sunday. Workmen were repairing the roof and the fire was caused by boys lighting the charcoal in the fire pots.

Mr. Geo. L. Pearson, formerly representative of the Sawyer-Massey Company, Hamilton, in Western Ontario, and an active member of the Western Ontario Commercial Travelers' Association, died at Windsor on Tuesday. He was 58 years of age.

Mr. W. C. Rankine, representing the Carborundum Co., Niagara Falls, N.Y., who has made his home in Toronto for several months, reports that the business done by his company in Canada has far exceeded their expectations, and their plant is being enlarged by the erection of two pilms in order to supply the demand for their goods.

Magistrate Jelfs, Hamilton, has dismissed the charges against the sixteen Burrow, Stewart & Milne union stove-mounters, accused of conspiring to prevent Herbert Bowman, a tinsmith, from following his regular occupation. It was held that the evidence did not disclose any breach of the statutes, and that a man could refuse to work with another because the latter was not a union man, without breaking the law.

A $2,000,000 HARDWARE PLANT.

The latest American firm to announce their intention of establishing a Canadian branch for the manufacture of their goods is Sargent & Co., of New Haven, Conn. Representatives of the company are to visit Canada in January, visiting Hamilton, Ottawa and other cities in looking for a site for their proposed factory. The company say that they will erect a $2,000,000 plant in Canada and the industry therefore is a very large and desirable one.

LEWIS BROS.' DINNER.

Lewis Bros., Limited, gave the second annual dinner to their travelers at the Engineers' Club, Montreal, Friday night of last week. Nearly all the traveling representatives of the firm were present, and all responded eloquently to the request for speeches. There were twenty-six seated at the table, which was presided over by F. O. Lewis, the president of the company.

THE CHRISTMAS TRADE.

Reports from some parts of the country are that the holiday business has failed to come up to expectations owing to the mild and open weather. This has not been a general condition, however, but even though it were the almost universal prosperity should be enough to encourage the trade to look forward to another "fat" year's trade in 1906. Lack of trade during the holiday season only means that the buying public will have more money to purchase necessities during the balance of the Winter season.

DEATH OF CUSTOMS APPRAISER.

Hardware circles in Montreal, and, indeed, throughout the country, will be pained to learn of the death at the Royal Victoria Hospital, Wednesday afternoon, of Mr. James H. Douglas, who for twenty years has held the position of hardware appraiser of customs at Montreal.

Mr. Douglas was born in Quebec, his father being Mr. John Douglas, merchant, of that city. Coming to Montreal in 1866, he engaged as traveler with Wm. Darling & Co., then a prominent wholesale hardware house. He later went to Alex. Ferguson & Co., paint and oil merchants, and finally went into the paint and oil business for himself. Twenty years ago he retired from business and was appointed to the service of the Canadian Government as hardware appraiser of customs at Montreal. In this capacity he became well known to all hardware men of the east, and as he was also a member of the Dominion Board of Appraisers, his acquaintance extended well over the entire country.

A little over a year ago Mr. Douglas underwent a severe surgical operation, with apparent success. A recurrence of the same trouble, however, made it necessary for him to again submit to a similar operation, which was performed last Wednesday. After lingering for a time Mr. Douglas succumbed exactly one week after the operation.

Mr. Douglas left a wife and one daughter. His brother, Mr. R. J. H. Douglas, is also well known to the hardware trade, through his connection with Caverhill, Learmont & Co., Montreal.

Markets and Market Notes

(For detailed prices see Current Market Quotations, page 62.)

THE WEEK'S MARKETS IN BRIEF.

TORONTO.

Brass Goods—American prices have advanced 10 per cent., and the rise is likely to be followed here.

Red Lead—An advance of ¼c. is reported.

Horse Nails—A revised list has been issued by the Canada Horse Nail Company. Discounts remain the same.

Pig Lead has advanced 25c. and is now quoted at $4.85.

Zinc Spelter—Foreign spelter has advanced ¼c.

MONTREAL.

Jenkins' Valves are now quoted at 42½ per cent. off list.

Ingot Copper is selling at from 20½c. to 21c.

Pig Lead has jumped up to $4.75 and $4.80.

Red Lead has advanced about 25c.

Lead Pipe—Discount is now 20 per cent. off list.

Horse Nails. A new price list has been issued by the Canada Horse Nail Company.

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, Dec. 29, 1905.

STOCK-TAKING is in full swing at all the wholesale warehouses here, and the natural lull in business following Christmas is being utilized in this way to keep the staffs busy.

All the travelers are now either at headquarters, or at their own homes, so that orders coming in are entirely by mail. Next week will see the opening of the 1906 campaign, an event which will be marked by great extensions of territory, on the part of most of the local jobbers.

The quietness of business during the week has been instrumental in preventing fluctuations, the only price change noted being in Jenkins' valves. Discounts are now quoted as 45 per cent. on globe, angle and check valves, thus showing an advance.

Axes — Our prices remain as follows: Chopping axes, unhandled, $6.00 to $9.50 per dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—We quote: No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Hay Wire—The tendency is still upward. Current quotations are: No. 13, $2.45; No. 14, $2.55; No. 15, $2.70; net cash, f.o.b., Montreal.

Sewing Machines—Trade is, of course, quiet just now. We give prices: Hand-sewing machines, $11 each, net: complete machines, with stand, $18.00 and up, according to quality.

Lanterns—There is, as yet, no disposition to change prices manifest. Our prices are: Cold blast, $4.50; No. 0 Safety, $5.00.

Rivets and Burrs—We make no alterations in the prices given out two weeks ago. We are still quoting as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 40 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Ruling prices are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—We are giving the following quotations: 3-8 and smaller, 60 to 10; 7-16 and larger 55 and 5.

Horse Nails—Last week's prices are unchanged. We quote as follows: C brand, 40, 10 and 7 1-2 per cent.: M.R.M. Co., 55 per cent.; P.B. brand, 55 per cent

Wire Nails—The price is again given as $2.15 per keg f.o.b. Montreal.

Cut Nails—Trade is dull at unchanged prices. We quote: $2.20 per keg f.o.b. Montreal.

Horseshoes—We give the following prices: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M Co. latest improved pattern iron shoes, light and medium pattern No. 2 and larger, $3.65; No. 1 and smaller, $3.90; snow pattern. No. 2 and larger, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $4, No. 1 and smaller, $4.25; featherweight, all sizes, No. 0 to 4, $5.60. Toeweight, all sizes, No. 1 to 4, $6.85 Packing, up to three sizes in a keg, 10c. per 100 pounds. More than three sizes, 25c.

Sporting Goods—We are quoting as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.. American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred pounds; chilled, $7.00 per hundred pounds; buck and steel, $7.50 per hundred pounds; ball, $8.00 per hundred pounds. We quote discounts 10 per cent. on shot, f.o.b., Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—The trade is very quiet. Prices remain as before, and may be consulted in our current market quotations.

Cement and Firebrick—Sales are few and of small volume. We are quoting: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch, $17.00 to $21.00; American, $30 to $35; White Bros.' Eng. cement, $1.80 in bags, $2.05 in barrels in round lots.

Coil Chain—Our prices are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3.00; 1 inch, $2.95.

Shot— The price, as amended last week, has held firm and we still quote net list.

Skates—There is, naturally, a reaction in this branch of the business, the demand having now become quiet. Our prices are from 25c. to $2.50, according to quality.

Sleigh Bells—We quote: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape, $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—The various grades are still selling well. We quote: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes— There is now but one grade which can be supplied in any quantities, owing to the great demand this year. Prices vary from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East.
Toronto, Dec. 29, 1905.

HOLIDAYS have stopped the lively business and the staffs of the jobbing houses are busy stock-taking. Considerable business is still being done, however. Reports from some quarters are that Christmas trade was affected adversely by the long stretch of mild and open weather. This is largely a local condition, however, and affecting only certain lines of goods, such as skates, sleigh bells, etc. Jobbers state that the heavy buying before the holidays indicates that trade on the whole was eminently satisfactory.

The Canada Horse Nail Co. have issued a revised price list which goes into effect on Jan. 1.

Axes and Handles—A normal trade is being done with prices the same.

Cutlery—The volume of the season's business has been very large and prospects for the coming season are good.

Sporting Goods—Shotguns and ammunition are having a fair sale.

Washing Machines—The outlook for next season's business is satisfactory.

Chain — We are still quoting prices as follows: 1 inch, $6.50; 5-6 inch, $4.45; 3-4 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—We are still quoting as follows: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Quotations continue as before quoted: $2.42 1-2 f.o.b. Cleveland. In barb and coil spring wire a seasonable trade is being transacted.

Wire Nails—A good trade is reported at the advanced prices. We are quoting $2.25 with the usual 10c. rebate.

Cut Nails — A satisfactory volume of business is being done. We still quote: $2.40 per keg f.o.b. Toronto.

Horse Nails—New lists have been issued on "C" brand horse nails. Discounts remain the same, however.

Horseshoes— Trade continues brisk; prices firm. We quote: P.B. base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $4.15; No. 1 and smaller, $4.40; featherweight, all sizes, 0 to 4, $5.75; toe weight, all sizes, 1 to 4, $7.00. If shipped from factory 15c. less.

Horse Blankets—Halters, girths, horse blankets and similar goods are moving satisfactorily.

Skates and Sleigh Bells— Continued open weather has caused a falling off in trade.

Skates and Sleigh Bells—The coming of snow and ice has created many sorting orders and shipments are large.

Screws—Advancing prices in metals make the market very firm, but prices are unchanged.

Rivets and Burrs—Copper rivets and burrs have advanced, but iron goods are unchanged.

Bolts and Nuts—Stocks are light and prospects for 1906 are for a heavy trade.

Cordage—Sorting orders are plentiful. We still quote: Manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 9c.

Cement—Prices are unchanged and trade is seasonable. Our prices are: For carload orders f.o.b. Toronto, Canadian Portland, $1.90 to $2.00; American Portland, $1.90 to $2.00. For small orders ex warehouse, Canadian Portland, $2.10, American Portland, $2.10.

Firebrick—Prices continue as before: English and Scotch firebrick, 27c. to 30c.; American low-grade, 22c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A fair trade is being done, the open weather keeping the demand lively. Prices are the same.

Hides—The general tendency of the market is one of weakness. Country hides have fallen 1-2c. to 1c. There are still indications of increased arrivals, whilst demand is only maintained at steadying point, so that the strengthening feature is absent. Chicago is continuing firm at previous low basis, but shows little indication of advance. We quote:

Hides, inspected, steers, No. 1	0	11½
" " " No. 2	0	10½
" " cows, No. 1	0	11
" " " No. 2	0	10
Country hides, flat, per lb.	0 09	0 09
Calf skins, No. 1, selected	0	13
" " No. 2	0	11
Sheep skins	1 20	1 25
Deer skins, green	0	13
" dry	0	22
Moose hides, green	0	08
Horse hides, No. 1	3 00	3 25
Rendered tallow, per lb.	0 04	0 04½
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL.
232 McGill Street,
Montreal, Dec. 29, 1905.

METAL merchants here are busier this week than ever before during the holiday season. Christmas Day made some slight difference, naturally, but the demand has kept up in an astonishing manner.

During the past week, the upward trend of the market was resumed, with several advances in evidence. The most remarkable change is in pig lead, which was last week reported to have declined in value. Not only has it recovered its strength, but a jump to the highest figures yet, is recorded this week. This refers to Canadian as well as to imported pig.

Ingot copper has also gained strength during the week, and has advanced about a half cent. The direct result of continued advances in this metal will be seen after stock-taking, when revised lists on all brass goods are almost certain to be issued. Other metals remain unchanged in price, and are all in first class demand.

Canada Plates—Our prices remain as follows: 52's, $2.60; 60's, $2.65; 75's, $2.75; full polished, $3.75; galvanized, 52's, $4.10; 60's, $4.35.

Copper—This metal is now a little stronger than at our last report and the price for small quantities has been advanced 1-2 cent. We quote: Ingot copper, 20 1-2c.; sheet copper, base sizes, 25c.

Ingot Tin—A good demand is keeping prices steady. We quote: 39 1-2c. to 40c.

Pig Lead—A reaction from last week's decline has occurred, and we now give the highest figures yet touched by this metal. We quote: $4.75 to $4.80 per hundred pounds.

Boiler Tubes—The situation in tubes remains about the same. The mills refuse deliveries under eight or ten weeks. We quote prices as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Conditions are unchanged. We are quoting:

"Dom.," No. 1, $19.50 to $20.00 delivered Montreal
Usual difference in price for lower grades.

Ferrona No. 1	$19 50	delivered	Montreal.
" No. 2	19 00	"	"
" No. 3	18 50	"	"
" No. 4	18.00	"	"
Londonderry	20.50	"	"
Carron No. 1	23.00	"	"
" (special)	22.00	"	"
Summerlee No. 1	23.50	"	"
Clarence No. 1	20.00	"	"
" No. 3	19.50	"	"

Tool Steel— We quote: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Colver's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed Steel, 60c.

Merchant Steel—We are still quoting: Sleigh shoe, $2.17 1-2; tire, $2.27 1-2; spring, $2.75; toecalk, $2.82 1-2; machinery iron finish, $2.27 1-2; ruled machinery steel, $2.75; mild, $2.17 1-2 and upwards; square harrow tooth, $2.27 1-2. Net cash 30 days. Rivet steel quoted on application.

Cold Rolled Shafting—We quote: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The following quotations are held steadily. Queen's Head, 28 gauge, $4.25; 26 gauge, $4.00; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.50; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4.00; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.25; Comet, 28 gauge, $3.85; 26 gauge, $3.60; 22 and 24 gauge, $3.35; 16 to 20 gauge, $3.10; Bell brand, 28 gauge, $4.20 to $4.25; Gorbal's "Best Best," 28 gauge, $4.10. "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots 25c. extra.

Black Sheets—We are still quoting. 28 gauge, $2.40; 26 gauge, $2.35; 22-24 gauge, $2.30; 19-20 gauge, $2.30; 8-10 gauge, $2.45.

Antimony—Prices in the Old Country continue high, but, as yet, dealers have not advanced their figures here. We quote 14c. to 14 1-2c. for Cookson's.

Tin Plates—We quote the following prices: Cokes, base size, 1C, 14 x 20, $4.00; charcoal, base size, 1C, 14 x 20, $4.25.

Terne Plates—Our prices remain at $6.85.

Ingot Zinc—Conditions remain just as before, and we are quoting 7c. to 7 1-4c.

Sheet Zinc— We still quote 8c. in casks; 8 1-4c. in less than casks.

Sheet Lead—We are quoting: 2 1-2 lbs., 5 1-2c. by the roll; 3 lbs. and heavy-

ier, 5 1-4c. by the roll; large quantities, 25c. per hundred pounds.

Bar Iron—The local situation is the same as last week. We are quoting $1.97 1-2 f.o.b. Montreal.

Old Material—The demand for scrap copper and brass keeps quite brisk, but there is not a great deal of activity in other metals. Rubber is still an uncertain quantity. We quote: Copper wire, 14 3-4c.; light copper, 13 3-4c.; heavy red brass, 12 1-2c.; yellow brass, 9 3-4c.; light brass, 7c.; lead, 3c.; zinc, 4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $11; mixed rags, 75c. to 90c. per 100 lbs.; old rubbers, 7 1-4c. to 7 1-2c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East.
Toronto, Dec. 29, 1905.

PIG lead shows another advance this week and is now close up to the record figure of 5c. per pound. This week's advance brings it up to $4.85 at which it is held firmly. Zinc spelter (foreign) has also jumped up 1-4c. and is now quoted at 7 1-4c. All ingot metals are very firm and trade is active in these lines as well as in galvanized sheets and tin-plates, the open weather being a factor in keeping up the demand for these materials.

The holidays have affected trade considerably, but this week's business is most satisfactory in comparison to similar weeks in previous years. Stocks of goods in the hands of retailers are very light and buying is done in small quantities at present because of the desire to end the year with a clean sheet. After the holidays very active trade is anticipated.

Pig Iron The holidays have caused a falling off in trade but stocks are light and brospects for the year bright. We quote:

Middlesboro, f.o.b., Toronto	$22 50
Hamilton, No. 1, at furnace	20 00
" No. 2, "	19 50
Midland, No. 1, "	20 00
" No. 2, "	19 50
Radnor, at furnace	31 50
Londonderry, f.o.b Toronto	21 50

Bar Iron—Stocks are light and trade satisfactory. The outlook for 1906 is bright. We still quote: $2.00 base, f.o.b. Toronto, with discount of 2 per cent. net cash.

Ingot Tin—The market is very active with prices the same. We quote 40c.

Tin Plates—Demand continues strong the open weather encouraging trade. Prices are very firm.

Galvanized Sheets—Conditions are unchanged, the demand being heavy at the same quotations.

Brass—Business is satisfactory, discounts continuing at 10 per cent.

Lead—Another advance of 1-4c. has been made for pig lead. We quote as follows: Pig lead, $4.85 per 100 lbs., and bar lead, $5.00 per 100 lbs.

Zinc Spelter—Prices have advanced 1-4c. and 7 1-4c. is now being quoted for foreign. We quote: 7 1-4c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Sheet copper holds steady and buying is heavy with stocks not very large. We are quoting as follows: Ingot copper, $20 per 100 lbs., and sheet copper, $25 per 100 lbs.

Antimony—We still quote 15c. per pound.

Old Material—Goods are moving actively for this season, copper being in strong demand. Dealers' buying prices are as follows: Heavy copper and wire, 14c. per lb.; light copper, 13c. per lb.; heavy red brass, 12 1-2c. per lb.; heavy yellow brass, 10c. per lb.; light brass, 8 1-2c. per lb.; tea lead, $3.00 per 100 lbs.; heavy lead, $3.25 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $10.50, No. 2 wrought $3 to $5; machinery cast scrap, $15; stove plate, $10; malleable and steel, $5; old rubbers, 7c. to 7 1-4c. per lb.; country mixed rags, 75c. per 100 lbs.

Coal—Prices keep very firm and the railways are not moving as much as could be expected with the present open weather. We quote: Anthracite in cars at bridges, grate, $5.50 per gross ton; pea, $3.75 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.70; 3-4 inch, $1.60, run of mine, $1.40; nut, $1.25: N.P. and S., $1.00; slack, 75c.; box cars 10c. per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.80; 3-4 inch, $2.70; mine run, $2.60; slack, $2.35.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

LONDON METAL MARKETS.

From Metal Market Report, December 26, 1905.

Pig Iron— Cleveland warrants are quoted at 53s. 7 1-2d and Glasgow Standard warrants at 52s. 7d, making prices as compared with last week 10 1-2d higher for Cleveland warrants and 10d higher for Standard warrants.

Tin— Spot tin opened weak at £162 10s, futures at £161 10s, and after sales of 100 tons of spot and 250 tons of futures closed weak at £162 10s. for spot and £161 10s. for futures, making price as compared with last week £3 4s. 6d lower on futures.

Copper—Copper opened easy at £79, futures £78 10, and after sales of 25 tons of spot and 200 tons of futures closed easy at £79 for spot and £78 10s. for futures, making price as compared with last week 5s. lower on spot and 7s. 6d lower on futures.

Lead—The market closed at £17 10s., making price as compared with last week 10s higher.

Spelter—The market closed at £28 12s. 6d, making price as compared with last week unchanged.

RAILROAD CAR BUILDING.

THIS is the era of big things in railroads, and the statement applies as well to all companies having anything to do with the manufacture of railroad equipments. From a recent article in the New York Commercial regarding the Pressed Steel Car Co., much interesting information is gathered. This company now has $60,000,000 in orders on its books because of the great prosperity of railroads of the United States, and 1905 promises to be the banner year in car building. Orders will largely exceed those of 1902, which was the biggest year in that line. Up to the third week in October of this year orders for 225,000 cars have been booked. Estimating the orders for the remaining portion of the year on the same basis the total for 1905 will be about 275,000 cars. This compares with 136,000 booked in 1904, 108,000 in 1903, and 195,000 in 1902. The use of steel cars on the railroads of the United States and Canada, is described as continuously on the increase. The Pressed Steel Car Co. has an order footing up $10,000,000 from the Grand Trunk Pacific Railway, which will be handled at the company's Montreal plant operated under the name of the Canada Car Co.; one of $14,500,000 from the Pennsylvania Railroad, and one of over $5,000,000 from the New York Central Railway. The Pressed Steel Car Co. is a consolidation of the Schoen Pressed Steel Co. and the Fox Pressed Steel Equipment Co. The Western Steel, Coal & Foundry Co. and the Canada Car Co. are subsidiary corporations of the Pressed Steel Car Co. The capital of the Canada Car Co. is $3,000,000, of which $1,000,000 is preferred and $2,000,000 common. These works will have a capacity of 20 freight cars every day, and five passenger cars every month, and in addition to this can turn out car wheels and other car belongings of considerable importance.

Nearly 2,000 leases granted for mining properties throughout Ontario are to be cancelled by the Provincial Government, through failure of the holders to carry out the conditions of their leases.

* * *

Evidences of a revival of silver mining in British Columbia are very encouraging. Many properties which have been shut down for several years are to be developed on a large scale, owing to the high prices lead is now commanding in the metal markets.

* * *

The Maritime Coal & Railway Co. have had the matter of establishing a power plant at Maccan under consideration for some time. The plan has been discussed at some length with various manufacturers of Amherst and has received their approval to such an extent that the company proposes bringing an electrical engineer to Maccan to go into the matter in detail. The company has already secured the right of running wires to Amherst, and the manufacturers, especially the smaller ones, will receive cheap power when the plant is in shape.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, December 28, 1905.

The open Winter thus far has been a blessing to the iron industry, since it has permitted the railroads to handle the enormous tonnage of raw materials and of finished product without a hitch, and has allowed outdoor work to be continued almost uninterruptedly. It has had its effect, too, in the markets for old material, which has come out in good volume.

In all the principal distributing markets for pig iron the volume of new business has been comparatively small. The pressure for deliveries of pig iron, however, is persistent, and there is ample evidence of the fact that the rate of melting is even exceeding the expectations of founders and steel makers. There is considerable manoeuvering going on on the part of buying interests, and the east iron pipe makers in particular are now feeling the market. The cast iron pipe trade promises to exceed in volume any previous record and it is possible that for the first time in the history of the industry the productive capacity may prove inadequate. The contract for 30,000 tons of high pressure pipe for this city has been virtually closed. The Warren Foundry has received the order for 8,000 tons of 48-inch pipe. To-day the Borough of Richmond will open bids for 8,000 tons additional.

The run of rail orders is excellent. The order for 52,000 tons for the Erie is now arranged. With a lot of 16,000 tons for the Florida East Coast Line, 5,000 tons for the Western Maryland and from 20,000 to 25,000 tons for trolley lines the aggregate tonnage comes pretty close to 100,000 tons. It is of interest to note that the Chicago mill has been forced to transfer 100,000 tons of its bookings for 1906 to the Carnegie plants, being unable to handle it.

A leading interest has purchased during the past two weeks upward of 25,000 tons of old steel rails for re-rolling into light rails, thus withdrawing from the market raw material upon which the smaller rolling mills depended. It has had the effect at the same time of stiffening up the price on light rerolled rails.

The eastern plate trade has been a keen disappointment lately. In conjunction with our Atlantic coast shipbuilders a special effort was made to secure the contract for building a tank steamer for the Standard Oil Company. It was found, however, that the prices of foreign shipbuilders were so much below those of the Americans that the work had to be placed abroad.

Little new work was placed during the past week with the structural mills. A somewhat significant fact is that all the bids for the 11,000-ton county building at Chicago have been rejected as being too high.

An interesting contract for steel castings is to be let within the next few days. The American Locomotive Company is now receiving bids for the steel castings for its locomotive work to be delivered during the coming year. The company will require about 30,000 tons, to be delivered at the rate of 2,500 tons a month.

The demand for export continues excellent, particularly in the wire products. Among the recent sales is one lot of 10,000 tons of girder rails for Rio Janeiro, 17,000 tons of sheet bars for the second half of 1906, bridges for Cuba and Japan, and the material for a theatre at Panama.

"Empire" shingles

New trade and added profits await dealers who handle "Empire" Metallic Shingles and go out among their townsmen who contemplate building, determined to have their orders.

Many people keep right on using old fashioned wood shingles from sheer force of habit, no one having taken the trouble to show them the advantages of "Metallic" Shingles over wood. Don't you think you can convince some of them of the fireproof, lightning proof, storm proof and rust resisting qualities of "Empire" Shingles, and put some profits into your pocket that now go to competitors? The facts are so self evident that it requires minimum selling effort to get many good orders for "Metallic" building material.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopædia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:
- "Eastlake" Metallic Shingles
- "Metallic" Ceilings and Wall Plates
- "Metallic" Cornices, Skylights and Ventilators
- "Metallic" Sheet Metal Fronts
- "Metallic" Siding, (Stone, Brick, etc.)
- "Impervia" Fireproof Windows
- "Metallic" Crestings and Finials
- "Hayes" Metallic Lathing
- "Metallic" Corrugated Iron
- "Metallic" Eavetrough and Conductor Pipe
- "Metallic" Pressed Zinc Ornaments
- "Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

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Nova Scotia Trade News

Halifax, N.S., Dec. 27, 1905.

Jobbers report collections very good, but business in all lines is very slack. During the week there was a good demand for skates, but otherwise trade is quiet.

* * *

Encouraging reports have reached the city from the gold mines at Isaac's Harbor. The mines there are being developed quite extensively and the returns are good, the average monthly output being valued at from $12,000 to $15,000.

* * *

The regular quarterly meeting of the Maritime Hardware Association was held at the Halifax Hotel in this city, during the week. The members of the executive present were: J. McAvity, St. John; T. C. Lee, of Thorne & Co., St. John; H. M. Coates, of S. Hayward Co., St. John; John Keefe, of J. Robertson, St. John; E. K. Spinney, of Yarmouth; W. G. Robertson, of Wm. Robertson & Son, Halifax; W. H. Sterns, of H. H. Fuller & Co., Halifax; W. B. Arthur and M. O. Crowell, of Halifax. The business transacted was of the usual routine description. The price list was considered and several changes proposed.

* * *

The powder tests being carried on at Glace Bay by the Dominion Coal Co's officials, committees from the various lodges and the Deputy Inspector of Mines, are not yet completed. All the collieries have been visited and tests have been made with Bulldog, Boblinnite and Pellet powder. Robrite and another powder, said to be flameless, are still to be tested. The test, however, is not likely to be made at all the mines; probably only at No. 2 colliery, where their efficacy will be tried this week. A decision on the powder question will probably be announced some time after the new year.

* * *

The price said to have been paid for J. P. Smith's coal mine at Maccan, by a syndicate of well-known capitalists, organized as the Eastern Coal Co., is $60,000. The property is very near Maccan Station, on the I.C.R., and separated from that line only by the main post road. Mr. Smith had taken out about 40,000 tons of coal, loading it on the cars of overhead trestle leading from the pit mouth. The new company will erect a permanent trestle work for the same purpose, and equip the colliery immediately for an output of 500 tons a day. The general manager is William Munns, Toronto, and the mine's manager Robert Archibald, C.E., of Amherst. The directorate is composed of J. K. Kerr, Wm. Dineen, Hon. Richard Harcourt, M.P.P., Toronto; J. B. Tudhope, M.P.P., Orillia; E. J. H. Eckhardt, Toronto. A. A. Laurie, of Toronto, is the secretary-treasurer. The company has also purchased an adjoining property on which coal has been found, which promises excellent result. They struck a seam of coal there last week eighty feet south of the place where the boring took place before. The seam was struck at a depth of one hundred and forty-two feet. This section of the Cumberland coal fields will be a hive of industry next Spring.

BEFORE you are many days older, you'll have a copy of our new Brush Book,—shows more kinds of better brushes than any supply house ever sent you yet—fact!

Right on the heels of the book you'll probably see our salesman,—he may mention brushes to you,—please be good to him.

If he and the book don't show you,—don't prove to you—that we can sell you more brush quality for every dollar than you ever bought before, don't be good to him, and do throw away the book.

We have bought our stocks at prices that must have hurt somebody badly,—but don't you care for that. We have closed out some big makers for spot cash,—others we've taken whole outputs from in carlots.

Never had such a brush stock—never were fixed to quote so low for such values. Assortment is big enough for any dealer,—no matter what kind of a trade he sells,—prices are where you won't think twice of competition. Big talk—but true talk.

And every brush we sell we guarantee,—that means we replace any brush that any customer of yours kicks about, if the kick is halfway reasonable.

Please read the book, when it comes,—and talk to the man, when he comes.

If you happen to want anything between now and then, our mail order department will take mighty good care of you,—it ships every order the day we get it, and the same old Stephens guarantee covers all it ships.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Dec. 29, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

Business conditions in the metal and hardware list continue remarkably good, better, in fact, than at this period a year ago. Values continue firm with but a few minor changes. As in all other lines of trade, the increased movement of money following the prosperous year throughout the west is making itself felt in this department. Collections are reported fairly good.

Game Traps—A few game traps are still selling. Prices are unchanged. We quote:

H. & N., discount	50 and 5 p.c.
Victor, "	66⅔ p.c.
Newhouse, "	35 p.c.
Bear	$7 each

Lanterns—The market is "open" and it is hard to quote with anything approaching to exactitude. The average prices are about as follows:

Cold blast lanterns	$5 25 per doz.
Coppered cold blast lanterns	7 25 "
Cold blast dash "	7 75 "
Lift Lanterns	4 25 "

Bluestone—Price for 1906 delivery is $6.50 per cwt.

Wire—Prices are steady. We quote:

Barbed wire, 100 lb					$3 00
Plain galvanized,	6 to 8	$3 39	9	$2 50	2 90
" "	10	3 50	12		3 10
" "	13	3 20	14		3 90
" "	15	4 45	16		4 60
Plain twist					3 00
Staples					3 50
Oiled annealed wire,	10	$2 96	11		$3 02
" "	12	3 10	13		3 20
" "	14	3 30	15		3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices have been steady since the recent advance in steel shoes. Quotations are as follows:

Horseshoes, iron, No. 0 to No 1	$4 65
No. 2 and larger	4 40
Snow shoes, No. 0 to No. 1	4 90
No. 2 and larger	4 65
Steel, No. 0 to No. 1	5 00
No. 2 and larger	4 75

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—The price has been steady since the recent decline to $2.60 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Pressed Spikes—Prices are firmly held at following quotations:

Pressed spikes, ¼ x 5 and 6	$4 60
" " 5-6 x 5, 6 and 7	4 25
" " ⅜ x 6, 7 and 8	4 10
" " 7-16 x 7 and 9	4 00
" " ½ x 8, 9, 10 and 12	3 90
" " ⅝ x 10 and 12	3 75

Screws—No change in price. Demand continues brisk at following unchanged discounts:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged and continue as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	32
" No. 12	37

Coil Chain—Unchanged in price. We quote:

Coil chain—

3-16 inch	$9 25	¼ inch	$7 20
5-16 inch	5 20	⅜ inch	4 60
7-16 inch	4 45	½ inch	4 30
⅝ inch	4 10	¾ inch	4 00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discounts are now 60 and 5 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz			$3 15
No. 1	1 90	No. 2	1 60
Octagon extra	2 30	No. 1	1 60

Axes—Prices are quoted as follows:

Bench axes, discount off list	40 p.c.
Broad " "	25 p.c.
Royal Oak, per doz	$ 6.25
Maple Leaf, "	8.25
Model "	8.50
Black Prince "	7.25
Black Diamond "	9.25
Standard Flint Edge, per doz	8.75
Copper King, per doz	9.00
Columbian, "	10.75
Handled axes, North Star, per doz	7.75
" " Black Prince, per doz	9.25
" " Standard Flint Edge, per doz	10.50
" " Copper King, per doz	11.00

Butts—The discount on wrought iron butts is 70 per cent.

Churns—The discounts from list prices are 45 and 5 per cent.

Chisels—Quoted at 70 per cent. off list prices.

Auger Bits—Discount on common auger bits is 65 per cent.

Blocks—Discount on steel blocks is 35 per cent. off list prices; on wood, 55 per cent.

Fittings—Discounts are quoted as follows:

Wrought Couplings	60 p.c.
Nipples	65 and 10 p.c.
T'sand elbows	10 p.c.
Malleable bushings	50 p.c.
Malleable unions	60 p.c.

Grindstones—The price is now 1 3-4c. per lb.

Fork Handles—The discount is 40 per cent. from list prices.

Hinges—The discount in light "T" and strap hinges is 65 per cent. off list prices.

Hooks—Prices are quoted as follows:

Brush hooks, heavy, per doz	$8.75
Grass " per doz	1.70

Draw Knives—The discount is 70 per cent. from list prices.

Rules—Discounts are 50 and 10 per cent.

Washers—On small quantities the discount is 35 per cent.; on full boxes it is 40 per cent.

Wringers—Prices are as follows:

Royal Canadian, per doz	$30.00
R. B., per doz	34.75

Files—Discounts are quoted as follows:

" Arcade "	75 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—The big rush is of course over, but there is still a steady sale at unchanged prices. We quote:

Joliette, plain	40c.
" tarred	65c.
Cyclone, plain	55c.
" tarred	80c.
Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—The price is steady since the recent advance. We quote as follows.

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 75
Lathyarn	11 25

Solder—Quoted now at 21c. per lb. with concessions for large quantities.

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.
(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.
(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Vises—Prices are quoted as follows:

" Peter Wright," 30 to 34	14½c. per lb.
" " 35 to 39	14c. "
" " 40 and larger	13½c. "

Anvils—"Peter Wright" anvils are selling at 11c. per lb.

Power Horse Clippers—The "1902" power horse clipper is selling at $12, and the "Twentieth Century" at $6 The "1904" sheep shearing machines are sold at $13.60.

Ammunition, Etc.—Shot has been advanced 25 cents per cwt. Other prices and discounts are unchanged. We quote:

WINDOW GUARDS,
OFFICE RAILING,
IRON GATES,
WIRE FENCING,
COAL SCREENS,
SPRING BEDS
AND MATTRESSES

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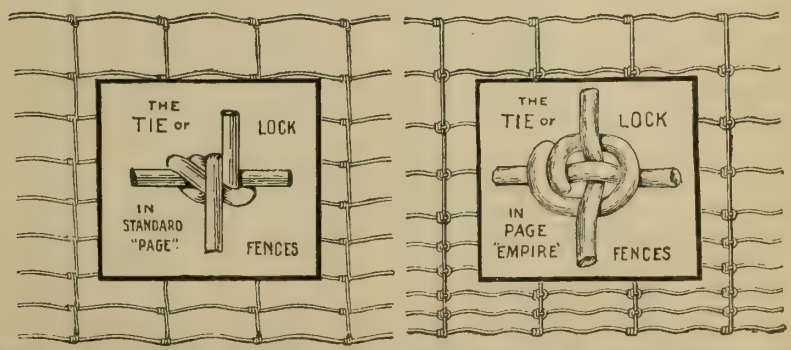
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The WHITE Brand

Two Styles—"Standard Page," and "Page Empire."

Double strength Wire; coiled for elasticity; Wire is not injured at joints; joints cannot slip; best galvanizing; all painted. 3,290,000 rods in use. Fences supplied in two weights—medium and extra heavy.

All Fences painted WHITE—Our Brand

THE PAGE WIRE FENCE CO., Limited, WALKERVILLE, Ont.
Branches—Montreal, Toronto, St. John. 402

"PAGE FENCES WEAR BEST"

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	20 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.

Loaded shells:

Dominion Eley's and Kynoch's soft, 12 gauge.	
black	16 50
chilled, 12 gauge	17 50
soft, 10 gauge	19 50
chilled, 10 gauge	20 50
Shot, Ordinary, per 100 lb	7 00
Chilled	7 50
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Iron and Steel—Prices are quoted as follows:

Bar iron (basis)	2 60
Swedish iron (basis)	4 75
Sleigh shoe steel	2 75
Spring steel	3 25
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—No change in price. We quote as before:

Black [illegible] 10 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Iron—The market is steady at the recent advance. We quote:

Apollo, 16 gauge	3 90
18 and 20 gauge	4 10
22 and 24 gauge	4 45
26 gauge	4 40
28 gauge	4 65
30 gauge or 10¾ oz	4 95
Queen's Head, 24 gauge	4 60
26 gauge	4 65
28 "	4 90

Tin Plates—XXI plates have been advanced 50 cents. We now quote as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 50

Terne Plates—Quoted at $9.00.

Canada Plates—We quote:

Canada plate, 18 x 21, 18 x 24	3 50
Canada plate, 20 x 28	3 75
Canada plate, full polished	4 25

Sheet Zinc—The price is now $8.50 for cask lots, and $9.00 for broken lots.

Pig Lead—There has been another advance of 25 cents and pig lead is now quoted at $5.00.

Iron Pipe—Prices are still quoted as follows:

Black iron pipe, ⅛ inch	
" ¼ "	2 5
Black iron pipe, ⅜ inch	2 85
" ½ "	3 15
" ¾ "	4 00
" 1 "	5 75
" 1¼ "	7 85
" 1½ "	9 40
" 2 "	12 90

Petroleum and Gasoline— Prices are quoted now as follows:

Silver Star, per gal	21c. ½
Sunlight "	22½c.
Eocene "	24½c.
Pennoline "	25½c.
Crystal Spray "	24½c.
Silver Light	22½c.
Gasoline, 70-72 (Engine)	25c.

(In barrels f.o.b. Winnipeg.)

Paints, Oils and Turpentine—There is an average trade for the present season. Prices are steady. We quote:

White lead (pure)	$7 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	1 00
Less than barrel lots	1 09
Linseed oil, raw	0 59
Boiled	0 62

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.25
26 to 40 "	2.40

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	3.75
26 to 40 "	4.25
41 to 50 "	4.75
51 to 60 "	5.25
61 to 70 "	5.75

21-oz. C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

British Columbia Trade News

Vancouver, Dec. 22, 1905.

The return of Mr. B. W. Greer, general freight agent of the C.P.R., from a conference with the chief officials of the company at Montreal, was not marked by any announcement with regard to the vexed question of freight rates. As far as the boycott instituted by coast shippers, Mr. Greer was drawn into stating that the company did not intend entering upon any reprisals. Further than that he would say nothing. From present prospects it is very likely that the business men will send a representative to Ottawa to appear before the Railway Commission.

* * *

Coast lumber mills will continue to get their supplies of logs, when they buy from outside parties, by negotiation with the individual logger. There was a proposal on foot to form a selling combine of all the independent loggers, the central agency to deal with the mills. This was to be in effect similar to the shingle pools, in which all the shingle mills are merged, a central agency disposing of the output.

The loggers were unable to effect a combination of interests and the project has fallen through. At the present season, as usual, there is a shortage of logs, owing to broken weather, and the fact that the holiday season attracts a large number of men from the woods every Winter. When they have had their holiday they will return to work, and the output of logs will get closer to the normal production. Lumber mills and factories report all the business they can reasonably handle, and it looks as if the big mills will find it hard to make time to shut down for the annual clean-up and overhaul.

* * *

Premier McBride, who returned from the east yesterday, has given it out in very confident terms that the Grand Trunk Pacific has surely decided on Tuck's Inlet as their northern coast terminus. A part of Kaien Island, granted to the company by the Government, is to be included in the terminus site. The Premier says he never had any doubt of the location. Tuck's Inlet, in the opinion of the company's engineers, is much the best location for harbor facilities of all places on the northern coast. The date of beginning work at this end is yet unknown.

* * *

Construction on the new C.P.R. hotel at Victoria is progressing rapidly, despite the fact that it is the Winter season. Day and night the big stone-sawing machine is kept going, and even on Sunday work only ceases for the twelve hours including the middle of the day. In the evening work goes on again. The superstructure is up to the third storey, steel framework being used throughout, and the outside walls being of dark pressed brick and cut stone. The hotel will out-rival anything in Canada.

* * *

Recent quotations indicate a stiffening in steel products in the United States. Rails are going up on account of big building projects, and the demands of British Columbia alone are to be considerable in the coming year. The steel is likely to be all laid next year on the C.P.R.'s branch into the Similkameen, the Great Northern's extension into the same district, and the Midway-Vernon line, now under construction. The prospects are also that the V., W. & Y. will build north from Vancouver at least part of the way.

* * *

Lumbering in the mountain section or interior of the province seems to be enjoying its due of the general prosperity. Crown Timber Agent Leamy, of New Westminster, who has just returned from a tour of inspection among the mills in the railway belt, reports each and all running to full capacity. Evidence of increasing business is to be found in the busy scenes wherever he went on his tour.

* * *

The most celebrated water record case ever heard in this province has been going on for nearly a month before Mr. Justice Duff at Victoria. There are really two trials, each being in the nature of an application for an injunction, asked for on behalf of the Esquimalt Waterworks Co., to restrain the Commissioner from giving a record of water to the city of Victoria in one case and the Victoria Power Co. in the other. Both the city of Victoria and the Victoria Power Co., the latter a subsidiary concern belonging to the British Columbia Electric Railway Co., applied for record of water on Goldstream River, the claim set up in each case being that there was a surplus beyond what the Esquimalt Waterworks Co. was entitled to under the special act of the legislature which incorporated it. In the injunction proceedings, which have drawn nearly to a close now, the claim has been set up that the waterworks company did not file record of the water it is using in the way set down by the Water Clauses Act. It is further argued that in selling power, or generating power, with the water it uses, the company has exceeded the powers conferred by its special act. As the question of an increased supply of water for domestic purposes, and also of increasing the power capacity of the British Columbia Electric Railway Co., depends on the decision, the case has been followed very closely and every point argued out exhaustively.

FOUNDRY AND METAL INDUSTRIES

REVIVAL OF MINING IN CANADA.

The mining situation in Canada is at the present time a great deal more promising than it has ever been, says the Canadian Mining Review. In Nova Scotia the outlook for the iron and steel industry has considerably improved. The condition of the coal trade is also encouraging, and it is anticipated that business this Winter will be exceptionally good.

In Quebec asbestos mining is very active in the Eastern Townships, it being estimated that the profits of three companies alone will be approximately three-quarters of a million dollars, while the new discoveries of gold, copper and asbestos in the Chibogamou region should, provided the mining laws of the province are amended to afford proper encouragement to prospecting and development, stimulate renewed endeavor along these lines and help revive interest in the mineral resources of what is undoubtedly a rich country.

In Ontario a period of unprecedented mining development may be anticipated for the near future, as a result not only of the important new discoveries at Cobalt, but in other mining sections of the province, notably the western gold fields. There also appears to be an increasing disposition on the part of capitalists to invest money in the opening up of undeveloped properties. There can be no doubt that the promised revision of the mining laws, in accordance with the views of those chiefly concerned in the development of the mineral resources of the province, will be the one thing required to place the industry on a sound and substantial footing.

The outlook in British Columbia is equally gratifying. Production is generally on the increase, so much so that the smelting works are being taxed to their utmost limits, making necessary the re-operation of the long disused works at Pilot Bay, Kootenay Lake, as well as the smelter at Crofton on Vancouver Island. The most convincing proof, however, of improvement is the gradual increase in the number of profit-earning mines.

Although the Yukon gold yield has, of late years, steadily diminished, by means of the gradual working out of the rich creeks in the vicinity of Dawson, it is by no means unlikely that the prospecting now being systematically carried on in the territory, will not fail to discover new gold areas. On the whole, the mining industry in Canada appears to be about to commence a new chapter in its history, which will be noteworthy as recording a period of remarkable prosperity and considerable expansion.

Hustle while opportunities are open. Prepare for emergencies when business drags.

INGOT METALS

Tin—"Straits" and "L & F"
Lead—Best English
Copper—Lake and Casting
Spelter—"V M" and Ordinary
Antimony—Cookson's

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DESERONTO, ONT.
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Manufacturers of
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for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

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Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks

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KING, QUEEN and WELLINGTON STS.



Enterprising Hardwaremen
handle our
ANTI-FREEZING PUMPS.

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Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited
GALT, ONTARIO.

Miners say
B.C. BRAND DRILL STEEL
has no equal. That means sales for some one, doesn't it? Have you a stock? Better write to one of the following:

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Agents:—E. G. PRIOR & CO., Victoria, B.C.,
BAINES & PECKOVER, Toronto, Can.
Manufactured by
B. K. MORTON & CO., Sheffield, England.

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

DOMINION COMMERCIAL TRAVELERS' ASSOCIATION ANNUAL MEETING.

THE annual meeting of the Dominion Commercial Travelers' Association was held on Saturday evening, December 16th, at Karn Hall, Montreal. There was a good turnout of the commercial missionaries and the hall was hazy with the fumes of the Concha Regalias. It was also haze with something else besides the fragrant perfume of Havanas, and things at one time were very lively. Of this more anon.

President Jas. S. N. Dougall occupied the chair. With him on the platform were Past Presidents Hon. J. D. Rolland, David Watson, Max Murdoch, Jas. Robinson and Messrs. W. J. Egan, Fred L. Cains, E. D. Marceau, R. C. Wilkins, Jos. Rosseau, Jos. Dubreuil, Fred Dugan, W. B. Mathews, Arthur Terroux, W. Hayes.

Successful Year's Work.

The report of the board of management showed a present membership of 5,185, an increase of 370 during the year. Since the last annual meeting forty-eight members had died. Their average age was fifty, the average week-end tickets are now granted by the railways to all stations, so that commercial travelers on presentation of their certificates can purchase tickets to any point good to start Friday p.m. and return the following Monday at one first-class fare.

The total receipts for the year were $86,329.65, which with a balance of $10,217.09 last year made a total of $96,546,74. Total disbursements were $91,769,73, leaving a balance of $4,777.01 The year's operations resulted in a surplus revenue of $12,263.17, making the present surplus or capital of the



Mr. Fred. L. Cains,
President of the Dominion Commercial Travelers' Association.

association, $254,754.32. The report was adopted.

The report of the election scrutineers, Messrs. Riddle and Stead, was as follows: For president, Mr. Fred L. Cains had received 2,191 votes; Mr. W. J Egan, 1,053. Vice-president, Mr. E. D. Marceau, and treasurer, Mr. R. C. Wilkins had already been elected by acclamation. The new board of directors, with the number of ballots each received, is as follows: James Thompson, 2,333; W. J. Cleghorn, 2,226; E. S. Bois, 1,875; J. B. Giles, 1,684; A. Terroux, 1,610..

The Banquet.

The annual banquet was held at the Windsor Hotel, Montreal, on Thursday evening, December 21. The event is one to which every traveler looks forward with pleasurable anticipation and it is only distance from the festivities and the fact of the event being always held near Christmas that prevents the majority of members from attending. As it was, there were exactly 260 members and guests seated around the well laden and flower-decked tables in the beautiful banqueting hall of the Windsor. Travelers gathered around any festive board are noted for having the proverbial "best time" and Thursday's banquet was no exception to the rule.



Mr. E. D. Marceau,
Vice-President of the Dominion Commercial Travelers' Association.

Mr. Fred L. Cains, the newly elected president, occupied the chair. With him were the principal guests and speakers of the evening, Hon. Sydney Fisher, Minister of Agriculture, and Hon. H. R. Emmerson, Minister of Railways; Mr. R. L. Borden, M.P., the Conservative leader for the Dominion, and Mr. F. D. Monk, M.P.

The menu was in the Windsor's best and this statement suffices to say that with the excellent table service no protests or cancelled orders were noted.

After the dinner had been served President Cains read a telegram from the Commercial Travelers' Association at Halifax, expressing their best wishes for Canada's prosperity and wishing a happy New Year to the Montreal members. He also read letters of regret owing to their inability to attend from the Governor-General, Earl Grey; Sir Wilfrid Laurier, Hons. W. S. Fielding, C. Fitzpatrick and W. Paterson; Messrs. Hays, Shaughnessy, Morse, His Worship Mayor Laporte and Hon. J. D. Rolland.

He also made a few remarks to the effect that their financial showing for the year was very good; they had added over $12,000 to their capital. In connection with the hospital funds of the association he said one of the members of the association had promised to give $1,000, if the other members would subscribe $2,000. This would enable them to provide a cot in the Notre Dame and General Hospitals for the benefit of commercial travelers, and he hoped the necessary funds would be forthcoming. The gathering arose while the chairman read off the names of forty-nine members who had died during the year.



Mr. R. C. Wilkins,
Treasurer of the Dominion Commercial Travelers' Association.

The Toasts.

Mr. Cains in concluding called upon the vice-president, Mr. E. D. Marceau, to propose the first toast, that of "The Government of Canada," coupled with the names of Hon. Sydney Fisher, Minister of Agriculture, and Hon. H. R. Emerson, Minister of Railways

After Mr. Munday sang "Le Canada," the toast of "The Parliament of Canada" was proposed by Mr. R. C. Wilkins, treasurer, who coupled the names of Messrs. R. L. Borden, leader of the Opposition, and Mr. F. D. Monk.

Mr. J. S. N. Dougall, the retiring president, then proposed the toast of "Trade and Commerce," to which Mr. C. C. Ballantyne, president of the Canadian Manufacturers' Association, and Mr. C. H. Catelli, vice-president Chambre de Commerce, replied.

Mr. Ballantyne in replying laid great stress upon the value of the commercial traveler as a factor in the development of the country's business. In speaking of the opportunities for advancement of men of the road he stated that it is largely from the ranks of travelers that modern up-to-date business houses draw their heads of departments. "There is no one so able to judge the requirements of the country trade and the people generally as the commercial traveler, so able to judge character, and so well posted on the financial affairs and stand-

ing of merchants." Mr. Ballantyne spoke also of the great development of the manufacturing interests of the country and attributed a good deal of the success of same to the work of commercial men. "If it had not been for the push, intelligence and energy of the travelers it would not have been possible to form the great association of which I have the honor to be president, the Canadian Manufacturers' Association." He referred also to the great future before the country in the greater development of its manufacturing interests.

Mr. C. H. Catelli replied briefly on behalf of the Chambre de Commerce, regretting the absence through indisposition of the president, Mr. H. A. A. Brault.

After a few topical songs and ballads by the St. Louis Quartette, Mr. W. J. Eagan proposed the toast of "The Press" in his usual good style. Mr. Hatley Taylor, of the Herald, responded.



C. C. Ballantyne,
President of the Canadian Manufacturers' Association.

Mr. Bois, of Quebec, proposed the toast of "The Ladies," to which Mr. Qua replied.

The gathering then sang the national anthem and dispersed.

Among those present were:

At the head table:— Chairman Cains, Hon. Sydney Fisher, David Watson, Hon. H. R. Emmerson, J. S. N. Dougall, James Robinson, W. H. Olive, George Bishop, W. J. Eagan, R. L. Borden, Wm. Murdock, F. D. Monk, R. C. Wilkins, C. C. Ballantyne, Fred Birks, George A. Mann, L. O. Demers, Jos. W. Rousseau, J. R. Day, A. Labelle, V. Laperle, Alf. Lortie, A. H. Casavant, D. Moreau, Arthur Chabot, J. A. Bonneville, S. Greenleese, R. S. M. Bouchette, J. E. Moriarity, J. N. Brossard, Frank Rodden, Eddy Code, W. J. Walker, R. J. Norton, J. S. Thompson, A. R. Tranchemontagne, Chas. Roberts, J. H. Marden, George Rolland, R. J. Walker, John Kingman, R. Bedard, H. Pinet, Charles St. Jean, G. C. M. Coutu, George S. Cleghorn, Emile Bourassa, Fabien Cote, George Gaboury, Gaston Domville, O. A. Thibault, A. A. Gingras, Jno. J. Cusack, Edmond Bois, J. B. Poirier and J. A. Chaummette, Quebec; G. A. Bergeron, Beauceville; J. E. Pelletier, L. P. Pelletier, W. Pouilot, Geo. Bonner, J. A. Nadeau, A. Tranchemontagne, R. P. Donnelly, Albert Laberge, J. O. Authier, E. Durette, B. Lesperance, Jos. Bouvier, M. J. Morris, James Ferres, Arthur H. Bentley, J. A. Beaudry, A. R. Wilson, Reg. W. Graham, E. N. Marceau, Jos. M. Marceau, Em. Joubert, jr., Charles A. Wilson, E. D. Marceau, S. D. Joubert, W. C. Whissell, T. D. Lloyd, H. Jenkins, Jos. C. Lessard, W. B. Naylor, Alfred T. Hodge, A. B. Caswell, Aymer R. Wilson, F. E. Fontaine, H. P. Nightingale, W. H. Seyler, J. H. Taylor, Harry Stubbs, J. Paterson, R. Booth, L. N. Dansereau, J. P. Dumaresq, Alderic Lemieux, A. S. Leblanc, A. E. Jackson, A. R. Angus, W. D. Hamilton, S. J. Martin, O. W. G. Dettmers, R. S. Coulson, A. W. Smith, Norman Holland, W. A. Mattinson, Geo. L. Holland, W. G. Robertson, L. W. Elliott, R. C. Bach, J. F. L. Carron, J. S. Going, J. J. Coolican, W. F. McLaughlin, Fred Caldecott, George Cooke, J. H. Palmer, J. A. Pare, A. Kellnor, L. Wener, A. L. Gittleson, J. H. Gordon, J. E. Auger, H. W. Snetsinger, Sydney Dugan, E. Fred Dugan, J. Bevans Giles, J. K. Oswald, C. C. Davidson, Geo. A. Gatehouse, Edward A. Davidson, W. H. Galt, H. R. Hamilton, Sam'l Dunn, Wm. N. Stephenson (Oshawa), C. L. Sibley, N. Inglis, F. B. Sanford, A. E. G. Austin, Francis J. Truaisch, E. H. Moles, F. Cooper, M. B. Atkinson, Raoul Mathieu, H. Macfarlane, W. Seers, E. Straker Lawton, D. Lorne

Quick and *Ready* Sales



THERE'S pleasure and profit combined in a Sherwin-Williams Agency. Pleasure in showing and selling paints and varnishes that give such universal satisfaction for their quality and price. Profit in the liberal proposition we give our agents and the ready demand, seasons 'round, for our goods.

We are always back of our agents. The advertising helps we give are unexcelled. They create new business for every line of trade the dealer carries. They keep his old friends and win new ones for him.

The spring paint campaign is even now going forward rapidly. Our business getters are the best we have ever planned. If you are not one of our agents, we shall be pleased to explain to you what it means to be with us—the advantages of handling The Sherwin-Williams Paints.

Write our nearest office for full information.

THE SHERWIN-WILLIAMS COMPANY
PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre Street, Montreal, Que.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg.

1523

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

McGibbon, Harrison Frost, J. A. Wade, P. R. Hanson, F. A. Shackell, Ed. Hurtubise, jr., H. A. Crawshaw, G. E. Wight, E. E. Guilbault, Ludger Goulet, A. DesCoteaux, W. Lauriault, Hercules Giroux, J. A. Panneton, B. Giroux, J. E. Lafond, N. W. Latter, B. E. W. Myers, Peter Bercovitch, H. Lightstone, R. Dionne, J. A. N. Pruneau, J. E. Monday, M. F. Farrell, L. C. Bernard, J. A. Benoit, G. A. Harris, L. W. Anderson, W. H. Gimpson, C. E. Hanna, Romeo Brosseau, J. A. C. Labrech (Joliette), J. Vincent Doyle, P. A. Cisbert, Edouard R. Dufresne, Fred Banillon, C. J. Hanratty, E. Daoust, D. M. Lefebvre, E. J. Langlois, Fred L. Barlow, R. A. Pageau, Alex. Bruce, A. Langlois, E. R. Ebbitt, C. A. Lockerby, D. W. Gagnon, D. A. Nadeau, J. A. H. Roch, J. Alcide Simard, Albert A. Belanger, Henri Jonas, C. A. Chouilloux, J. E. LaFontaine, Adam Pichett, J. Emile Roy, Ralph Young, James P. Carlyle, T. Owst Baxter, Blair L. Reid, John A. Gariepy, H. G. Pepperell Frost, S. W. Haskett, W. Keaneth.

Samples.

Mr. E. D. Marceau as an after dinner speaker left nothing to be desired. His proposal of the first toast of the evening was a finished piece of well pointed suggestions to the powers.

Mr. W. J. Eagan has a love for the press and his very kind and appreciative words were well chosen and delivered with dignity and emphasis.

No one has more friends than J. W. Rosseau. He has the physique, the geniality and the "savoir faire" of the genuine traveler. Besides, he's a hustler.

Mr. Monk is popular with the French-Canadian travelers. How they did call for him to "parlez en Francais" — and how he did "parlez" ! It's all the same to Mr. Monk—eloquent in both languages.

The Rolland Paper Co.'s little booklet and card of pens was a happy souvenir, as was the usual supply of cigarettes donated by the American Tobacco Co., Limited.

The St. Louis Quartette are a well balanced lot of artists—but why under heaven do quartettes, as well as soloists, always select ponderous and wearying songs for festive occasions ? Why, oh why ?

A splendid hit was made by Mr. R. C. Wilkins in asking the Ministers present to consider ways and means by which the 16,000 travelers (50 per cent. of whom were always away at election time) could exercise their franchise. It was observed by one of the members that the subject was worthy of consideration. Will it be thought of again ?



CANADIAN RUBBER CO. CHANGES.

A syndicate of Montreal and Toronto capitalists, headed by Major G. W. Stephens, M.P.P., and D. Lorne McGibbon, have succeeded in a big financial coup and have secured the controlling interest in the Canadian Rubber Co., by extending the purchase of about the capital of which is $1,500,000. The control of the company has been in the Allan family, and Sir Montagu Allan has been president for some years past.

The new syndicate has been buying up the stock of the company wherever they could get it, starting on October 11 last buying some stock at 75, and completing their work of getting control by securing several blocks of stock at 140.

Major Stephens in making the announcement of the coup, stated that plans would at once be made to greatly extend the business of the company by the addition of several plants. The company is the largest rubber company in Canada and had been held by old estates for over fifty years.

Mr. D. Lorne McGibbon, in referring to the growth of the company within the past few years, stated that they had almost doubled their output in thirty-six months, and in that interval nearly half a million dollars worth of profits had gone into betterments, such as new machinery and generally improved plant.

The present output of the works is over three million dollars' worth of goods per year, and the hands employed number two thousand. The company has branch establishments at Toronto, Halifax, Winnipeg and Vancouver, where stocks are kept and the trade supplied. They do, besides, a large export business.

Last year the company paid a 5 per cent. dividend and previous to that 8 per cent. The difference of the dividend is accounted for by the fact that a large sum was put into betterments.

The present officers of the company are Sir H. Montagu Allan, president; Mr. J. B. Learmont, vice-president; directors, Messrs. C. F. Smith, Andrew Allan, H. Markland Molson, Lt.-Col. Henshaw, Alfred Piddington, Hugh A. Allan and Lt.-Col. Hector Prevost.

A VALUABLE TESTIMONIAL.

THE following letter received by Mr. F. C. T. O'Hara, superintendent of commercial agencies, from a well known Ottawa firm, is a splendid testimonial to the effective system adopted in that branch of the Department of Trade and Commerce :

"We have on many occasions throughout the past year or so, applied for addresses to your department, of firms which appear by number in your weekly trade inquiries, and we have specially observed with what promptness our inquiries have been answered and how valuable the information given has been. We now think it only fair that we should acknowledge how much benefit the trade inquiries have been to us and to compliment you on the system you have adopted. We may add for your information that through the department we have succeeded in obtaining several agencies that have resulted in a handsome commission to us, as well as bringing a considerable revenue into the country in the way of duty."

Safety razors in cases are excellent sellers, according to the jobbers. They are put up very neatly and not only attract the trade of the man who uses them but make excellent Christmas presents. A number of new designs have been put on the market within the past year.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

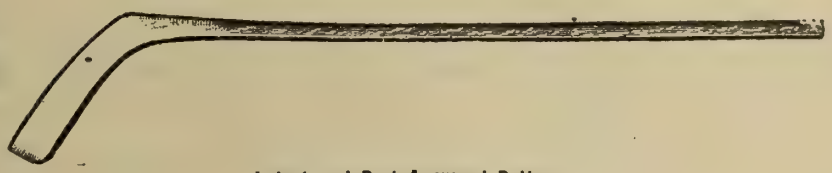
Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

HOCKEY STICKS.

RETURNED
JAN 2 1906



Latest and Best Approved Patterns.

No.
4. XXX Rock Elm, Oil Finish.
5. XXX " Plain "
8. XX " " "
8. Assorted Defective.
9. Boys' Assorted X Elm.

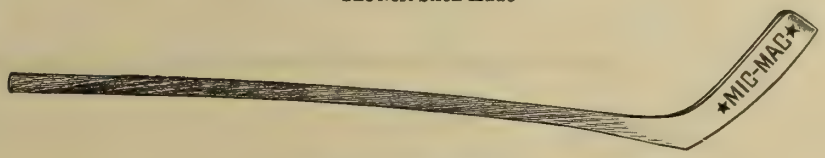
Child's, Red.
" not Painted.

RETURNED
JAN 2 1906

THE GENUINE "MIC-MAC" STICK.

The Best Stick Made

The wood from which the "Mic-Mac" Hockey Stick is made is Selected Yellow Birch.



"Mic-Mac" Hockey Sticks are the correct shape. Use the best.

"Mic-Mac," Yellow Birch. Hockey Stick
" Goal, 3 x 12 in. Blade "

These sticks are all carefully selected by the maker for our trade.

Look for the trade mark "Mic-Mac" when you buy Hockey Sticks and if you find it you can feel secure in the stick you get.

RETURNED
JAN 4 1906



BOKER'S HOCKEY SKATES.

Starr Manufacturing Co., Halifax Skate.

RETURNED
JAN 9 1906
T. Owen
Cat Book 41
page 5
B

HOCKEY PUCKS.

"Juvenile," Size 2½ x ¾ in.
"Regulation," " 3 x 1 in.
" Soft "
" Starr "

For Skates and Straps see our Catalogue.

H. S. HOWLAND, SONS & CO., LIMITED

GRAHAM NAILS ARE THE BEST.

Telegraph orders shipped day received.

Factory: Dufferin Street, Toronto.

Mail orders shipped day received.

PAINT, OIL AND BRUSH TRADES

THE NORTHWEST OIL FIELDS.

A year ago a report was received from the northern portion of Athabasca to the effect that a rich oil deposit had been located there. Alfred von Hammerstein was the discoverer and he at once interested American and Canadian capitalists. Early last Spring heavy consignments of machinery were freighted down the Athabasca River to the new fields and since then boring has been faithfully carried out, but with what success those interested refuse to say. Trappers and hunters who have passed by the locality where the work is in operation state that the creeks and lakes in the vicinity are covered with an oily substance and oil is lying in surface seepages. Samples brought down show the oil to be of rich quality.

In Alberta, on the border of Montana, several large wells have been struck and one of them is reported to flow at the rate of 300,000 gallons per day, but this well has been plugged to wait better transportation facilities. A thriving town has sprung up at the wells, which is known as Oil City, and already the population of the little oil centre is nearing the three thousand mark. Companies have been formed and have received Government grants of land and several of them have already paid dividends on stock which a few months ago was considered as worthless.

At the present time several railroad companies are having surveys made to the new fields and it is their intention to build to the oil districts in the Spring. Geologists and oil experts claim that there is an immense underground lake connecting the wells struck in Alberta and Athabasca, although they are over 1,000 miles apart. It is claimed that when the fields have been properly developed they will prove to be as rich as any on the continent.

THE TIME TO PLAN.

After the holidays there are a few short weeks of comparative quiet in nearly every store, says an exchange. This is a good opportunity for the business world to look back upon its successes or failures of the past, sift out the reasons for each and map out new and better plans for the future.

The retail merchant in particular should take advantage of this opportunity. There are many little details in every store which can be improved with the exercise of a little thought and originality on the part of the proprietor and his clerks.

Changes in the arrangement of your stock always attract attention. It is always a good plan to look back carefully over the Spring business of the previous year and bear in mind the line of goods on which the greatest percentage of profit was made. If the same conditions are likely to prevail this year, see that this line is brought to the front early and arranged in some attractive and conspicuous way.

Get into the lower drawers, the bottom bins, the back shelves and the dark corners—up stairs, down stairs and in the cellar. Sort out the odds and ends which always accumulate in the handling of every class of goods, and make careful memoranda of them to work them off by some special effort when the proper season comes.

Your paint department should receive the same attention that is given to any other item of your stock. Some packages may become shop worn and these should not be carried over from year to year, but should be brought to the front for the busy painting season and sold out before the new stock is drawn upon. A little forethought and effort, with possibly a slight concession in price when the packages may have become materially damaged, will turn what might have been waste into ready capital.

The progressive paint dealer uses plenty of paint to brighten the appearance of his own store, which should indicate, both outside and inside, that he believes in paint and has confidence himself in the qualities of the goods which he sells.

Winter is a good time for interior changes, and it frequently may happen that shop worn material can be used with good effect in this way.

In searching out the dark corners of your store you may find some forgotten package of color cards or advertising matter which should be carefully noted and kept ready to hand when you need it. Have some convenient place where it can be preserved to the best advantage and kept clean.

Put in your stock order for paint and paint advertising at an early date and be sure to add some new lines to your stock each season.

Paints applied in the Fall dry about as quickly as in the Summer, yet the complete oxidation of the upper portion of the film is not hastened as it is in the hotter days of the Summer. Therefore the original elasticity is maintained longer, and the coating is much more durable. The clear, dry weather and the absence of sudden showers in the Fall season provide conditions most favorable for the proper application and drying of paints.

We Wish You a Prosperous New Year

but let us remind you that in your Paint and Varnish Department you can at least insure prosperity by stocking the Imperial Lines for 1906. Our new Catalogue will be mailed in a few days. If you do not receive a copy, drop us a card.

The Imperial Varnish & Color Company Limited

TORONTO, Ontario, Canada

Straith's Bath Tub Enamel

or Liquid Porcelain

Forms a hard, polished, non-absorbent surface, effectually resisting hot and cold water and preventing the unhealthful accumulation of grease, soap, sediment, etc.

Put up in Patent Cans with extra slip covers. Every dealer can well afford to keep a fair-sized stock of **STRAITH'S BATH TUB ENAMEL.** There is always a call for it.

We shall be pleased to send you a copy of our Catalogue.

THE STANDARD PAINT & VARNISH WORKS CO., Limited, WINDSOR, Ont.

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

AGENCIES WANTED

We wish to represent manufacturers and provision dealers in Manitoba, Saskatchewan and Alberta. We have well established sales agents in every important town. At Winnipeg we have first-class warehouse accommodation. Interested parties are referred to The Eastern Townships Bank of Canada.

CANADIAN CO-OPERATIVE CO., Limited

Box 559 WINNIPEG, MANITOBA

Capital $250,000.

SEALED TENDERS addressed to the undersigned and endorsed "Tender for Hamilton Wharf," will be received at this office up to and including February 5, 1906, inclusively, for the construction of a wharf in the City of Hamilton, Wentworth County, Ont., according to a plan and specification to be seen at the office of J. G. Sing, Esq., Resident Engineer, Confederation Life Building, Toronto, on application to the Postmaster of Hamilton, Ont., and at the Department of Public Works, Ottawa.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for eight thousand dollars ($8,000.00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,

Secretary.

Department of Public Works,
Ottawa, December 16, 1905.

Newspapers inserting this advertisement without authority from the Department w not be paid for it.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Sharratt & Newth's Glaziers' Diamonds

are unequalled for cutting and wearing qualities.

To be obtained from the principal Hardware Dealers and Glass Merchants.



Agents for Canada: **A. Ramsay & Son Company, Montreal**

OILS

Raw Linseed
Boiled Linseed
Pale Boiled Linseed
Pale Refined Linseed

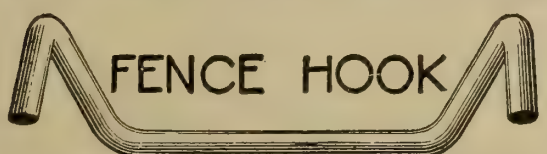
"DOMINION" BRAND

OILS GUARANTEED GENUINE.

Canadian Agents—
J. A. BERNARD,
21 St. Peter Street., Quebec
HOMER TAYLOR,
Temple Bldg., Montreal

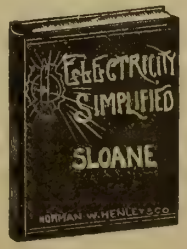
FRED'K FENNER & CO., LTD.
PENINSULAR HOUSE, MONUMENT ST., E.C.
LONDON, ENGLAND.

GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.



ELECTRICITY SIMPLIFIED

By Prof. T. O'Connor Sloane.

This work is the simplest ever published on the subject of Electricity, and does something not hitherto accomplished. The object of "Electricity Simplified" is to make the subject as plain as possible, and to show what the modern conception of electricity is; to show how two plates of different metals immersed in acid can send a message around the globe; to explain how a bundle of copper wire rotated by a steam engine can be the agent in lighting our streets; to tell what the volt, ohm and ampere are, and what high and low tension mean, and to answer the questions that perpetually arise in the mind in this age of electricity

158 Pages. Fully Illustrated. - - Price, $1 00.

THE MacLEAN PUB. CO., - TORONTO

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

we know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers, and the world's best white lead—BRANDRAM'S B. B. GENUINE.



Manufactured by

HENDERSON & POTTS, Limited

HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED

MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, Dec. 29, 1905.

A FEW travelers are back on the road, but the campaign proper begins next week. The manufacturers in Montreal are enthusiastic over the prospects for 1906, declaring that there is nothing to stop them from breaking even the fine record of 1905.

Red lead has advanced this week, and some of the local jobbers have almost cleaned out their stocks. As the primary market keeps on advancing, and red lead has been going up steadily in the European markets, it looks as if Canadian jobbers would soon have to revise their figures very materially.

Linseed Oil—Prices are steady. Raw, one to four barrels, 47c.; five to nine barrels, 46c.; boiled, one to four barrels, 50c.; five to nine barrels, 49c., f.o.b. Montreal, net 30 days.

Turpentine—No further fluctuations have occurred this week. We quote: Single barrel, 93c. per gallon. Two barrels or over, 92c. For smaller quantities than barrel, 5c. extra per gallon is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Ground White Lead—Our quotations are as follows: Best brand Government standards, $5.75 to $5.80; No. 1, $5.40 to $5.55; No. 2, $5.05 to $5.30; No. 3, $4.80 to $5.05; all f.o.b. Montreal.

Dry White Lead—Prices are: Barrels, $5.40; 100 lb. packages, $5.65; 6 to 10 lb. tins, $6.65.

Dry White Zinc—We quote as follows: Pure dry in casks, 7 1-2c.; in 100 lb. kegs, 8c.; No. 1 zinc in casks, 6 1-2c.; in 100 lb. kegs, 7c.

White Zinc (ground in oil)—We quote: 25-lb. irons, 8c. to 10 1-2c.; No. 1, 6 3-4c.; No. 2, 5 3-4c.

Putty—Our quotations are: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—The local market remains steady, with prices unchanged, in spite of advances to importers. We are quoting as follows: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—An advance has been declared, owing to stocks giving out. We quote: Genuine red lead in casks, $4.75; in 100-lb. kegs, $5.00; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.50; kegs, $4.75; and smaller quantities, $5.50.

Gum Shellac — We still quote: Fine orange, 55c. per lb.; med. orange, 50c. per lb.; bleached shellac (white), 60c. per lb.

Paris Green (for 1906)— We quote as follows: Barrels, 600 lbs., 15 1-4c. for Canadian Government standard, to 15 3-4c. for Berger's English; kegs, 250 lbs., 15 1-2c. to 16c.; drums, 25 lbs., 16 1-2c. to 17c.; drums, 50 and 100 lbs., 16c. to 16 1-2c.; 1 lb. packets, 17c. to 17 1-2c.; 1 lb. tins, 18c. to 18 1-2c.; 1-2 lb. packages, 19c. to 20 1-2c. per pound. Terms, 2 per cent. off on Berger's English.

Shellac Varnish—We quote as follows: $2.50 to $2.60; pure orange, $2.40 to $2.50; No. 1 orange, $2.35 to $2.45.

Mixed Paints—Our prices are from $1.20 to $1.40 per gallon.

Castor Oil—We are still quoting: 7 1-2c. to 8 1-2c., according to lots.

Refined Petroleum—We still quote: American water white, 16 1-2c. and 17 1-2c.; Canadian prime white, 14 1-2c. and 15 1-2c.; 18 1-2c. and 19 1-2c. ex warehouse.

Window Glass—No new features have cropped up during the week. The market is at present very firm at the following prices: First break, 50 feet, $2.10; second break, $2.20; first break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feet, $6.25; eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second break, $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24.00, and twelfth do., $28.50.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Dec. 29, 1905.

AN advance in red lead is about the only incident of importance in the markets of the past week. This line is now quoted 1-4c. higher and a further rise is considered possible, owing to increased quotations at the sources of supply.

Business has been dull during the week, and there are no other changes to report.

White Lead—Ex Toronto, pure white, $5.80; No. 1, $5.37 1-2; No. 2, $5.00; No. 3, $4.25; No. 4, $4.50 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $5.25.

Red Lead—Genuine in casks of 560

lbs., $5.00, ditto, in kegs of 100 lbs., $5.25; No. 1, in casks of 500 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00.

White Zinc—Genuine V.. M., in casks, $6.50; in 25 lbs., $7.50; in 12 1-2 lbs., $8.00; Lehigh, in casks, $5.50; in 25 lbs., $6.00; in 12 1-2 lbs., $6.50.

Shingle Stain—In 5-gallon lots, 57 to 90c. per gallon.

Paris White—90c. to $1.00 per 100 lbs.

Whiting—60c. to 65c. per 100 lbs.; Gilders' whiting, 75c.

Paris Green (for 1906)—We quote as follows: Barrels, 600 lbs., 15 1-4c. for Canadian Government standard, to 15 3-4c. for Berger's English; kegs, 250 lbs., 15 12c. to 16c.; drums, 25 lbs., 16 1-2c. to 17c.; drums, 50 and 100 lbs., 16c. to 16 1-2c.; 1 lb. packets, 17c. to 17 1-2c.; 1 lb. tins, 18c. to 18 1-2c.; 1-2 lb. packages, 19c. to 20 1-2c. per pound. Terms, 2 per cent. off on Berger's English.

Shellac Varnish — Pure orange in barrels, $2.80; white, $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 49c. to 52c.; boiled, 52c. to 55c.; 5 to 9 barrels, raw, 48c. to 51c.; boiled, 51c. to 54c. Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrel lots, 95c. f.o.b., point of shipment, net thirty days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5-gallon packages, 50c., and 10-gallon packages 80c. will be charged.

Glues—Broken sheet, in 200-lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2.00 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2.00; 100-lb. kegs, 25c. extra.

Plaster Paris—New Brunswick, $2.00 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.00.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Trade continues normal. We quote: Canadian prime white, 14c.; water white, 16c.; American water white, 16c. to 18c. ex warehouse.

Crude Petroleum—Prices continue unchanged. We quote: Canadian, $1.36; Pennsylvania, $1.61; Ohio, 94c.

Steel ceilings are rapidly taking the place of lath and plaster, not only for stores and public buildings but for dwelling houses. They certainly have advantages that cannot be gainsaid. They are fireproof, easily kept clean and do not furnish any dirt to fall upon the goods or the furniture. Every hardwareman should keep his eye open for a chance to put in a steel ceiling.



KING BUG: "WELL BOYS! I KNEW SOMETHING FEARFUL WAS BOUND TO HAPPEN WHEN I HEARD THE CANADA PAINT COMPANY WERE SHIPPING THEIR PARIS GREEN TO THESE PARTS."

. . . The . . .

Canada Paint Company's

PARIS GREEN Kills POTATO BUGS

MADE ONLY BY THE

CANADA PAINT COMPANY Limited

MONTREAL and TORONTO

Experience has demonstrated that **PARIS GREEN** is the only safe and certain remedy to be employed to destroy the

POTATO BUG

and, at the same time, not injure the leaves and plants.

For many years the Pure Paris Green made by the **CANADA PAINT COMPANY** has been recognized as the genuine bug and fungi killing article. It is Government Standard, and the formula is endorsed and approved of by the Department of Agriculture at Ottawa.

STOVES AND TINWARE

HOW TO CARE FOR COMPLAINTS.

THE success of a stove merchant depends largely upon the way he takes care of stove complaints, says "Buck's Shot," a St. Louis paper. If he lets a complaint run along from day to day without giving it attention, the consumer will get disgusted at the treatment received at the hands of the merchant. She will get prejudiced against the stove and it will become a very difficult matter to ever satisfy the consumer, even though the stove is made to operate perfectly. When the merchant lets the complaint run along without giving it attention the consumer tells all the neighbors about having a stove, bought of Mr. Jones, that does not draw or bake, and the entire neighborhood becomes prejudiced against the stove. If, after the consumer is prejudiced, the merchant goes or sends a man to take care of the complaint, even though the stove is made to work perfectly the consumer will not be as well pleased with it during the entire lifetime of the stove as if it had had immediate attention, and the consumer will feel slighted at the hands of the merchant. This will injure the business of the merchant, and also injure the reputation of the manufacturer's stoves and ranges in that city or town. If a merchant is not educated to take care of these complaints, when he gets a complaint he is in deep water, and immediately calls upon the company for assistance. This causes the representative in that territory to have to call upon the merchant at quite an expense of time and money.

For the above reasons it is very important that the merchant make an earnest effort to educate himself, his salesmen, the stove black, men who set up the stoves, in fact everybody who has anything to do with selling or handling the stove. A man cannot be a thoroughly successful stove merchant or stove salesman until he understands how to take care of a stove complaint. He cannot take care of a stove complaint until he understands what causes a stove to operate. He must understand that a stove of itself has no draft, that without air there is no combustion, without combustion no heat, that the air that creates combustion is drawn into the fire box by the draft in the chimney, that the heat created by combustion does not work its own way around the oven but is forced around by the draft in the chimney. If it fails to get around the oven, and the top of the stove gets red hot, it is proof positive that the draft is at fault, and is not drawing the heat under the bottom oven plate. If the stove gets hot it is proof that the draft is only strong enough to force the heat to the end of the flue strip, or part way under the bottom oven plate. To successfully bake, the draft must be strong enough to completely flood the space under bottom oven plate with heat. If the draft is too strong it will cause the bottom of oven to get too hot. If the draft is very strong it will draw the heat out of the stove, and it will neither cook on top nor bake successfully. Very often the consumer will declare that the stove has a good draft, that the fire burns nicely, etc., when upon investigation you will find only enough draft to create imperfect combustion, that the coal is being smudged and turned into soot instead of heat. It takes fifteen pounds, or fifty-eight cubic feet, of air to burn one pound of soft coal perfectly. When you make a man understand this, it will make him realize the importance of draft. Thousands of tons of stove castings are burnt out every year, a great many stoves are unjustly condemned on account of poor drafts, set up by careless, incompetent men, and most of all, by neglect of merchants in taking care of complaints.

SHOWING A PARLOR STOVE.

TOO many stove dealers, says the Metal Worker, stop when they have polished the nickel, blackened the stove and put the mica in it and then set it in a conspicuous place. There are other things to be done which will not only please the customer and even the shopper, but will be sure to prove a good advertisement. A little more space, for example, should be given to the others. Again, instead of displaying it on the usual stove board, a neat rug may be used, with a grouping around the stove of a suitable coal hod, poker, slicer, dust brush, bellows and the other articles needed for attending a fire.

These fixtures are still not enough to display the stove properly. It makes an unsightly show for the doors to be open and the ash pan to be on the floor, so that the opening into the flues of a base heater is laid bare, and is equally unsightly if the upper mica doors are open in order to show how easy it is to take out the sectional fire pot, for the sections are not usually things of beauty, especially if they are also laid on the floor. The attention will be attracted far more satisfactorily if the dealer provides himself conveniently at hand a rack with hooks and shelves where these different parts can be hung or laid while the necessary parts of the stove are removed in the process of exhibiting the vitals of the stove and the ease with which they can be repaired. The more people know about anything the deeper is their interest. This is something which the average salesman does not know, and those salesmen who are above the average earn their advanced position by the store of information they have and freely give whenever a customer shows a disposition to look into anything they have to sell. If this rack and shelf arrangement can be made partly in the shop by the use of wrought iron pipe, it may cost more than to make it out of old packing boxes, but it will show the stove dealer is alive to the refinement of taste in his customers and is catering to it, which in itself often is all that is necessary to secure the preference over the other fellow when the purchaser is undecided which stove to buy. There is a good deal more in showing a stove to a customer than can be accomplished by merely setting it in a plate-glass window where every passer-by can see it.

AIR MOISTENERS FOR FURNACES.

There has long been a demand for a practical apparatus for supplying moisture to artificially heated buildings, and there has at last been invented a practical vaporing apparatus to accomplish this purpose. It is arranged to be placed in the centre of the bonnet or top of the hot air furnace. The portion of the vaporizer below the main dome lies within the air chamber at the top of the furnace so that the series of small circular openings in the vaporizer may permit the vapor to moisten the air as it passes by it. The vaporizer consists of a small boiler automatically supplied with the water required, the water supply being controlled by means of a valve operated by a lever attached to a piston connecting with a float in the water chamber. When the water level has reached a given point, the float rises and closes the valve. When a sufficient quantity of water has passed through the hot air chamber, the float lowers, opens the valve and the water enters the vaporizer through the supply pipe.

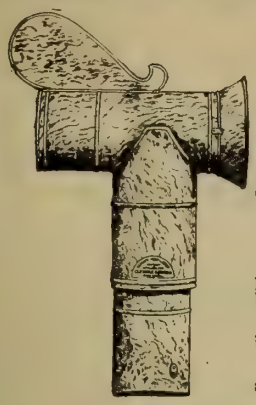
BURNS LIKE COAL.

The recent discovery that the so-called oilstone which underlies all the lead and zinc fields of Southwestern Wisconsin would burn like coal promises to revolutionize the mining industry in that section. Heretofore there have been no smelters in the field. At the Enterprise mine seven wheelbarrows of the stone kept the roaster going for 12 hours, developing a richer gas than is produced from coal, and of such volume that the pipe from the retort to the roaster was unable to convey it fast enough. When a ton of this rock was tested it produced 50 gallons of heavy lubricating, 4,000 cubic feet of gas and a residuum of several pounds of fire and weatherproof paint.—Exchange.

NEW SOLDERING MACHINE.

A clever invention in the form of a moving soldering machine has been completed by Mr. F. L. H. Sims, manager of the Siche Gas Company, Toronto. The new machine will be used by the Dominion Roller Screen Company. It runs back and forth on a metal track and distributes the solder over the brass screens, adhering them firmly to the rollers, enabling a boy to turn out hundreds an hour.

Business Getters for Tinsmiths



Are there any defective chimneys in your locality?

Then it is your chance to get business.

— THE —

ZEPHYR Ventilator

saves the expense of building a high chimney.

It is so constructed as to guarantee a perfect draft, and, therefore, easy combustion.

By using the ZEPHYR it is possible to burn soft coal with the best results.

The smoke is easily drawn off, enabling an even heat to be generated.

THE ZEPHYR IS STRONGLY PUT UP AND WILL RESIST ANY STORM

This is what others think of it:

Montreal, February 20th, 1901.

Providence Mother House

Messrs. HARRIS Co., Montreal.

Dear Sirs,

It is with pleasure that I can say that your "AEOLIAN" Ventilator is the best Ventilator we have used on our establishments so far. We had eight (8) of the large sizes put up on our Mother House and on the Hospice Gamelin and they gave us entire satisfaction.

Yours respectfully, SISTER MADELEINE, Dep.

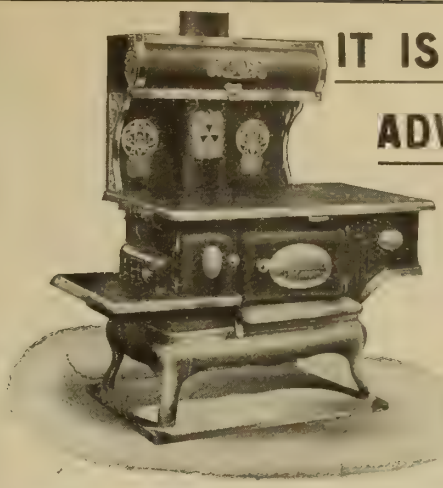
We manufacture and guarantee:

The Harris Filter. The Zephyr Ventilator.
The Aeolian Ventilator. Expansion Conductor Pipe.

The J. W. HARRIS COMPANY, Limited

Successors to LESSARD & HARRIS

Contractors ***MONTREAL***



IT IS TO YOUR ADVANTAGE

to give your store the best stove display. It helps trade in other lines. It begets steady custom. Conspicuous amongst your stock should always be

THE EMPIRE QUEEN RANGE

Get enthusiastic over this range. It can be recommended with full confidence. If you had our booklet and read what other people think of The Empire Queen, you would see reason for our confidence. Many of the opinions are from dealers, who first wrote for booklet and then ordered.

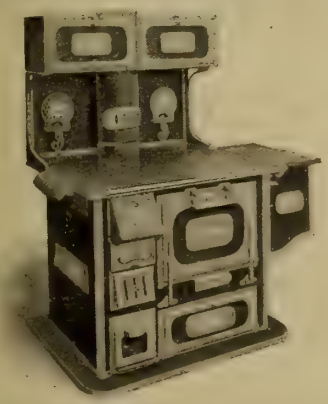
WILL YOU SEND FOR A COPY?

The Canadian Heating & Ventilating Co.

OWEN SOUND, Ontario Limited

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.



HAVING SHOWN THAT THE BODY OF

THE JOY MALLEABLE AND STEEL RANGE

is made of the best material for such work in existence, we now want to draw your attention to the **FIRE BOX** which next to the body is of first importance.

The **FIRE BOX** is long, narrow, deep and straight; lined with sectional iron linings and having **DUPLEX GRATES**, reversible for either coal or wood with the cogs on the outside of the body. Grate bars may be removed without disturbing the water front or linings.

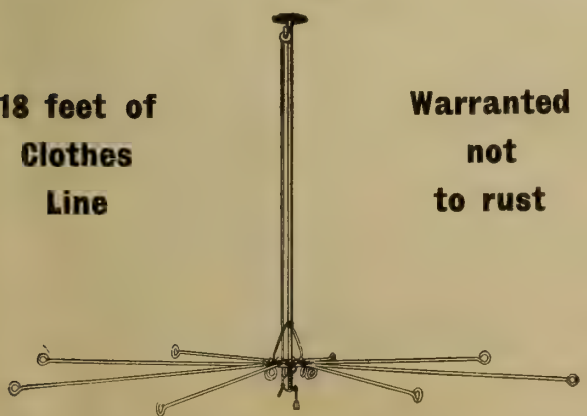
Ashes will not adhere to the sides of the fire box—a turn of the grate gives a clean, bright fire.

Opportunities for securing the agency are growing less daily. Be wise.

THE JOY MANUFACTURING CO.

32 William Ave., - - TORONTO

18 feet of Clothes Line



Warranted not to rust

B. & W. Elevating Clothes Dryer

Patented Sept. 12th, 1905

This Illustration, No. 2, shows the B. & W. Clothes Line lowered and spread ready to receive the clothes.

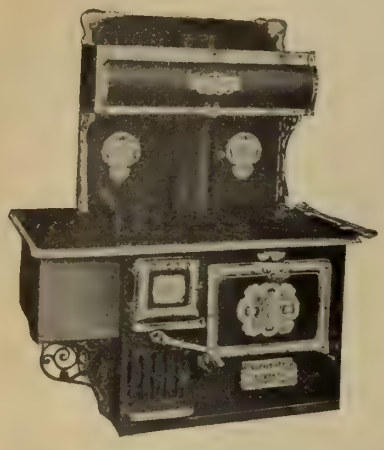
When Clothes are all hung, the line is raised to within a few inches of the ceiling by means of a small rope pulley—a child can operate it.

FOR SALE BY

E. T. WRIGHT & CO., - - Hamilton, Canada

Steel Ranges

We have educated the people of Canada up to a high appreciation of high grade ranges. Let us take the



Guarantee Bond With Each Range

Oxford Chancellor Range

for instance. Your establishment is not complete if you haven't this A1 Steel Range on your floor. The body of this Range is built of the best quality steel sheets, to which is closely riveted an inter-lining of asbestos mill-board.

The oven is big enough to meet the requirements of a large family, and is fitted with our convenient drop oven door.

This range burns hard or soft coal or wood.

The Fire-box is accurately proportioned, and the celebrated Duplex Grates are provided for hard coal burning.

The Fire-box for wood is very commodious, and intended to burn the roughest kind of wood.

The Chancellor is furnished with special fire-box linings for soft coal burning, the hard coal linings or linings for wood burning, just as required.

The Reservoir is of planished copper and is easily attached or detached by any one in a few minutes.

These features, which we have merely enumerated to you, have been explained in detail to probable range buyers in your territory.

The Oxford Chancellor is thoroughly satisfactory, durable, an easy seller and a trade winner.

Let us mail you Catalogue 61

WE also manufacture Cast Iron Stoves and Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Hot Water and Steam Boilers and Radiators, Warm Air Furnaces and all kinds of cooking and heating apparatus, Plumbers' Supplies.

The Gurney Foundry Company, Limited

TORONTO WINNIPEG VANCOUVER 81

The Gurney-Massey Co., Limited, Montreal, Que. The Gurney Standard Metal Co., Limited, Calgary, Alta

If you are in business to make money and are desirous of selling an article that will make satisfied customers for you and attract their trade in other lines, get the agency for

Walker Stoves and Ranges

"SUCCESSFUL EVERYWHERE"

About our Walker Pilot Range. An enamelledware tank in a solid cast casing—duplex grates for coal or wood, removable without disturbing the linings – oven thermometer—Seymour Patent slide draft along the entire length of the grate—cast iron flue back—and a large square oven, are a few features that make

Easy Sales and Satisfied Customers.

GET OUR CATALOGUE AND PRICES ON MONDAY.

The Walker Steel Range Company, Limited

Grimsby, Ont.

A BRIGHT STORE

PLEASES YOUR CUSTOMERS
ATTRACTS BUSINESS
SAVES TIME

A modern Acetylene plant will light your store perfectly and economically. Ask us about it.

THE CONTINENTAL HEAT & LIGHT CO.

MONTREAL



Keeps Soft Longer

Sterne's Asbestos Stove and Furnace Cement

will keep soft longer and stand more heat than any other cement made. It is fire and acid proof, and burns as hard as the iron itself.

Sterne's Asbestos Stove and Furnace Cement has no vegetable or animal oils in its composition; therefore it has no disagreeable odors when fires are first started.

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

A NEW DEPARTURE

The Perfection Safety Furnace Pipe Co.

MANFRS. OF ALL KINDS OF

Hot Air Pipe, round or square,
Elbows, Angles, Register Boxes, etc.,
Galvanized Cold Air and Smoke Pipes.

Galvanized casings made for any make of Furnace. Our pipe is made to save you time, labor and material. SEVEN to TEN feet of pipe saved in every hundred Fittings made to fit. Made by specially adapted machinery, and under the supervision of practical furnace men of long experience.

We also lay out furnace jobs for our customers free of charge.

Freight paid on all orders of 500 feet or over. See terms, etc., in our catalogue sheet, which will be sent upon application.

PROMPT SHIPMENTS—GOODS PROPERLY CRATED.

No. 3 Brookfield Street, - - TORONTO, ONT.



"VICTORIA" IMPROVED COAL GRATE

24½x30½. Dump Grate. Double Damper.

Mantel Coal Grates

We are making a special run on this coal grate.

Finished in Oxidized Copper, Brass, or Dull Black.

WRITE FOR QUOTATIONS TO-DAY

Whittaker Stove Works

WINDSOR, ONT.

The New

National Oak Heater

For Hard or Soft Coal, Lignite, Coke or Wood

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG **WESTON, ONT.** **CALGARY**

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

COAL ATTACHMENT FOR GAS STOVE.

A gas stove equipped with an attachment designed for the use of coal for cooking purposes is now announced. It consists of a large fire box for burning hard or soft coal or wood, to be attached at the side of the gas stove proper. It is particularly useful for burning waste paper and other refuse. It can be attached to an ordinary gas range.

TO ERECT A MODERN FACTORY BUILDING.

The Glazier Stove Company, Chelsea, Mich., is soon to erect a large three-storey modern factory building for the manufacture of gasoline stoves and steel ranges. There will also be a new building which will be designated the Welfare Department. This building will be given entirely to the employes and will contain reading rooms, swimming pools, shower baths and a gymnasium.

STOVE ITEMS.

The stove mounters at Burrow, Stewart and Milne's foundry at Hamilton went on strike recently because a non-union man was put to work.

With the present price of iron the mixture in most stove foundries is more expensive than that which was poured into the stoves in the early part of the year and all kinds of supplies and labor are equally strong in the market. When these considerations are carefully looked into there are many in the trade who feel that no better time to advance the prices will be found than now.

DRAFT EXCLUDER

The patents, or rights to manufacture a draft excluder are for sale for Canada and the United States. The Draft Excluder is an English invention and is regarded as the most effective appliance that has yet been produced. It can be fastened on any door in a few minutes. It is so constructed that when the door closes, wind, water and even air are prevented from passing between the foot of the door and the floor. It is strong and durable, but at the same time light and neat and does not in any way disfigure the door to which it may be attached.

The chief feature of its superiority over others is that when the door is closed the Excluder presses very firmly against the floor, yet the moment the door is opened even the smallest degree the pressure is released, so that the door may swing backwards and forwards as freely as if there were no appliance upon it.

It goes on upon the inside of the door.

COST OF PRODUCTION

The Excluder is constructed of mild sheet metal and rubber, and it costs in England about three shillings and three pence to produce each Excluder. The rubber may be replaced by wood and in that case the cost of production would be reduced to about two shillings and six pence. These calculations are based on cost of steel and rubber in England.

Address inquiries to

SOLICITOR, care of Hardware and Metal Toronto Office. (tf)

A WESTERN STOVE.

A stove worthy of a large sale in Ontario and the northwestern provinces is the National Oak Heater, manufactured by the Moffat Stove Company, of Weston, Winnipeg and Calgary. This stove is made particularly for the western trade and hardware dealers now handling American goods will do well to send to the Moffat Company for particulars regarding this heater, which burns either hard or soft coal, lignite, coke or wood and is smoke consuming.

The illustrations shown indicate two

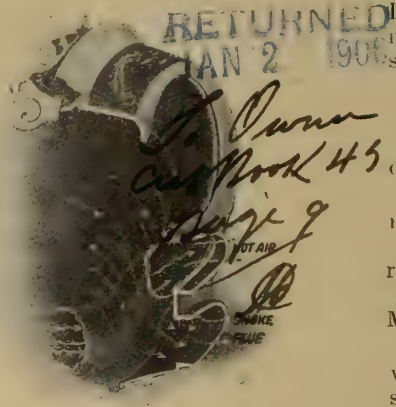


Fig. 1.

of the strong talking points of the National Oak. Figure 1 shows the double draft, the smoke and hot air going upward in different flues, the draft being taken from the floor under the stove and all the heat being extracted from the smoke before it is allowed to escape through the chimney. Under this double

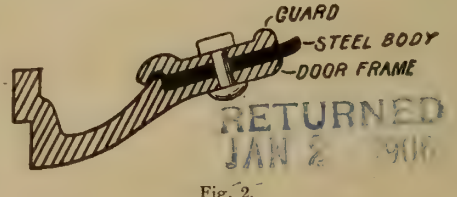


Fig. 2.

hot blast system air is taken through the screw draft, passed around the super-heating chamber, entering the fire-pot through slots, consuming all the gases and checking the fire where necessary. Figure 2 shows how the steel and iron rings are substantially joined. No soft coal stove should be without a gas ring over the fuel.

The Moffat Company have made remarkable progress, their business having grown from about $13,000 annually to over $200,000 during the past year. While they are carrying over a considerable quantity of stoves their business shows a satisfactory increase during the past season. They are specializing on fewer lines than formerly and their policy of getting into direct touch with their customers has proved successful.

Mention Hardware and Metal when sending for catalogues or for descriptive matter relating to the National Oak.

Business Changes

Ontario.

C. J. Werner, stoves and tinware, Dunnville, is advertising business for sale.

B. Gerry, hardware merchant, Wingham, has sold his business to Bishop & Brewer.

H. W. Denyes, hardware merchant, Carleton Place, has assigned to John Macpherson.

The stock of O'Connor & Wilson, hardware merchants, Ottawa, was sold at 50c. on the dollar.

The firm of Johnston & Smith, stoves, London, have dissolved, and the business will be carried on by Wm. Johnston.

Quebec.

Joseph Legault, blacksmith, Montreal, deceased.

C. Gauthier & Co., plumbers, Montreal, registered.

H. & W. Gamache, plumbers, Montreal, registered.

Hector MacKenzie, plumbers' supplies, Montreal, has lost by fire.

The assets of Guenette & Frere, hardware merchants, Montreal, are to be sold.

Chas. Alph. Parent has been registered with L. C. Giguere & Cie., hardware merchants, Quebec.

There will be a meeting of creditors of Galarneau & Ethier, plumbers, Montreal, on the 16th inst.

Western Canada.

The business of F. N. Pedlar, McLean, is advertised for sale.

Kribbs & Rendel, hardware merchants, Frank, Alta., have dissolved.

Wiebe & Epp, hardware merchants, Rosthern, have dissolved.

Johnson Bros., hardware and implements, Redvers, opening branch at Wauchope.

MacVicar & Davidson, agricultural implements, Heward, have been succeeded by F. Kneeshaw.

British Columbia.

Baker & Taylor, blacksmiths, Ladner, registered.

New Brunswick.

Siddal Bros., stoves and tinware, Sackville, have sold to W. H. Carter.

The cash register has done more to prevent stealing in stores than all of the sermons ever preached. Stealing dimes leads to greater thefts. Therefore who can say just how much the cash register has counted in the great plan for making men better. "Thou shalt not" often deters, but "you cannot" goes much farther.

CONDENSED OR "WANT" ADVERTISEMENTS.

SITUATIONS WANTED.

ENGLISHMAN, exceptional Canadian and British experience; capable reliable worker; hardware office or store; used to managing working business. Palmer, 122 McGill, Toronto, Ontario. [52-2]

WANTED—By retiring hardware merchant, position in wholesale house. Write Box 279, HARDWARE AND METAL. [52]

WANTED—Position as salesman by hardware man; five years' experience; strictly temperate; A1 references. Address Drawer E, St. Marys, On.

SUPERINTENDENT WANTED.

FIRST-CLASS man to take full management of Furnace and Stove plant; would prefer if he would take a financial interest in the business, which will bear the closest of investigation. Address Room "C" Confederation Life Building, Toronto. [52-2]

FOR SALE.

$2,500 TINSMITH, Stove, Eavetroughing, Plumbing and Furnace Stock in good natural gas town in Niagara district of twenty-seven hundred population; annual turnover twelve thousand; net p ofits, twenty-five hundred; fine trade; owner must sell on account of ill-health. Address Box 736, St. Catharines.

HARDWARE business, stock practically new, good paying business; liveliest town in Ontario with prospects of a boom; good reasons for selling. Address, Box 230, HARDWARE AND METAL. [52]

HARDWARE and Stoves in good manufacturing town; population 3,9 0; one opposition; stock $5,000. Box 298, HARDWARE AND METAL, Toronto. [52]

AGENT WANTED

ENERGETIC and first-class business man wanted to push the sale of Machine-made Kettle Spouts; state commission required ground covered, what connection amongst buyers of this article, and full particulars. Apply, Ernest Stevens, Stour Works, Cradley Heath, England. [52]

SITUATIONS VACANT.

TINSMITH, capable of making cheese vats and all kinds of good bench work quickly; large furnace and some plumbing experience; must work overtime when necessary; state wages, experience and references; drunks or loafers don't answer. Box 232, HARDWARE AND METAL, Toronto. [52]

EXPERIENCED hardware salesman; a pusher with a taking manner; send references; state salary; when can come; also clerk with two years or more experience, same qualifications. Box 233, HARDWARE AND METAL. [52]

WANTED—Two first-class tinners for furnace work; $3 25 per day, eight hours; steady employment. Apply The Wm. Ralph Co., Vancouver, B.C. [51]

WANTED—Traveler for the North-West; experienced in Hardware, Stoves and Tinware; about 30 years of age preferred and an A1 man; no other need apply. Write, stating experience, salary expected, etc., Box 231, HARDWARE AND METAL, Toronto. [51]

WANTED.

WANTED—To buy a small established hardware business, Ontario preferred. Write Box 280, HARDWARE AND METAL. [52]

STOVE MANUFACTURERS

IF you intend opening up a branch in Canada for the manufacture of stoves, it will be to your interest to communicate with A. B., Room C, Confederation Life Building, Toronto. [52-2]

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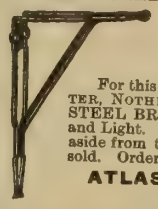
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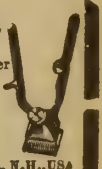
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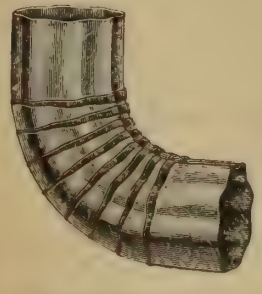
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BUILDING AND INDUSTRIAL NEWS

HARDWARE AND METAL would be pleased to receive from any authoritative source building and industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

R. P. Inglis, Montreal, is making preparations to establish a street railway at Edmonton.

A hydraulic engineer is to investigate the subject of developing power at the Reversible Falls at St. John, N.B.

The convention of the Canadian Manufacturers' Association will be held next year in Winnipeg, September 17, 18 and 19.

It is announced that the Canadian Northern Railway line will be constructed into Prince Albert inside of a couple of months' time.

James A. Ross, Wellandport, is promoting a company to operate an electric railway from Port Maitland, on Lake Erie, to Beamsville, on Lake Erie.

An important pulp wood industry in which from $1,000,000 to $2,000,000 will be invested is to be established in the Back River district near St. Jerome, Que.

The Canadian Machine Telephone Co. has been granted a twenty-one year franchise by the city of Brantford. The price of the 'phones is to be $15 to $25.

The Canadian Tap & Die Company, who recently purchased the Clark & DeMill building at Galt, have received a consignment of thirteen machines, which are now being installed.

About one hundred men will move to Toronto from Stratford on account of the transfer of the factory of the Kemp Manure Spreading Machine Co. to Toronto by the Massey-Harris Co.

Winnipeg financiers will establish an industry at Medicine Hat to be known as the Great West Sewer & Tile Company, with a capitalization of $1,000,000. Brick and tile will be manufactured.

A company of English and American capitalists propose to construct a railroad from a harbor on the north shore of Lake Superior into the country north and beyond the height of land. They also propose to establish pulp wood mills in connection with the road.

The Lake Superior Company has recently made contracts with the Canadian Pacific Railway Company for 60,000 tons of steel rails, deliverable next year. The capacity of the Lake Superior Company for rolling steel rails is now fully taken up until about December 1, 1906.

The Dominion Iron and Steel Company has secured a second contract for rails from the G.T.R., aggregating 37,000 tons. Delivery on the new contract will begin the first of the year, when the I.C.R.'s 25,000-ton order will be completed. It is also said that the steel company has secured a large order for rails from the C.P.R.

The following officers have been elected by the Petrolea Board of Trade for 1906: President, R. S. Ford; vice-president, F. W. Wilson; secretary, T. S. Chatterton; treasurer, W. F. Cooper. Council—The officers and Mayor J. D. Noble, J. E. Armstrong, M.P., J. L. Englehart, Wm. English, Chas. Jenkins, Wm. Lowery, Jas. McCort, J. W. McCutcheon, Dr. C. O. Frirbank, John Kerr and G. G. Moncrieff.

Canada's total exports for the five months ending November 30 of the current fiscal year were greater by five millions than the total exports for the whole of the fiscal year 1895. The increase in domestic exports for the five months over the same period of last year was in round figures $18,000,000, and the gain in the aggregate trade for the five months was $26,000,000. These figures denote the remarkable expansion that has taken place in the trade of Canada in the last decade, and which, to quote a time-worn expression, is still going forward by leaps and bounds. Taking the several items in the exports it will be seen that during the five months agricultural products increased by ten millions, manufactured articles by one million, animals and their products by four millions and a half, and fisheries by about two millions. Exports of products of the mine and of the forest remained stationary. The gain in the importation of free goods is only about half a million, whereas dutiable goods show a betterment of about seven and a half millions. The imports of domestic produce last month increased by seven millions and the exports by nearly eleven millions.

Two important announcements were made by representatives of the Lake Superior Corporation before the Tariff Commission at its recent sitting at the "Soo." One was that a coke plant would be built to supply the coke for use in connection with the steel plant, and the other that the directors had authorized the construction of open-hearth blast furnaces for the manufacture of steel for rails and structural purposes. The open-hearth furnaces could use the ore from the Helen mine, which cannot be used in the company's Bessemer plant. The location of the coke plant depends upon the result of a request that the duty on soft coal used for coking purposes be removed. If it is removed the company will build its plant on the Canadian side of the river. Otherwise it will be located in the Michigan "Soo." The building of a coke plant would mean the employment of 300 men, and the expenditure in Canada of an additional $1,500 daily, which now goes to United States railways to pay the transportation charges on coke brought from the Pennsylvania and Virginia fields. The consumption of coke at the plant amounts to 500 tons each day. This is brought in all-rail, as it cannot be shipped in boats, and thus keeps 1,000 cars constantly in the service of the company. It has been found impracticable to get a supply of coke ahead, so that the steel industry at the "Soo" is at all times subject to railway delays, strikes, blockades, or anything else that may delay the delivery of coke over the long distances between the "Soo" and Virginia and Pennsylvania.

Companies Incorporated.

The J. C. & J. C. Mining Development & Smelting Company, of Illinois, has been licensed to do business in Ontario with W. Proudfoot, of Goderich, as attorney.

The Colonial Cordage Company, chartered by the Dominion Government, has been licensed to do business in the Province of Ontario, with W. B. Converse, of Toronto, as attorney.

The Pacific Construction Company, chartered by the Dominion Government, has been licensed to do business in the Province of Ontario, with C. J. R. Bethune, of Ottawa, as attorney.

Silver Bar Mining Co., Ottawa, share capital five hundred thousand, purpose to mine and mill minerals. The directors are W. D. Gregory, H. F. Gooderham, H. N. Barry, R. Weir and J. F. Boland.

Mac Mining Company, Toronto, share capital three hundred and fifty thousand, purpose to develop mining property. The directors are D. A. McPherson, Toronto, Geo. Chapman and W. E. Buckingham, of Guelph.

J. Eveleigh & Co., Montreal, share capital two hundred and seventy-five thousand, purpose to manufacture trunks, harness, saddlery, hardware, etc. The directors are J. Eveleigh, F. J. Eveleigh, W. E. Boon, E. E. Hutchison and J. W. Blair, all of Montreal.

The Dominion Steel Car Co., Montreal, share capital five hundred thousand, purpose to manufacture railroad rolling stock. The directors are E. F. Surveyor, A. C. Casgrain, C. M. Cotton, J. W. Weldon and S. J. Lehuray, all of Montreal.

St. Lawrence Pressed Brick & Terracotta Co., Montreal, share capital two hundred and ninety-nine thousand, purpose to manufacture brick, etc. The directors are A. W. Blouin, O. Frechette and A. Brunelle, all of Montreal, and R. Lefebvre and F. C. Larose, of LaPrairie, Que.

Meakins Brush Co., Montreal, share capital sixty thousand dollars, purpose to take over the business of Meakins, Sons & Co., manufacturers of brushes, etc. The directors are C. W. Meakins and W. G. Meakins, Hamilton, Ont.; F. A. Ritchie, Toronto; C. W. Meakins, H. R. St. Michael, J. J. Robson and M. Thivierge, all of Montreal.

McCormack Cobalt-Silver Mining Company of Toronto, share capital five hundred thousand, purpose to develop mining property. The directors are R. L. McCormack, R. E. Gibson, John A. McGillivray, F. E. Hodgins, and S. R. Wickett, all of Toronto, H. Bascom and S. S. Sharpe, Uxbridge, and Archie Campbell, of Toronto Junction.

GERMANY'S CEMENT BUSINESS.

Germany, which 15 years ago led the world in its cement manufacture, occupies at the present time a similar preeminent position in cement wares. With the exception of the concrete building blocks America is far behind Europe in the utilization of cement products, omitting, of course, concrete structural work.

According to Cement and Engineering News, there are in Germany 100 factories producing woven wire for reinforcing cement pipe, and round and egg-shaped

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In self colour or Bright Tinned. Perfect shape and quality. Made in 5 sizes. Write for samples and quotation and state quantity required. AGENTS WANTED.

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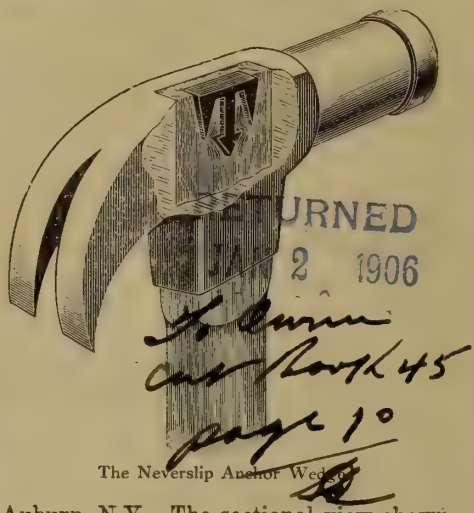
PLATE
GLASS

TORONTO
MONTREAL
OTTAWA
LONDON
WINNIPEG

sewer sections. The clay roofing tile industry has now a competitor in the cement tiles, while building stone is being rapidly displaced by cement substitutes made up into caps, sills, steps, bridge materials, carriage blocks, hitching-posts, newel posts, balusters, water-troughs, relief ornaments and numerous other similar products.

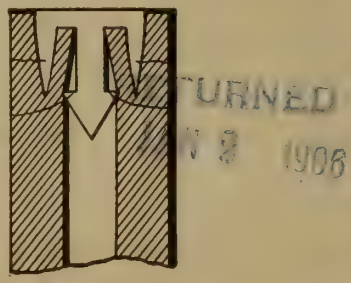
NEVERSLIP ANCHOR WEDGE.

A VALUABLE improvement in wedges for hammers, axes and other tools is the "Neverslip Anchor Wedge" shown in the accompanying illustrations and manufactured by the Neverslip Anchor Wedge Company,



The Neverslip Anchor Wedge.

Auburn, N.Y. The sectional view shown illustrates the operation of the Neverslip, and the reader will notice that when the wedge is driven into the handle, the wood is forced up over the shoulders of



How the Wedge Grips the Handle.

the shank, securely anchoring the handle to the hammer, axe or other handled tool. It not only insures a permanent anchorage of the handle, but it preserves the life of the handle itself. The sale of tools, the heads of which are practically immovable, means satisfied customers, and interested merchants are invited to send for further information, mentioning Hardware and Metal in their communication.

MR. SCHWAB'S ENTERPRISE.

The Bethlehem Steel Corporation, which is expending in the neighborhood of $10,000,000 in additions and improvements, will engage in the manufacture of structural steel under an entirely new process. Beams and other classes of steel under this head will be of solid steel, free from rivets. Under the old process the free use of rivets on columns of certain sizes is necessary.

The manufacture of structural steel under the process secured by the Bethlehem Steel Corporation has never before been attempted in America. A small plant is in operation in Germany. The new material to be produced by the Bethlehem Steel Corporation, it is said, will be stronger and more durable than that now produced, and cost of production will be lower. The new additions to the Bethlehem Steel Corporation, including blast furnaces with a total capacity of 2,000 tons a day, have already been started. According to Mr. Schwab they will not be completed for a year and a half.

BUILDING NOTES.

J. A. M. Aikins, is to erect a six-storey business block at Winnipeg.

Crediton is to have a four roomed school building built next Summer.

The City and District Savings Bank is to have a new bank building in Montreal.

The Canadian Machine Telephone Co. are to erect a central building at Brantford.

J. W. Walker, Toronto, has taken out a permit to build four residences to cost $14,000.

The Hudson Bay Co., Winnipeg, are to remodel and enlarge their store building in that city.

The Royal Bank will build a new structure of granite or marble next Summer in Montreal.

The National Drug & Chemical Co., Montreal, is to erect a factory in that city, to cost $250,000.

The Toronto Laundry Machine Co. are to erect a factory building on Dundas street to cost $12,000.

E. L. McColl has taken out a permit to erect a galvanized iron warehouse in Toronto to cost $6,000.

Raymond & Sons have commenced work on the construction of a new business block at Victoria, B.C.

M. Shea, Buffalo, has purchased a site in Toronto and will erect a new theatre to cost from $150,000 to $200,000.

A. H. Pulford, Winnipeg, has purchased a site and will erect a new auction warehouse and office building.

It is stated that the C. R. Somerville Co., of London have definitely decided to build a paper box factory at Stratford next Spring.

A stone school to cost $60,000 is to be erected at Calgary. W. B. McLaughlin, of Wetaskiwin, has the contract. This figure does not include the heating work.

At a cost of $46,000, a new four-storey brick and stone business block is to be erected in Vancouver for Mr. W. F. Ackland Hood, an English capitalist.

The contract for the construction of the abattoir to be built by P. Burns & Co., in Vancouver, will be awarded to Messrs. Armstrong & Morrison, of Vancouver.

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When you have copies of **Catalogue No. 7** and **Supplements,** you see plainly why **Gurney Cylinder Locks** lead.

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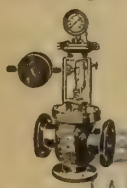
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We make and handle the best in



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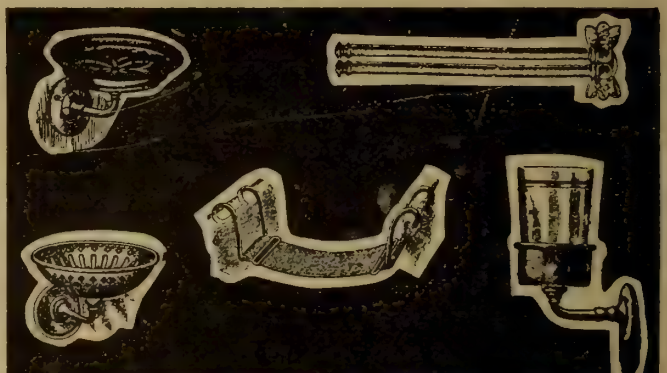


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By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
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ARTICLE XXIII.

HINTS ON PLUMBING.

IN this article it is the purpose to deal with the two points in a plumbing plant, which, outside the actual syphoning of the fixture traps, are more likely to permit the escape of sewer gas into a building, unsuspected, than perhaps any other feature.

In our article on "Testing a Plumbing System," we drew attention to the fact that while the piping system, which includes all soil, waste, and break-syphon connections, could be tested under pressure, that it was impossible to put a pressure above a couple of ounces on the final joints between the fixtures and the said connections, and for that reason great care should be exercised in making the latter.

In this connection the joint between the closet and the soil pipe is undoubtedly the one which is most likely to leak—if the case may be put in that way—and which therefore requires the most care in the making.

In fig. 1 we have a drawing, in section, showing the various parts which go to make this final connection and which are prepared and arranged as follows:

"A" is the 4 in. lead bend which is "wiped" on to a 4 in. brass ferrule (not shown), the ferrule being caulked into the soil pipe as described in a previous article; and the upper end of it is brought up through the floor at least one half inch.

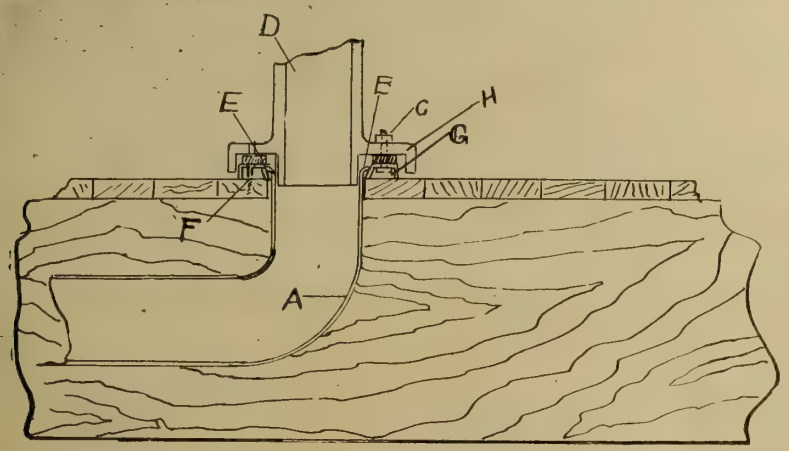


Fig 1.

"G" is a brass ring, called a floor flange, the internal circumference of which tapers inward at the bottom toward the lead bend as shown, and is filed clean and thoroughly tinned before being set in place.

In the brass floor flange will be found a number of holes, two (and sometimes four) of which are for bolts "C" to pass through for the purpose of fastening the closet down later on, and four other holes are for the purpose of screwing the flange to the floor with screws "F."

The method of making the connection is first to cut off the top of bend "A" at a point 1-8 inch below the top of the flange "G" and clean (by scraping) the outside of that portion of the bend above the floor, then, having tinned the inside edge of the brass flange as before directed, lay it on a flat surface to see if the top is level, and, if not, then make it so with a hammer. Now insert the two bolts "C" from underneath the flange and place the latter over the lead bend, set bolts in proper position to pass through holes for same in bottom of closet, and screw the flange to the floor with screws "F."

This being done gently beat the top of the lead bend over against the sides of the flange as at "B" and solder securely all around, using a pretty hot iron, and making the solder flow freely.

This joint having been made, next examine the underside of the flange "H" in the bottom of the closet to see that there are no lumps or other imperfections which would prevent it coming to a good seat on the rubber washer "E" when bolted down.

Great care must be taken when fastening down nuts "C" that the pressure is equal on each side of the closet, because unequal pressure in this regard will probably result in breaking the flange on the bowl.

Another point in the plumbing system requiring special attention is the connections made for draining the basement floor, and while, owing to the space of time often elapsing before any water is present to drain away, it is difficult to provide a connection which under all circumstances will be safe, still, in a good many instances, fixtures are used which needlessly expose the occupant of the building to the dangers of sewer gas poisoning, and most prominent among the latter class is the "Bell" trap, illustrated in fig. 2.

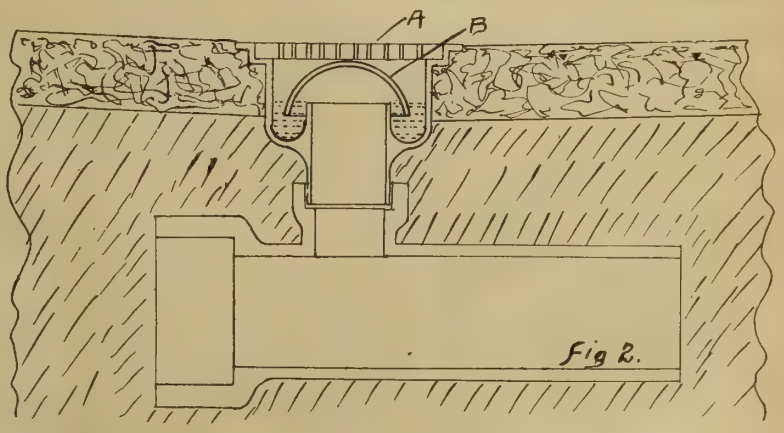


Fig 2.

The "Bell" trap, as will be seen, is a casting having within it a space all around the pipe which enters the drain which is supposed to hold water. Above

the water and level with the floor is a grating "A," and fastened to the center of this grating is the "Bell" "B," the mouth of which is submerged, so that water entering the sewer must go down on the outside of the "Bell" and up on the inside.

The difficulty with the "Bell" trap, however, is that the space in which the water is contained is very small and fills up rapidly with dust and floor sweepings, so that any small amount of water not absorbed in that way is rapidly evaporated, making the fixture a most dangerous one.

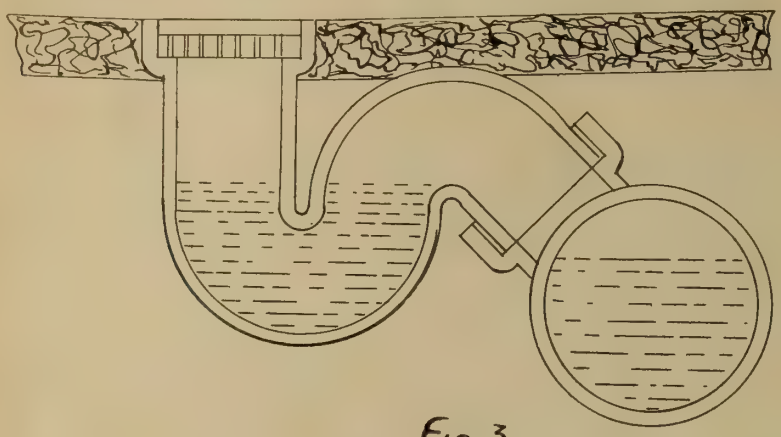


Fig 3

Where it is absolutely necessary to have floor drain for the basement, then the proper connection is one such as is shown in fig. 3, the advantages of which are that it holds a comparatively large amount of water, which is not so easily evaporated as that in fig. 2, because it is further from the surface, and it is not so easily choked up.

It is, however, a decided advantage to have a wash basin or water filter empty into it, as this prevents the possibility of the seal becoming broken for want of fresh water to make up that lost through evaporation.

In the case of cellars where drains are necessary only during the wet season, or simply to take away the water when the floor is washed over with the hose, then it is advisable to use "clean out" in the top of the trap, removing the cover only when necessary.

Fig. "A" shows a connection to the drain for draining the cellar floor, which should not be used, for the reason that, as will be plain, when the water rises in the drain to "A" or even to a much lower depth it will flow back into the trap.

This, of course, would be no disadvantage if nothing but clean water were passing through the drain, but in the case of ordinary domestic sewage, the trap would soon become fouled, and a menace to the health of the occupants of the building.

BATHROOM FIXTURES.

A new line of manufacture recently taken up by the Carriage Mountings Co., 491 King street west, Toronto, is that of nickel plated bathroom fixtures, including towel bars, soap and sponge dishes and baskets, tumbler, tooth and soap holders, comb and brush trays, toilet paper fixtures, robe hooks, shower-errings, bath sprays, and whisk and match holders. All of these lines are illustrated in a small but neat catalogue issued by the company, a copy of which can be had by any inquirer who mentions Hardware and Metal. Being made of nickeled brass, these goods cannot rust, and plumbers and hardware merchants will find them a good line to carry in stock.

SMEAD SYSTEM UNDER FIRE.

The annual report of Chief Plumbing Inspector Reuben S. Benner, of Providence, R.I., makes a strong plea for the replacement of the Smead dry closet system by water carriage sewerage in the schoolhouses of Providence, which are still equipped with the antiquated system. After speaking at some length of the danger to the health of teachers and pupils of a possible reversal of currents in the ventilating ducts of the Smead system, he says:

"The workings of this objectionable system having been explained in previous reports, it is not necessary to review in detail the bad features of the combination of dry closets and heating and ventilating apparatus; it is enough to say that the slightest negligence on the part of janitors or the opening of a window by a teacher may cause back draught and carry the air from the vaults into the rooms instead of drawing the air from the rooms through ducts to the vaults and discharging it into the open air. Years ago where there were no sewers, this arrangement seemed to be the most available substitute for drainage, and it was adopted in many towns and cities, Providence being among the number. But, after thorough trial, it was found lacking in the essential feature of cleanliness, and to-day no recognized authority on sanitation advocates its retention in old or its adoption in new buildings.

"Lack of drainage facilities cannot be urged as a reason for deferring action on one of the most important questions which can be presented to the representatives of the parents of the children who are exposed to the dangers of ventilating ducts leading directly to the dry vaults. There can be no difference of opinion as to the superiority of high class plumbing over all other methods of removing sewage, and whoever compares the dry vaults and the new hygienic plumbing placed last Summer in the three schoolhouses on Branch avenue, Bourn street and Roosevelt street, will commend the action of the committee on city property and advise the abolition of the remaining vaults at the earliest moment practicable.

"In the report of this department for 1903 was an estimate of the cost of approved closets and urinals connected with the city's sewers and of the cost of the coal used in operating the stack heaters employed in maintaining circulation of air between the schoolrooms and the dry vaults. The amount required according to the estimates was $17,600 for the fourteen buildings. Deducting from this estimate the $4,600 specified for the Roosevelt street, the Branch avenue and the Bourn street schools, we find that $13,000 will be required for the remaining eleven buildings. At $5 a ton, the cost of the 171 tons of coal burned in the stacks of the fourteen schools was $855, or $225 less than 3½ per cent. interest on the cost of plumbing. Last year's table showed that forty-five tons of coal were burned in the stack heaters of the Roosevelt street, the Branch avenue and the Bourn street schools. Subtracting $225 from $855, we have a fuel expenditure of $630, or more than the interest on an investment of $13,000 in sanitary plumbing, and, as present prices of coal are much in excess of $5 a ton, it is obvious that the change can be effected without cost to the taxpayers.

"The estimates quoted were on the deep immersion school latrines, which

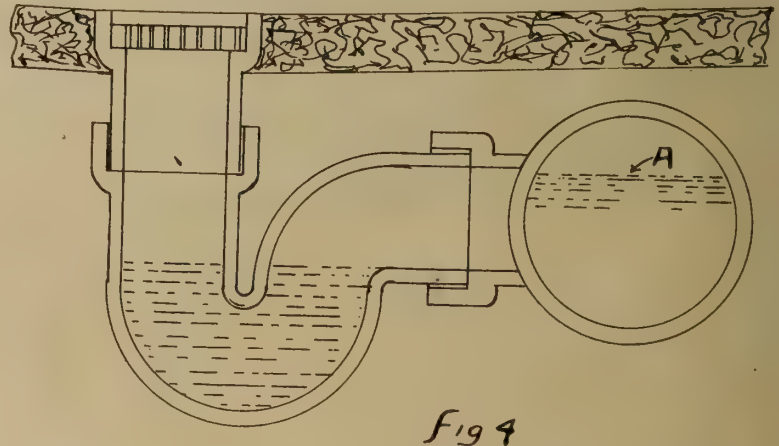


Fig 4

The Paint For The Coming Year



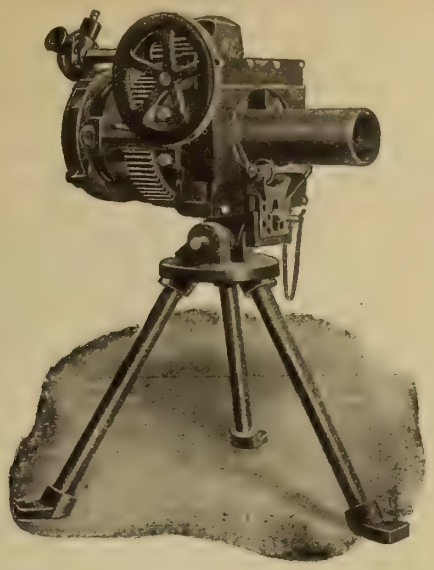
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1" — 4" "Solid-Adjustable" Die Machine

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The "BORDEN" Machines are constructed entirely of Malleable Iron and Steel

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Pipe Threading Machinery and "Solid-Adjustable" Dies

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USE

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TRIED and TESTED PLUMBERS' BRASS GOODS

and your worries will cease

Used by leading Plumbers Everywhere

UNITED BRASS MF'G CO.

CLEVELAND, OHIO, U.S.A.



give excellent results, but which are not as desirable as the improved water flush closets offered since the publication of the 1903 report of this department. The later type may be described as a series of closets having an automatic flushing tank similar to that of the latrine with the added improvement of presenting above the floor line the appearance of the individual closet. The estimated cost of the new individual closet is 20 per cent. higher than that of the latrine or $15,600 for the eleven schools in which unsavory dry vaults are in daily use. The interest on this amount at 3½ per cent. is $546, or $84 less than the cost of the coal burned in the stack heaters on a basis of $5 per ton."

The best type of plumbing thus will cost the city nothing.

MECHANICAL VENTILATION AND HEATING.

When the necessity of mechanical means for the ventilation of buildings and the convenience of steam hot blast apparatus for the combined heating and ventilating of all classes of buildings was fully realized in the early eighties, a radical change was made from the old and proportionately expensive tubular heater to a single large, hollow cast-iron chamber, into which a group of steel pipes was screwed, and through which steam could be circulated. Enclosed in a steel plate covering, which connected with the inlet of a fan, air in large volumes was drawn across these pipes and heated to a temperature dependent upon its quantity and the steam pressure.

But such a type of heater was obviously serviceable only for small plants. For large work a new form of heater section was designed, consisting of a long, narrow, hollow base casting, divided by an interior diaphragm midway of its length into which steel pipes were screwed. Cross-connecting pipes above gave ample opportunity for the steam, entering at one end of the section, to pass up, over and down to the other side, whence it could escape in the form of water or condensation through a chamber in the lower part of the casting.

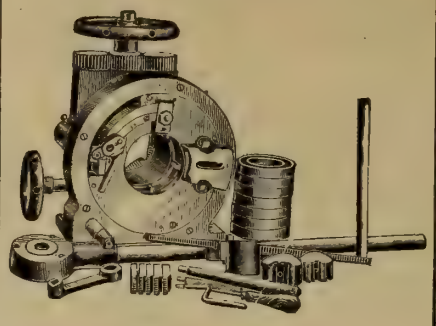
Made up in groups, supplied through a single steam pipe, and enclosed in a fireproof steel plate jacket, this new design has continued to this day as the most convenient, durable and compact upon the market. In its combination with a steel plate steam fan, this forms the hot blast apparatus as manufactured by the B. F. Sturtevant Co., Boston, Mass.

HAMILTON CONSPIRACY TRIALS.

The preliminary hearing of the plumbers' conspiracy cases at Hamilton was continued on Tuesday. Only two witnesses were examined, the secretary of Local Union 67, and George Stevenson, a former member of the Master Plumbers' Association. Mr. Stevenson differed from Secretary Davies about the limit the rules applied to, and said that his assertion could be corroborated if the minute book could be produced.

Crown Attorney Washington conducted the prosecution. George Lynch-Staunton, defending the plumbers, objected frequently to evidence, which he claimed had no bearing on the charges on which they were being tried. He intimated

Merrell Portable Hand Machines



Nos. 5, 6, 9 and 11

The chasers of these machines can be sharpened by grinding and can readily be replaced by chasers, cutting any style or pitch of thread, either right or left. Power is applied by either crank or ratchet lever to the shaft of the pinion, which engages the geared wheel enclosing the dies. The gears are completely housed from dust, and chips are not accessible to any part of the machine to its detriment. No. 9 cuts and threads pipe 2½ to 8 inches inclusive.

CATALOGUE FOR THE ASKING.

THE CANADIAN FAIRBANKS CO. Limited

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NEWMAN'S PATENT INVINCIBLE FLOOR SPRINGS

Combine all the qualities desirable in a Door Closer. They work silently and effectually, and never get out of order. In use in many of the public buildings throughout Great Britain and the Colonies.

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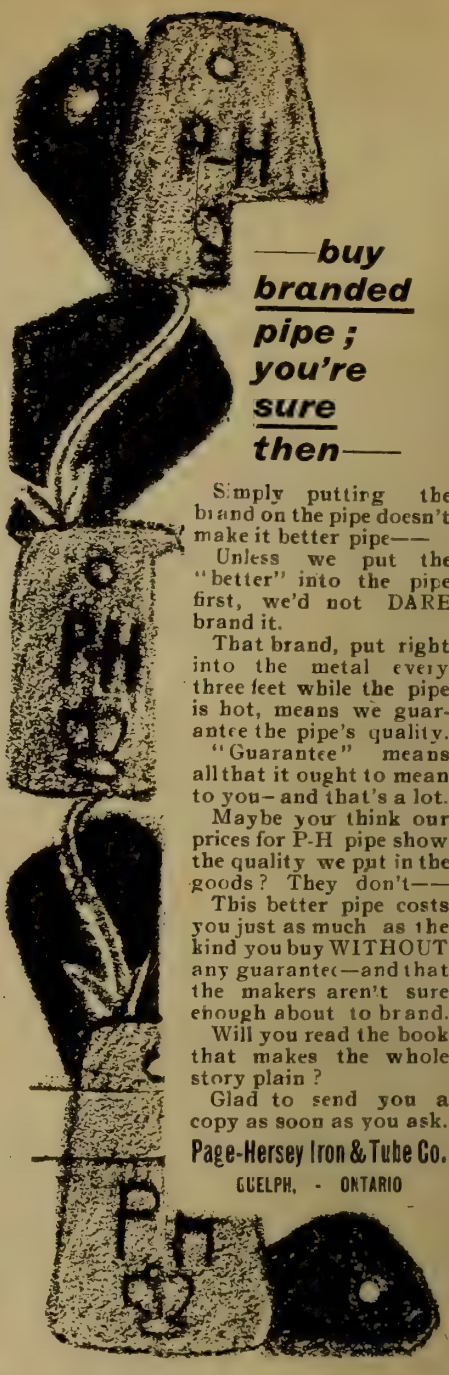
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GLAUBER, CLEVELAND, OHIO, U.S.A.



—buy branded pipe; you're sure then—

Simply putting the brand on the pipe doesn't make it better pipe—

Unless we put the "better" into the pipe first, we'd not DARE brand it.

That brand, put right into the metal every three feet while the pipe is hot, means we guarantee the pipe's quality.

"Guarantee" means all that it ought to mean to you—and that's a lot.

Maybe you think our prices for P-H pipe show the quality we put in the goods? They don't—

This better pipe costs you just as much as the kind you buy WITHOUT any guarantee—and that the makers aren't sure enough about to brand.

Will you read the book that makes the whole story plain?

Glad to send you a copy as soon as you ask.

Page-Hersey Iron & Tube Co.

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THIS TRADE MARK will be found on all GENUINE ARMSTRONG



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THE ARMSTRONG MFG. CO.

BRIDGEPORT, CONN.

that the Crown was simply endeavoring to work up another charge. Most of the objections were over-ruled, as the magistrate held that the inquiry should have wide scope and nothing kept out that might be permitted at the higher court. Stevenson was on the stand for nearly an hour and a half, and underwent a severe cross-examination. The case was resumed on Friday, and Mr. Staunton said that when he got a copy of the rules he would have some further questions to put to Mr. Stevenson.

The first witness was J. Harris, secretary of the journeymen's union. He admitted that there was an agreement between the union and the Master Plumbers' Association. When the trouble arose in Toronto the local masters disbanded and the agreement became void. When George Stevenson violated the rules of the association the union was notified by getting a list of bosses in good standing. Stevenson's men were called out as he was not on the list, the union agreeing that its members would work only for bosses connected with the association.

Mr. Stevenson explained that the trouble which caused him to be dropped from the association was a $20,000 job he did for Jas. Morton at Toronto. The Hamilton plumbers wanted to give this to the Toronto association because Stevenson was infringing on the rights of the Toronto men. He could not get supplies from several Toronto houses openly, but some with whom he had dealt for years sent him supplies secretly, putting private marks on the cases. Stevenson swore he was ordered to add 15 per cent. on a day job, in addition to his regular profit. Ten per cent. of this was to go to the association. On contract work 5 per cent. went to the association.

Crown Attorney Washington said he hoped by books and documents from Toronto to show that the Hamilton association was a branch of the provincial one.

WINNIPEG PLUMBING CRITICISED.

A number of journeymen plumbers waited upon the Winnipeg Board of Works a few nights ago. The delegation asked that when a new plumbing by-law was drawn up they should be consulted. The party consisted of E. A. Bailey, R. Thompson, J. Simmonds, J. Mackie, T. Sova, Geo. Gosling and J. Cooper.

"The plumbing that is done in Winnipeg," said Mr. Bailey, "is simply rotten. It would not be put up with in any other city on the continent. You talk about smells from your sewers but you have them in your houses. We have to put it in to hold our jobs, but the class of work is something fierce."

Ald. Harvey asked whose fault this was and Mr. Bailey replied that it was the fault of the city council. Five years ago they had as good a plumbing by-law as anywhere, and as the council took no action when their attention was called to it, that had been as the standard of work for the city.

PLUMBERS' UNION OFFICERS.

The Toronto Plumbers' Union has decided to subject all applicants for membership to an examination in writing and in practical work. An examining board has been appointed, comprising Mr. W. J. Storey, W. Bush, W. Gray, and C. Horn. The following are the officers of the union for 1906: President, William Bush; vice-president, J. Gilbert; past president, W. J. Brayborn; financial secretary, James Richards; recording secretary, G. Kingsford; inside guard, J. Stacey; outside guard, C. Horn (acclamation); treasurer, T. Maxwell.

PLUMBERS' FRAUD CASES.

As announced last week the conspiracy cases against Toronto plumbers were all concluded so far as the preliminary trials were concerned, practically every person charged with conspiracy being committed for trial at the January Assizes. The fraud cases against firms which participated in the giving of I.O.U.'s were, however, not settled. The first one, in which it was charged that $500 was added to the Isolation Hospital contract and divided amongst unsuccessful tenderers, was gone on with Friday, the 22nd, and adjourned until the following Thursday.

* * *

This information, sworn to by Detective Verney, charges "that Henry Hogarth, William J. McGuire, Robt. W. Harrison, Chas. Robertson, Geo. Wallis, Joseph Clapperton, Joseph Wright, Fred Armstrong, James H. Wilson, Watson Mashinter, A. Welch, Francis R. Maxwell, Herbert Johnson, Alexander Purdy, William Mansell, Kenneth J. Allison and William J. Williams, in the month of June, in the year of our Lord one thousand nine hundred and three, in the city of Toronto, in the county of York, did unlawfully conspire, the one with the other or others, by deceit and falsehood and other fraudulent means, to defraud the municipality of the city of Toronto of the sum of $500 of lawful money of Canada."

* * *

Mr. W. R. Riddell, K.C., for the defence, said he was not ready to go on and suggested that later on he might be able to "shorten the proceedings materially."

"How?" asked the magistrate.

"There's such a thing as pleading guilty."

"There's such a thing," replied His Worship, "of going to a higher court. I don't propose trying these cases. They are too important. It is a very important matter and a very serious case. If there was a conviction before me, I would not fine, because the law is dead against this sort of business. I'm speaking frankly."

Mr. Riddell said that he was in the hands of the court.

* * *

In reply to questions from the magistrate, Joseph Harrison, the first witness, said that there had been eleven I.O.U.'s for $20 on the plumbing and the same number for $25 on the ventilating. The former had been circulated by K. G. Allison and the latter by Fiddes & Hogarth. They amounted in all to $220 and $275. Mr. Riddell contended that the I.O.U.'s were to recompense unsuccessful tenderers for their time and trouble in tendering. In the evidence it transpired that the city treasury had been reimbursed by the repayment of the $500.

* * *

The other three informations for fraud were not investigated, the whole matter being let stand until the "tack combine" case was proceeded with on the 28th when those named above were committed for trial. The other three cases were let stand until next week.

ELECTRIC REFRIGERATION.

Ever since the perfection of the cold storage plant, money and brains have been expended in producing an iceless refrigerator. It was generally conceded that there was a demand on the part of dairymen, soda fountain proprietors, saloon keepers, butchers, and grocerymen for something that would make them independent of the iceman, and this seems at last to have been accomplished. Besides being a great convenience, the new refrigerator has a number of other recommendations, notably its cleanliness. Because of the great amount of moisture in the interior of the refrigerator, and because of the material usually stored within, the walls tend to become foul unless cleaned with scrupulous care at frequent intervals. This condition is brought about all the more quickly where the ice is not pure. Moreover, the charging of the ice receptacle every day is a nuisance. All this is done away with by means of electric refrigeration.

The electric refrigerator is a self-contained and automatic cold storage plant in a small way. It almost takes care of itself. The switch controlling the electric current is the only part that must be manipulated.

A refrigerator of this kind has been in operation for some time as an experiment in a Philadelphia grocery store. When the store is opened in the morning, the current is turned on and remains so during the day. Although the box is being constantly opened and closed, the temperature is maintained at 34 degrees. About the best temperature obtainable by the ordinary method of icing is 40 to 42 degrees. When the store is closed for the night the current is shut off, and the temperature remains constant all night. The difference shown by the mercury between the closing and opening hours is never more than one degree. During all this time no operating expenses whatever have been incurred.

The largest soda fountain in Philadelphia has been in operation for several months, and the materials drawn therefrom have been uniformly several degrees colder than could be secured with the use of shaved ice, and yet no ice has been used in it. A motor of one-half horse-power in the cellar operates a refriegrating plant, which not only keeps the fountain at a frigid temperature, but also does some additional work of a similar character in the cellar.

The iceless refrigerator is much the same in appearance as any large refrigerator. In a compartment at one end a motor and all the necessary compressors and other paraphernalia are contained. The place usually occupied by the ice is given over to a tank containing brine, which is the means of cooling the inferior of the refrigerator. The principle is identical with that of the large refrigerating establishments, but this is the first time that the system has been reduced to an automatic basis. No expert knowledge of either electricity or refrigeration is required in order to operate one of these outfits.

PLUMBING MARKETS

ONTARIO.

Office of HARDWARE AND METAL.
10 Front Street East,
Toronto, Dec. 29, 1905.

INCREASES on brass goods are considered likely very shortly owing to the continued high prices of copper. A 10 per cent. advance has been made in the States. American enameled ware is another line which is booked for an increase, in the opinion of shrewd buyers.

Business during the week has been very dull, but a revival is looked for after the middle of January.

Last week's quotations are unchanged:

Lead Pipe—A normal demand exists with prices held firm. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 20 per cent.

Soil Pipe and Fittings—No falling off is reported as yet. Prices continue firm. We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe—Business continues satisfactory and the market is strong. We are quoting the following prices: Black, 1-4 inch, $2.09; 3-8, $2.09; 1-2 inch, $2.45; 3-4 inch, $3.05; 1 inch, $4.37; 1 1-4 inch, $5.96; 1 1-2 inch, $7.15; 2 inch, $9.54; 2 1-2 inch, $15.00; 3 inch, $19.35; galvanized, 1-4 inch, $2.91; 3-8 inch, $2.91; 1-2 inch, $3.27; 3-4 inch, $4.20; 1 inch, $6.02; 1 1-4 inch, $8.22; 1 1-2 inch, $9.86; 2 inch, $13.14; 2 1-2 inch, $21.45; 3 inch, $28.05.

Iron Pipe Fittings—Trade continues good owing to the heavy demand for heating supplies. We quote: Cast iron, elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N. P., 70 per cent.; C. I. floor, 80 per cent.; hookplates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Galvanized Iron Range Boilers—Prices continue unchanged with trade quite active. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $4.75; extra heavy, $7.50; 35 gallon, standard, $5.75; extra heavy, $8.50; 40 gallon, standard, $6.75; 40 gallon, extra heavy, $9.50; 52 gallon, $11.00; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55. The discount on copper and range boilers continues at 15 per cent.

Solder—Business continues lively with prices well maintained. We quote as follows: Bar solder, half-and-half, guaranteed, 21 1-2c. and wiping at 20c.

Enameled Ware—The Standard Ideal Sanitary Co. report that their output is booked ahead until about April. The demand for their Canadian ware has been enormous, but with the doubling in the size of their plant they will be well able to handle next season's business. We quote as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $18.65; special, $16.65; 3 inch rim, first quality, $19.15; special, $18.15; 5 1-2 feet, 2 1-2 inch rim, first quality, $20.15; special, $18.15; 3 inch rim, first quality, $21.65; special, $19.65. Lavatories, discounts, first quality, 30 to 30 and 5 per cent.; special, 30 and 10 to 40 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.55; special, $2.40.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, December 29, 1905.

SUPPLY houses feel gratified at the good volume of business which is keeping up to the close of the year. Dealers report that their staffs are being kept busy shipping goods.

Prices in all lines keep very firm. Lead pipe is now quoted at 20 per cent. discount, and Jenkins valves (globe, angle and checks) are now 42 1-2 off list.

Range Boilers — Normal conditions prevail. We quote as follows: Iron clad, 30 gallon, $6.00, and 40 gallon, $7.50 net; copper, 30 gallon, $22.00; 35 gallon, $24.00; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The discount has been changed to 20 per cent., the advance being due to the steady rise in pig lead. Our prices are as follows: Discounts 20 per cent. f.o.b. Montreal, Toronto St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—The scarcity reported has been overcome to a certain extent, but it is still difficult to obtain deliveries. Our prices are: Discounts on all sizes of nipples up to 6 inch, 67 1-2 to 70 per cent.

Iron Pipe—The demand keeps very strong and prices are steadily maintained, which we quote as follows: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 per cent.; 3-8 inch, 62 per cent.: 1-2 inch, 71 1-2 per cent.; 3-4 inch, and upwards, 73 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 61 1-2 per cent.; 3-4 inch and upwards, 63 1-2 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15,000; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 71 per cent., and for galvanized 61 per cent.

Soil Pipe and Fittings—Trade shows no let up. We are quoting: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent off.

Solder—We continue to quote the following prices: Bar solder, half-and-half, guaranteed, 22c.; No. 2 (wiping solder), 18c.

THE "TO-LET" SIGN UP.

Since the inception of the conspiracy trials very little business has been done in the offices of the Master Plumbers' and Steamfitters' Co-operative Association, and about a month ago the doors were closed to visitors. The "To Let" sign now appears on the windows and the office fixtures are being disposed of. The association can now be considered practically out of existence, although Secretary Meredith's engagement does not terminate until next May. No efforts to re-organize are likely to be made until next Spring or Summer.

PAPER GAS PIPES.

Paper gas pipes are among the novelties to be reported from Europe. It appears that paper can be used to advantage for this purpose. As to the method of manufacturing the pipes, manilla paper is cut up into strips whose width is equal to the length of the pipe section to be used. The paper bands are then passed into a vessel filled with melted asphalt. After coming out of the bath the prepared strip is rolled uniformly and very tightly around an iron rod or pipe which serves as the core and has the same diameter which the gas pipe is to have. The rolling of the paper is stopped when the right thickness has been secured. After the pipe section which is thus formed has been put through a high pressure it is covered on the outside by a layer of sand which is pressed into the asphalt while still hot. Then the whole is cooled off by placing it in water. The core is taken out and the outer surface of the pipe is treated with a waterproof compound. It is said that the pipe is very tight and is cheaper than metal piping.

"Please shut the door" will be the national watchword for the next few months. A way to get rid of it is to install a good door check and spring. The door will do its own closing then. You might sell a number of these to your fellow merchants, too.

THE MINING CONVENTION.

SHARP controversy between miners and men financially interested in mining existed at the mining convention, which concluded its sessions in Toronto last Saturday. Hon. Frank Cochrane, minister of mines, in referring to charges of favoritism in securing mining locations said: "Pull is dead and is not going to be resurrected. I intend to administer the mining laws to the best of my ability, and justice and equity will come first."

It was decided that it would be injudicious to provide for payment of any royalty or for a special tax applicable to the mining industry, and it was further resolved that there should be only one mining law for the whole of the province.

Another resolution passed was to the effect that all lands of the Crown, whether timbered or not, should be always open for exploration and sale, and never, under any circumstances, be withdrawn by order-in-council or otherwise; that when a discovery of mineral is made a location title be issued to the discoverer, so that he may have a negotiable interest; that after such discovery the owner of a timber berth be given a limited time, say three years, to remove the pine, after which the ownership of the mineral discovery shall be absolute; and that New Ontario and other mining sections should be formed into recording districts, where all applications would be on file and open to public inspection. Amongst other resolutions passed were the following:

"That the Ontario Government grant to the ore-producer a bounty for the production of pig iron by Ontario furnaces when such iron is made wholly from Ontario ores.

"That although it is desirable that assistance be given by the Dominion Government in the way of bounties on pig iron smelted in the Dominion, the convention protests against the present system of bounties on iron smelted from foreign ores, and asks that the same be discontinued when the present law expires in June, 1907, but that the bounty on pig iron made from domestic ore be placed at $3 per ton for the next five years.

"That the Province of Ontario should erect a smelter and refinery capable of refining the silver-cobalt ores, and should make provision for refining the copper and nickel ores of the province.

"That the Dominion Government be recommended to admit coal free of duty, if used to make coke to be used for the smelting or treatment of iron ore."

It was also decided not to form an independent provincial organization in view of the fact that the miners at various centres have decided to form local organizations, which may affiliate with the Canadian Mining Institute.

A LARGE CONTRACT.

The Fredericton, N.B., city council has awarded the contract for putting in a modern sewerage system. Work will begin early next Spring. Contract was awarded to J. B. McManus, Limited, of Memramcook, N.B., for $42,000. The engineers' estimate of the cost was $61,000. The city is to supply all pipe and material at an estimated cost of $21,000.

FIREPROOF BUILDINGS.

CHICAGO may have been the birthplace of the modern fireproof structures, more especially the "skyscraper," but to-day New York City can boast of a larger number of buildings of that type than is to be found in all other cities in the United States and Canada put together. Figures compiled by the New York Fire Insurance Exchange show that in the boroughs of Manhattan and the Bronx there are 1,389 fireproof buildings; in Brooklyn, 113; in Jersey City, Hoboken, etc., 28, making a total of 1,530 such buildings located in the territory under the jurisdiction of the Exchange. In twenty other cities there are 1,490 fireproof buildings distributed as follows (Baltimore is not included, nor do the figures given include buildings under municipal ownership): Boston 265, Buffalo 86, Chicago 298, Cincinnati 51, Cleveland 48, Detroit 8, Indianapolis 10, Louisville 14, Milwaukee 32, Montreal 35, Newark 45, New Orleans 10, Philadelphia 166, Pittsburg 100, Providence 23, Rochester 46, San Francisco 40, St. Louis 190, Syracuse 6, Toronto 17. Total, 1,490.

Some dealers, when making their carver display, place fine tissue paper to protect the cloth in the display boxes so that the goods may be delivered to the purchaser in prime order.



FACTORIES

whose boiler rooms are equipped with a



AUTOMATIC INJECTOR

GENUINE PENBERTHY INJECTOR

have a decided advantage over all others. It means an automatic injector that will work with from 22 lbs. low to 155 lbs. high.

THERE IS NO SUBSTITUTE. ASK THE ENGINEER. WRITE YOUR NEAREST JOBBER.

Brass and Copper Pipe

Our Stock comprises

BRASS: ⅛-in. to 3-in. in Iron Pipe sizes

COPPER: ⅛-in. to 2-in. " " "

All orders shipped promptly. Correspondence solicited

WM. STAIRS, SON & MORROW, Limited, HALIFAX, N.S.

We wish the trade

A Prosperous and Happy New Year

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA



THE NATURO CLOSET

during the short period of its existence has worked wonders in the trade and in many a home.

As a business builder it has more than fulfilled the expectations of many plumbers; as a gigantic stride in the direction of constant health it has proved itself of vast benefit to numbers of people.

Your experience and that of your customers may be equally fortunate. All it needs is for you to make a start by writing us for particulars.

Your only regret will be that you did not do it sooner.

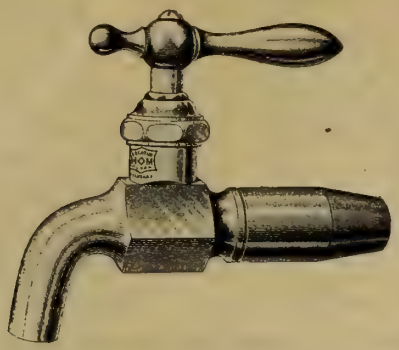
THE NATURO CO.

C. H. MUCKENHIRN
PRESIDENT

Salem, N.J.

MUELLER FULLER WORK

Standard Grade Bibb



You can take one make of fuller bibb apart about as quickly as you can one of another make, but when it comes to assembling them again you will find a vast difference in the time required.

In Mueller Fuller Bibbs the packing is made in one piece which slips over the stem just like a washer, and the eccentric stem is tapered at the end so as to easily enter the ball stem hole, even though the latter be a little out of position. They can be assembled as quickly as they can be taken apart.

Mueller Fuller Bibbs are made in plain and hose patterns, and with tail pieces for all styles of pipe connection. Iron pipe tail pieces have the hexagon on either end desired. The bibb illustrated is the plain pattern with lead pipe tail piece.

Each bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

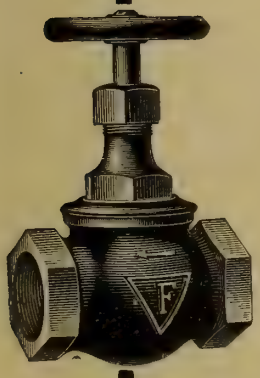
SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

LAST CALL FOR 1905



USE FAIRBANKS VALVES

THE CANADIAN FAIRBANKS CO. LTD.

MONTREAL TORONTO WINNIPEG VANCOUVER

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

Ask for the J.C.M. Brand of Canadas

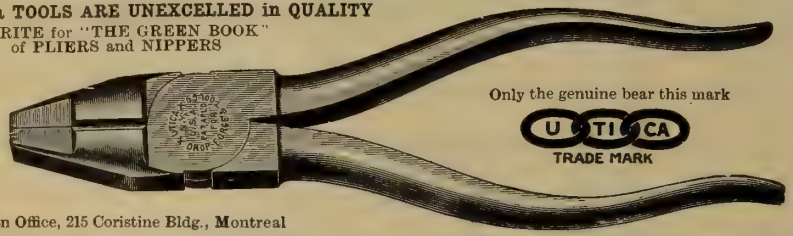
Galvanized—
3 Crown, Black
half-polished—
1 Crown.

APPLY TO First-class makes at low prices.

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

No. 50. Standard Side-Cutting Plier

Utica TOOLS ARE UNEXCELLED in QUALITY
WRITE for "THE GREEN BOOK" of PLIERS and NIPPERS



Only the genuine bear this mark
U TI CA
TRADE MARK

Canadian Office, 215 Coristine Bldg., Montreal
Factory, Utica, N.Y. ***UTICA DROP FORGE & TOOL CO., 296 Broadway, New York***

FOR SPRINGS,

made and backed up by a concern with fifty years experience, send your specifications to

The WALLACE BARNES CO., BRISTOL, Conn.

NEW CATALOG JUST ISSUED.

The most light for the least money

C. G. E. INCANDESCENT LAMPS

LONG LIFE EFFICIENCY RELIABILITY

Write for prices and quantity discounts.

CANADIAN GENERAL ELECTRIC CO., LIMITED

HEAD OFFICE: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Vancouver, Rossland.

SOMEBODY PROFITS. DO YOU?

There is no use our telling you there is money in selling

METALLIC ASH-SIFTERS

You know that. You also know that if you don't sell them somebody else in your town does. Now, why not you? Let us send you a stock for trial and also a few of our **PATENT WIRE BALES** and **METAL COVERS.** Once you were to carry a supply of **METALLIC ASH-SIFTERS** you would say good-bye to wooden sifters. Get our booklet and read it.

C. M. CUTTS & CO., Toronto Junction, Ont., Sole Makers

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED

STANDARD OAK

FOR A HEATER.

SOVEREIGN

AS A COOKING RANGE.

Finest Fuel Saving Furnaces in Canada

Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.

Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

A WORD TO PLUMBERS

Our Pipe Die reduces the labor in threading pipes at least one half. Try it, it will cost you nothing to try it. We secure you against possible loss by our offer to return your money on return of the die within thirty days, if it is not satisfactory. It is surely worth a trial on these conditions.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO



Kerr's Extra Standard

GLOBE VALVES

are of the best quality. They give the best of service and are moderate in price.

Every valve is TESTED, and PACKED, and GUARANTEED.

WRITE FOR CATALOGUE

The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE - ONTARIO

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO

ALEXANDER GIBB
Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID
used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not gotthem, write direct to

R. E. THORNE
768 Craig Street MONTREAL
29 Melinda Street TORONTO

$ $ $ $ $ $ $ $ $ $

CONTRACTS

mean dollars for the pockets of contractors. The weekly reports in the

CANADIAN CONTRACT RECORD

tell where contracts may be had.
$2 per year buys them. Address

THE CONTRACT RECORD
TORONTO, MONTREAL, WINNIPEG and VANCOUVER.



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

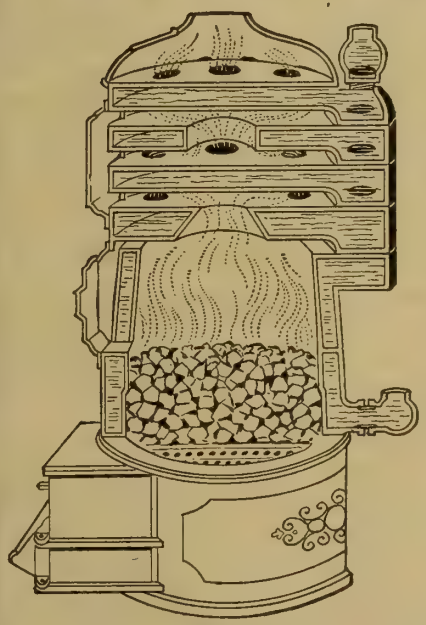
A BETTER WAY

Business comes easier to the dealer who features the Oxford lines. His customers are absolutely and lastingly satisfied—they advertise the superiority of his wares and bring other customers along to his place.

To disappoint a customer, even in a little thing, is bad business. To disappoint a customer in a heating system will damage the best business in the country.

You can depend on the

OXFORD HEATING SYSTEM



to give perfect satisfaction. It will always make you friends as well as money.

The Oxford ("B" Series) Boiler is the most powerful and economical heating apparatus. A glance at the improved construction of the fire pot is enough to convince all practical men of its superiority. The immensely increased heating capacity obtained by the overhung upper walls is apparent at once. This, in conjunction with the extra deep first water section with bell-shaped flues, still further increases the heating power, insuring fuel economy.

We use our Oxford Steel Push Nipples in making all connections—a permanent metal-to-metal joint.

The **OXFORD STEAM** and **HOT WATER RADIATORS** used in combination with Oxford Boilers mean comfort, economy, universal satisfaction and more business.

Talk the Oxford Heating System now and you won't have to complain of dull times.

Send for the Gurney Oxford Book of Steam and Hot Water Heating Apparatus.

WE also manufacture Cast Iron Stoves and Ranges, Steel Plate Ranges, Gas Stoves, Ranges and Heaters, Hotel Ranges, Warm Air Furnaces and all kinds of Cooking and Heating Apparatus, Plumbers' Supplies,

The Gurney Foundry Co., Limited
TORONTO WINNIPEG VANCOUVER
The Gurney-Massey Co., Limited, Montreal, Que.
The Gurney Standard Metal Co., Limited, Calgary, Alta.
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WE WANT YOU TO REALIZE

THAT IF YOU ARE NEGLECTING TO ORDER A SUPPLY OF

"BLACK DIAMOND"

BUILDING PAPER
READY ROOFING



TARRED FELTS
WRAPPING PAPER

You are neglecting to seize "sure-trade" opportunities. "Black Diamond" goods sell readily because they are the best that can be got.

"Cyclone" and "Joliette" brands of **SHEATHING** are profitable lines to carry also. They bear the stamp of merit.

Don't you want the best goods?

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

F. J. C. COX, Winnipeg, Sole Agent for Northwest Provinces.

CURRENT MARKET QUOTATIONS.

Dec. 29, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$39 00 $40 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, 14 x 20 base	$6 50
IX 14 x 20 "	8 00
IXX, 14 x 20 base	9 50
Famous, equal to Bradley—	
I C, 14 x 20 base	6 50
I X, 14 x 20 "	8 00
I X X, 14 x 20 base	9 50
Raven and Vulture Grades—	
I C, 14 x 20 base	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C, 14 x 20 base	5 50
I X, 14 x 20 "	6 50
IXX, 14 x 20 "	7 50

Allaway's Best"—Standard Quality.

I C, 14 x 20 base	4 75
I X, 14 x 20 "	5 75
I XX, 14 x 20 "	6 75

Bright Cokes.

Bessemer Steel—	
I.C., 14 x 20 base	3 75
I.C., special sizes, base	4 00
20x28	8 00

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 00
IX., Terne Tin	8 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. / " 14x60, " / " 14x65, "	7 00

Tinned Sheets.

2x30 up to 24 gauge	7 50
" 26 "	7 50 8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 97½	2 00
Forged iron "	2 22½	2 43
Refined " "	2 37½	2 40
Horseshoe iron "	2 37½	2 40
Hoop steel, 1½ to 3 in. base		2 75
Sleigh shoe steel "	2 17½	2 20
Tire steel	2 27½	2 30
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality, best warranted		0 18
"T" " warranted		0 14
"O" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 65
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 16
" Silver steel		0 12
" Black Diamond	0 08	0 09
Thos. Jowett & Sons B.P.L. tool steel annealed		10½
Self-hardening		45
Rapid self-hardening		75
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

Canada Smelting Co., Limited.

Hard Genuine Babbit	0 40
Standard Anti-Friction Babbit	0 30
" Special Babbit	0 25
Car Box Babbit	0 20
Extra "	0 15
No. 1 "	0 12
No. 2 "	0 07
No. 3 "	0 05½
Standard Phosphor Tin	0 40

On large orders special discounts given.

BLACK SHEETS.

	Montreal.	Toronto
14 gauge		2 55
16 gauge	2 40	2 30
18 "	2 35	2 35
20 to 24 gauge	2 30	2 50
26 "	2 30	2 70
28 "	2 40	2 90

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary, 52 sheets	2 60
All bright "	3 85
Galvanized Canada Plates, 52 sheets	4 10

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 25	
22 to 24 gauge 3 50	3 75
26 " 3 75	4 00
28 " 4 00	4 25

Apollo.

10¾ oz. (American gauge)	4 15
28 gauge	4 00
26 "	3 85
24 "	3 75

Comet Bell.	Queen's Head.
16 to 20 gauge 3 25	
22 to 24 gauge 3 50	3 75
26 " 3 75	4 00
28 " 4 00	4 25

Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

Ingot,	Per 100 lb.
Casting, car lots	20 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	26 00
" round and square,	
Cut 1 to 2 inches	25 00 26 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	25 00
Plain, 14 oz.	26 00
Tinned copper sheet	27 00
Planished	34 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 25
" 35 to 45 " "	0 24
" 50-lb. and above "	0 23

BOILER AND T.K. PITTS.

Plain tinned / Spun } 35 per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 25	7 50
Domestic " "	7 00	7 25

ZINC SHEET.

5-cwt. casks	8 00	8 00
Part casks	8 25	8 25

LEAD.

Imported Pig, per 100 lb.	4 65
Bar, "	4 80
Sheets, 4 lb. sq. ft., by roll	0 05½
Sheets, 3 to 6 lb. "	0 05½

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	15 00

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Net list. Prices are f. o. b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard	Ideal	Enameled.	
Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$19 15		17 15
5 feet "	20 15		18 15
5½ " " "	21 65		19 65
6 " "	24 40		22 40
Plate E II			
5 feet 2½ in. "	18 65		16 65
5½ " 2½ " "	20 15		18 15

LAVATORIES.

	1st quality.	Special.
Plate E 100 to E 103	30 p.c.	30 & 10 p.c.
" E 104 to E 132	30 & 5 p.c.	40 p.c.
Sinks 18 x 30 in flat rim, A quality		2 55
" " " " " B "		2 40

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 09
⅜ "	2 09
½ "	2 43
¾ "	3 05

Black pipe—	Per 100 feet.
1 inch	4 37
1¼ "	5 96
1½ "	7 15
2 "	9 54

Galvanized pipe—	
¼ inch	2 91
⅜ "	2 91
½ "	3 27
¾ "	4 20
1 "	6 62
1¼ "	8 22
1½ "	9 86
2 "	13 14

Lead Pipe discount 20 per cent.

Malleable Fittings—Canadian discount 35 per cent.; American discount 25 per cent.

Cast Iron Fittings—Standard bushings 65 per cent.; headers. 65; flanged unions and lipped, 65; malleable bushings, 60; nipples, up to 6 in., 75 per cent.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c

Cushion work, discount 50 and 10 p.c.

Fuller work, discount 70 p c.

12 dozen lots and over of the above, extra discount 10 per cent.

Lever handle Stops and Waste, discount 60 per cent Within lots of 12 dozen and over an extra discount of 10 per cent.

J.M.T. Globe, Angle and Check Valves, discount 55 per cent.

Standard Globe, Angle and Check Valves, discount 65 per cent.

Kerr's special standard globes and angles, discount 65 per cent.

Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.

Kerr's standard brass checks, discount 55 p.c.

Kerr's standard brass disc steam radiator valves, discount 65 per cent.

Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.

Kerr's quick-opening hot-water radiator valves, discount 65 per cent.

Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.

Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.

J. M. T. Radiator Valves discount 55 per cent.

Standard Radiator Valves, discount 65 per cent.

Patent Quick-Opening Valves, discount 70 per cent.

No. 1 compression bath cock net	1 90
No. 4 " " "	1 75
No .7 Fuller's "	2 10
No. 4½ " "	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 65 per cent	
" iron " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

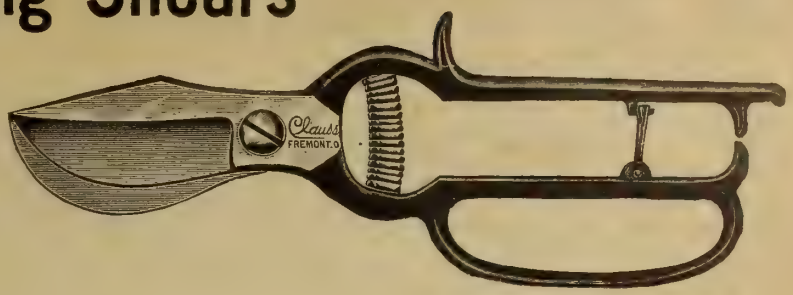
Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
0	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand Pruning Shears

Fully Warranted

Our Plain Pruning Shear is of the very best our secret process of manufacturing can produce. There is no question as to the quality, which is unsurpassed.

Filed Handles and Finely Polished Blades. Ask for Discounts.



The Clauss Shear Co., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Montreal	Toronto
Bar, half-and-half, guaranteed	0 22	0 21½
Wiping	0 18	0 20

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lbs.
Pure	5 50 5 80
No. 1	5 10 5 25
No. 2	5 05
No. 3	4 12½
No. 4	4 05
Munro's Select Flake White	5 65
Elephant and Decorators' Pure	5 50
Tiger brand, pure	5 75
Decorators' Special for exterior use	5 00
Monarch	5 75
Decorator's Pure	5 50
Essex Genuine	5 00
Sterling Pure	5 75
Island City Pure	5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06 0 08
French V. M.	0 06½ 0 07
Lehigh	0 06 0 06½
Pure	0 07½
No. 1	0 06½
No. 2	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 40
" " " ½ gal.	1 35
" " " gal.	1 30
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

	Canadian	English
	Per lb.	
Petroleum, barrels	0 15½	0 15¾
Arsenic, kegs	0 15½	0 16
50 and 100 lb. drums	0 16	0 16½
25 lb. drums	0 16½	0 17
1 lb. paper boxes	0 17	0 17½
½ lb. tins	0 18	0 18½
1 lb. paper boxes	0 19	0 19½
1 lb tins		0 20½

Terms 2 pe cent. off 30 days or 90 days.

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08 0 08½
French medal	0 10 0 14
White, extra	0 18 0 22
Gelatine	
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	
Ground	0 12 0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes	
Single bit, per doz.	7 00 10 00
Double bit, "	10 00 18 00
Bench Axes, 40 per cent.	
Broad Axes, 25 per cent.	
Hunters' Axes	5 50 6 00
Boys' Axes	6 25 7 00
Splitting Axes	7 00 12 00
Handled Axes	10 00
Red Ridge, boys', handled	5 75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00 7 00
Best quality	10 00 12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.	

Farm.

American, each	1 35 3 00

House.

American, per lb.	0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65 0 90
Diamond, Shell, per doz.	1 00 1 50
Nail and Spike, per gross	2 25 5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent
" " ⅜ and smaller	60 and 0
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS.

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00 9 00
American "	12 00 18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 55
Tarred Fibre " 400 "	0 65
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00 1 50
Bullard's "	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	50 8 50

CHALK.

Carpenters' Colored, per gross	0 45 0 75
White lump per cwt.	0 60 0 65
Red	0 05 0 06
Crayon per gross	0 14 0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discoun 37½ to 40 per cent.

Button's imitation per doz.	5 00 9 00
man "	0 60 0 66

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55 1 00
Axle "	0 22 0 33
Screw "	0 22 1 00
Awning "	0 35 2 50

PUMPS.

Canadian cistern	1 40
Canadian pitcher spout	1 80

A Profitable Investment

is made when you lay in a stock of Paterson's Building Papers and Wire Edged Ready Roofing. These goods have the Quality and Reputation that make them popular with your customers.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

COPPER AND NICKEL WARE.

Copper boilers, kettles, teapots, etc., 45 per cent.
Copper pitts, 35 per cent.

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	" 0 95	1 65
English	" 2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 1 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 32
7-inch	"	1 48

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5	"
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50.

GLASS.

Window. Box Price.

Size United Inches.	Star Per 100 ft.	Double Diamond Per 100 ft.
Under 26	$4 25	$6 25
26 to 40	4 65	6 75
41 to 50	5 10	7 50
51 to 60	5 35	8 50
61 to 70	5 75	9 75
71 to 80	6 25	11 00
81 to 85	7 00	12 50
86 to 90	....	15 00
91 to 95	....	17 50
96 to 100	....	20 50
101 to 105	....	24 00
106 to 110	....	27 50

For less than 100 feet of one size, pane list less 33⅓%. Terms 90 days net 2½ 30 days.

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz. 1 10	1 20

Sledge.

canadian	per lb. 0 07	0 08½

Ball Pean.

English and Canadian, per lb. 0 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net	3 00	4 00
Store door	per doz. 1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz 1 00	1 25

Plane.

American	per gross 3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.		
Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½
Light T and strap, discount 65 and 5 per cent.		
Screw hook and hinge—		
6 to 10 in. per 100 lb.	....	4 50
12 in. up "	....	3 25
Spring, No. 20, per gro. pairs	....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz. 4 00	4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz. 0 50	1 10
Clothes line, No. 61	" 0 00	0 70
Harness	" 0 60	12 00
Hat and coat	per gro. 1 10	10 00
Chandelier	per doz. 0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

M.R.M.'Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

Discount 50 per cent.

PICKS.

Star	per doz. 3 00	3 25

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz. 2 75	3 25
Bronze, Genuine	" 6 00	9 00
Shutter, porcelain, F. & L. screw	per gross 1 30	2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz. 4 50
No. 3, "Wright's"	" 8 50
Ordinary, with O burner	" 4 00
Dashboard, cold blast	" 9 00
No. 0	" 5 75

Japanning, 50c. per doz. extra.

LAWN MOWERS FOR 1906.

Woodyatt 12 to 20-in. cut	$3 95 to $5 00
Star, 12 to 16-in cut	2 75 to 3 05
Daisy, all sizes	2 50
Woodyatt, ball bearing, 12 to 20-in	5 60 to 7 45

Philadelphia, King Edward and grass boxes, 50 per cent. off 1905 list.

Horse Lawn Mowers, "Special.

Discount, 40 per cent., with freight concessions in quantity shipments.

LEMON SQUEEZERS.

Porcelain lined	per doz. 2 20	5 60
Galvanized	" 1 87	3 85
King, wood	" 2 75	2 90
King, glass	" 4 00	4 50
All glass	" 0 50	90

LOCKS.

Canadian, 0 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz.
Cabinet.
Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz. 0 50	6 00
Eagle, discount 20 to 25 per cent.		

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz. 1 25	1 50
Carpenters', hickory,	" 1 25	3 75
Lignum Vitae	" 3 85	5 00
Caulking, each	0 60	2 00

MATTOCKS.

Canadian	per doz. 5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ....each 1 15

MILK CAN REPAIRING.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	....	10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz. 1 25	3 50
Brass	" 1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 45 per cent
Flaring pattern, discount 45 per cent.
Galvanized washtubs, discount 45 per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PIUES.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross 1 35	1 50
Brass head	" 0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross ...	7 80
" "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ 40 per cent.

We make Electric Fixtures, Sockets, and Cut-Outs

Munderloh & Co

Electrical Supplies of all kinds. MONTREAL.

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's ..... "	3 00	15 00
Tinners', solid ..... per set	....	0 72
" hollow ..... per inch	....	1 00

RAKES.

Wood ..... per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11 00
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 40 per cent.
Copper Burrs only, discount 30 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal		0 10½
Pure Manilla		0 15
"British" Manilla		0 11½
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea		0 16
Jute		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet ..... per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet ..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished ....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

S. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's ....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete ..... each 0 75 2 75
" frame only ..... each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century $6 25
" " No. 1 Maple Leaf 5 25
" " Happy Medium 4 25
" " Watch Spring 4 25
" common frame 4 00

SASH WEIGHTS.

Sectional ..... per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb. 0 31

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's ..... per doz.	0 65	1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style ..... per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style .... per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish ..... per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood ..... per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net	6 00	9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24		0 85
" 18 x 30		1 00
" 18 x 36		1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb. ..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ..... per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	...	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita	per lb.	0 28	0 60
Hindostan	"	0 06	0 07
" slip	"	0 09	0 09
Labrador	"	....	0 13
" Axe	"	....	0 15
Turkey	"	....	0 50
Arkansas	"	....	1 50
Water-of-Ayr	"	....	0 10
Scythe	per gross	3 50	5 00
Grind, 40 to 200 lb., per ton		....	25 00
" under 40 lb., "		....	28 00
" 200 lb. and over		....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch ..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk .. 85,	12½ and 12
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and apanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin ..... per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's ..... each	0 90	2 85
" steel ..... each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German ..... per doz.	4 75	00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian ..... per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress ..... per lb	0 33	0 45
Staging ..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "		6c. extra.
11 "		12c. "
12 "		20c. "
13 "		30c. "
14 "		40c "
15 "		55c. "
16 "		70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 52½ per cent. off the list.
Copper wire, discount 52½ per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 1 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14, $3.75 to $3.75—No 15, $4.30—No. 16, $4.30 from stock. Base sizes, Nos. 6 to 9, $2.17½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17, $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure, F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb	....	2 75
Galvanized, plain twist	....	2 75

Galvanized barb, f.o.b. Cleveland, $2.42½ for small lots and $2.30 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net	1 50

Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Daisy	48 00

WRINGERS.

Leader, 11 in. ..... per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days

WROUGHT IRON WASHERS.

Canadian make discount 40 per cent.

They All Roll Best—The Best All Roll on "Storm King Barn Door Track"



The superiority of **Storm King Track** is due to carefully selected material, good workmanship and perfection in every detail. **Storm King Rail** possesses all the salable qualities that go to make it what it is—the best Barn Door Rail made in Canada.

Every piece stamped "Genuine Storm King," with our name. Insist on securing this brand.

MADE BY

Ask Your Jobber

SAFETY DOOR HANGER CO., - Hamilton, Canada



Walker's Quick and Easy Meat and Fruit Juice Press

Made to clamp to the table or hold in the hand. They are made in three sizes and three styles of each size; capacity, one-half pound of meat at a press full.

As all the juice is out as soon as screwed down, several pounds can be pressed in short space of time. The real capacity is equal to others of larger and more expensive prices.

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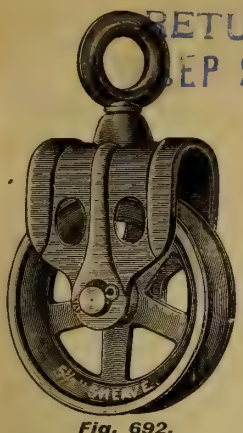


Fig. 692.

Cast Iron Pulley

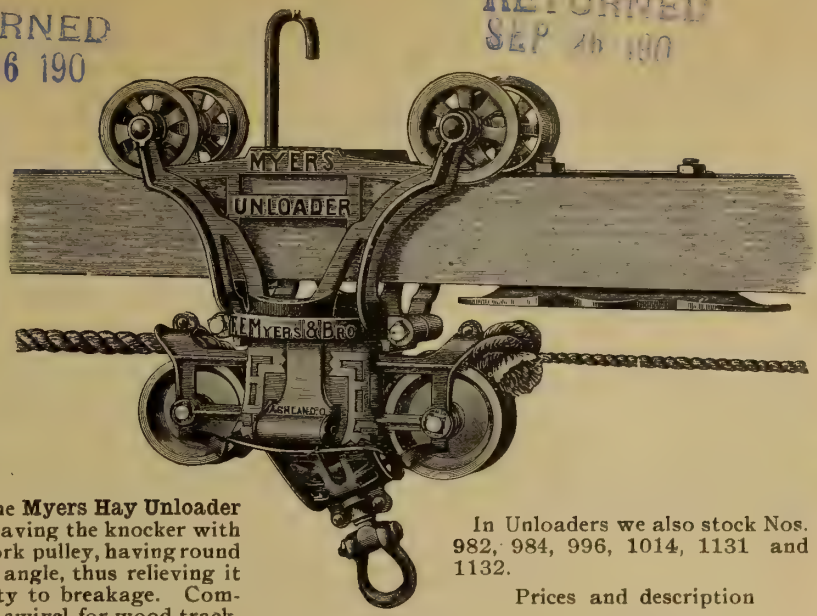


Fig. 996 illustrates the **Myers Hay Unloader** as it would appear in leaving the knocker with a swinging load. The fork pulley, having round top, can swing at any angle, thus relieving it from strain and liability to breakage. Combination, reversible and swivel, for wood track. It has seven-eighth inch turned steel axles.

Fig. 996.

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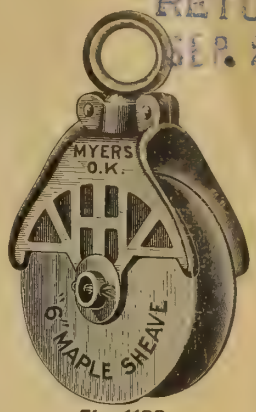


Fig. 1133

Myers O.K. Plain Pulley



Fig. 436

Rafter Bracket

MYERS' HAY TOOLS



Fig. 266.

Floor Hook

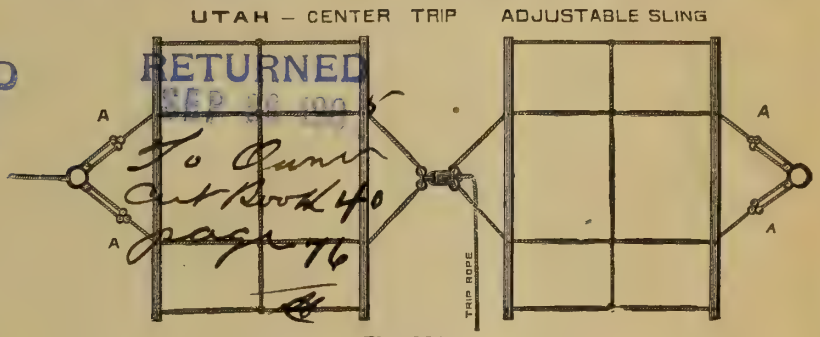


Fig. 621

Fig. 621 illustrates the **Utah Center Trip Adjustable Sling**, which has all the advantages of the Myers Center Trip Adjustable Sling, with the following changes: Instead of a three-foot cross-bar, the Utah has a six-foot, which extends beyond the side-ropes eighteen inches on either side, to which is attached an additional rope, and also a cross-rope attached to each of the main ropes, as shown in the cut. This sling really forms a net, and is designed to carry fine stuff. We also stock No. 620.

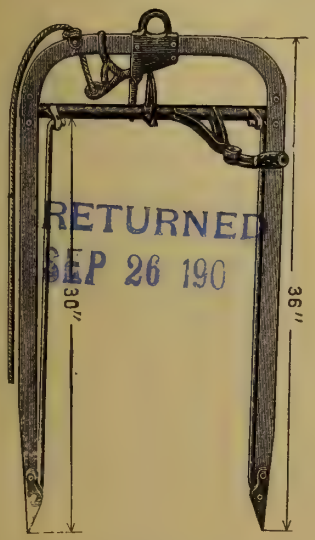


Fig. 670

Fig. 670 illustrates the **Myers Lock Lever Harpoon Hay Fork.** This fork is 19 inches wide, is made of spring steel; sets with one lever and locks open. While it is not larger than the regular double harpoon (except in width), it has 50 per cent. more capacity, owing to the cross-bar being placed nearer the top; and it gathers the grain or hay from the end of point, not two inches from the bottom, as all old-style forks do. We also stock No. 268.



Fig. 267

Wood Track Hanging Hook



Fig. 324.

Double Steel Track and Splicing Clamp.

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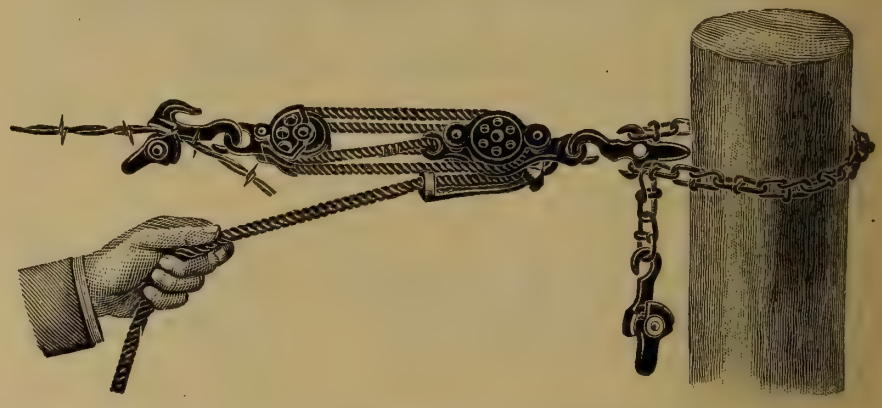
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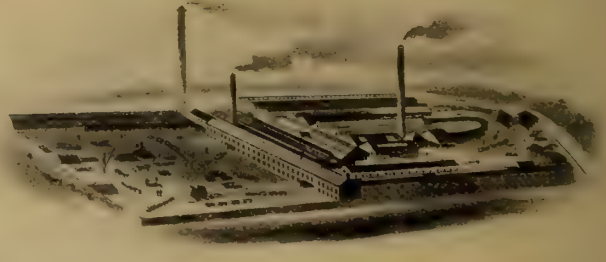
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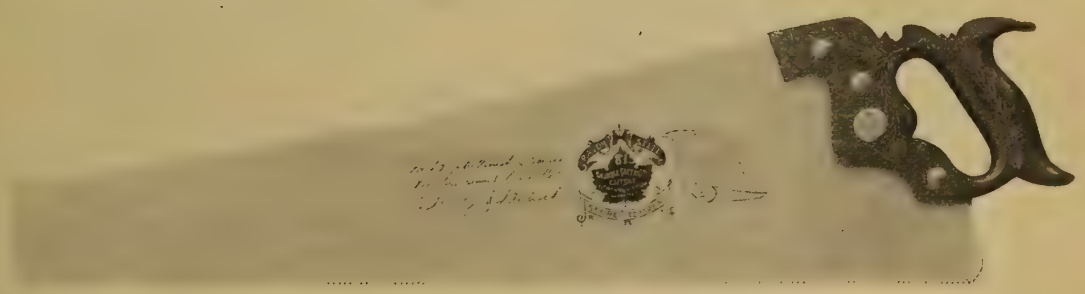
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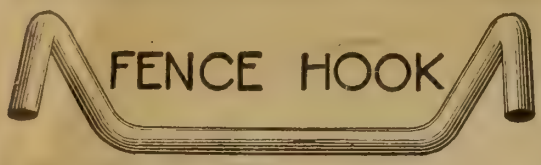


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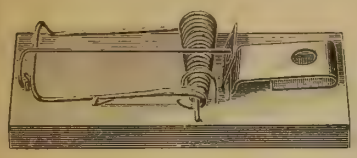
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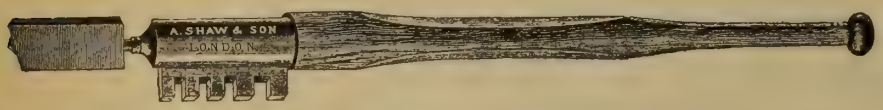
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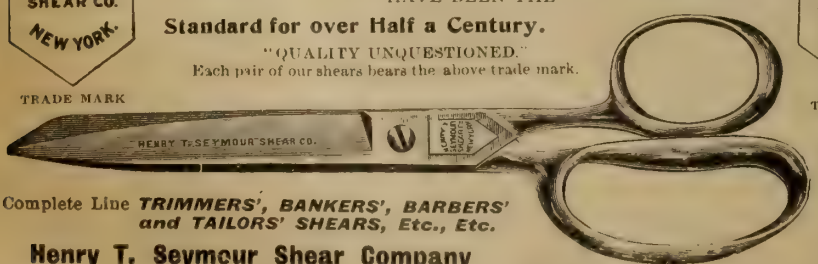
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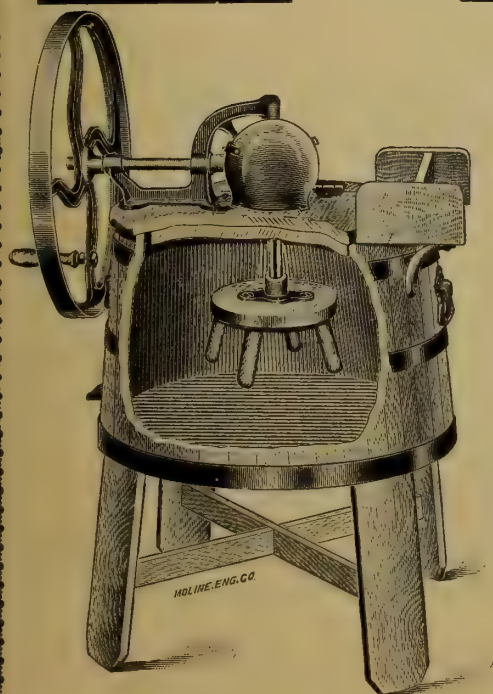


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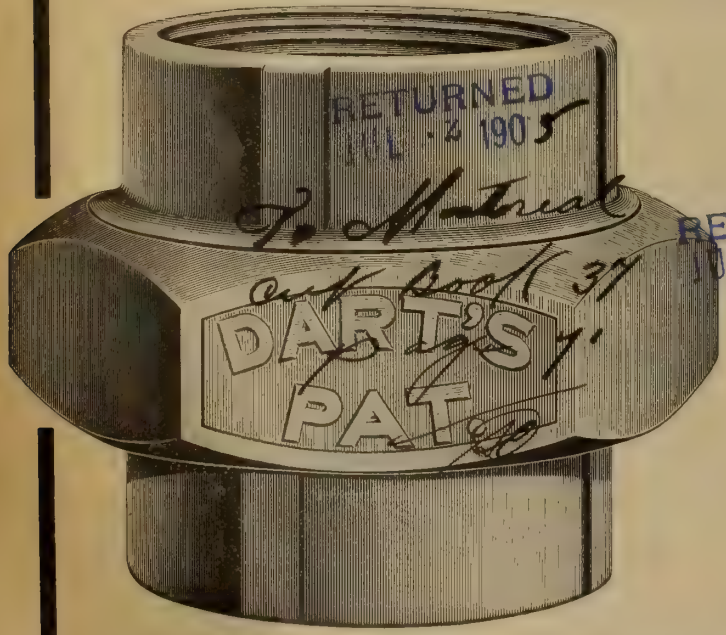
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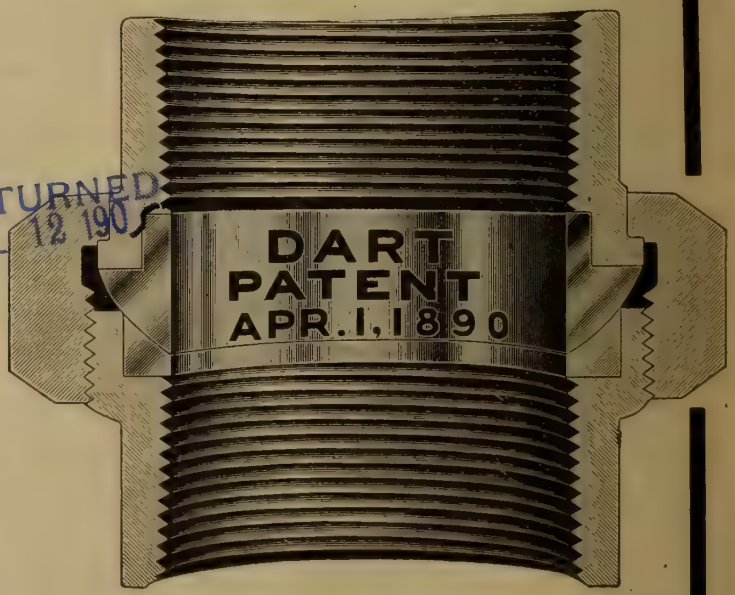
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Wholesale Hardware and Iron Merchants, - - Montreal, Canada.

Nearly a Century in the Hardware Trade.

BRANTFORD, JULY, 1905.

MR. DEALER :

Just a minute of your close attention to a subject in season—**BINDER TWINE.**

Our Factory is in operation at hurry-up speed and full capacity.

Orders are coming in daily.

It is an even race between supply and demand.

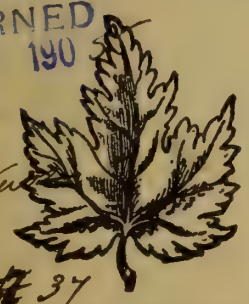
We offer you, at regular prices, **OUR 4 MAPLE LEAF BRANDS**, which are not surpassed in quality by any others in the Canadian market.

To state our claim briefly :—We have succeeded in making our goods the **BEST** for the **FARMER** to **BUY** to **USE**, and therefore the best for the **DEALER** to **BUY** to **SELL**.

REPEAT ORDERS we are receiving from those who have been selling our goods.

TRIAL ORDERS are particularly welcome to us, as every one we receive adds one more to our list of satisfied customers.

RETURNED
JUL 3 190



Registered Trade Mark.

These are our four Brands :

GILT EDGE, 650 ft., Pure Manila
GOLD LEAF, 600 ft., Manila
SILVER LEAF, 550 ft., Standard Manila
MAPLE LEAF, 500 ft., Standard



A word to the wise is sufficient. Thanks for your attention. May we not have your order? You ought to have the goods we offer ; they are trade builders. We fill orders by prompt shipment from Toronto, Brantford, Winnipeg and Brandon.

Yours faithfully,

THE BRANTFORD CORDAGE CO., LIMITED,

BRANTFORD, CANADA.

Canadian Oil Gusher

Oil Well Cables

Sand Lines

Sucker Rod Lines

Torpedo Lines

Bull Ropes



Oil Well Cables

Sand Lines

Sucker Rod Lines

Torpedo Lines

Bull Ropes

THIS WELL WAS BORED WITH ONE OF OUR CABLES.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

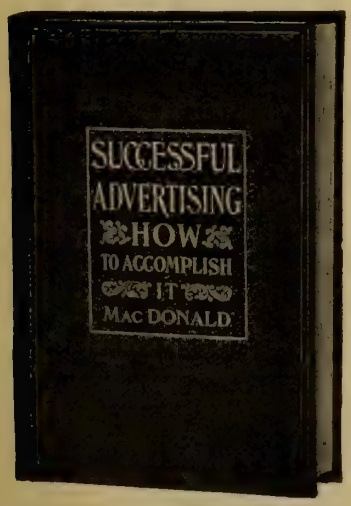
BRANCHES.

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; F. H. ANDREWS & SON, Quebec, Que.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.

SUCCESSFUL ADVERTISING

How to Accomplish It

By J. ANGUS MacDONALD



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"Advertising is one of the biggest businesses—perhaps the biggest business—in the world. To treat of it comprehensively is as difficult as to treat comprehensively of military strategy or the making of a newspaper. Mr. MacDonald has succeeded. He has produced an admirable and exhaustive monograph.

"Perhaps the deepest pitfall into which an author might fall in writing upon such a subject as this is too much theory and not sufficient practicality. Most happily has Mr. MacDonald avoided this chasm: he writes from practical experience in the field, and his methods as presented have been given the thorough tests of time and circumstances.

"Any one with even a superficial knowledge of advertising cannot but perceive that in the many examples shown are evidenced a thorough knowledge of the subject and a businesslike and practical grasp of advertising which is far removed from the light, airy and entirely impractical and hare-brained stuff which is not uncommon in literature treating of the subject of advertising."

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Postpaid $2.00 per copy

The MacLean Publishing Co. Limited

TORONTO MONTREAL WINNIPEG



Steel Frame Support.

DAVID MAXWELL & SONS

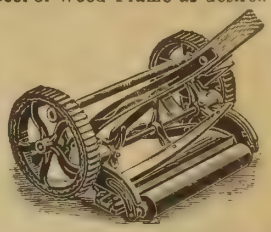
ST. MARYS, ONT., CANADA.

"Maxwell Favorite Churn." PATENTED FEATURES: Improved Steel Stand, Roller Bearings, and Foot and Hand Lever Drive, and Detachable Driving Link. Improved for season of 1904. Steel or Wood Frame as desired

Lawn Mowers. High and Low Wheels, from 12 in. to 20 in. widths. Cold Rolled Steel Shafting, Crucible Steel Knives and Cutting Plate.

If your Wholesale House does not offer you these articles

SEND DIRECT TO US.



MAXWELL MOWER

8-in. Low Wheel.



Wheelbarrows. In Four Different Sizes.

J.C.M.

Galvanized Dead Flat Sheets

made from British Siemens Martin Steel only; most reliable for working up. Apply for samples and prices to:

RD. JOHNSON, CLAPHAM & MORRIS, Limited

MANCHESTER, ENGLAND

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.



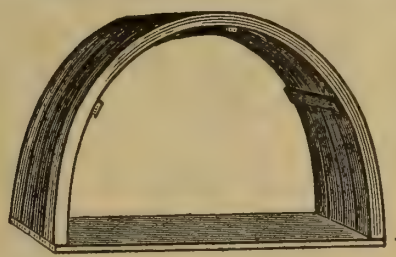
COVERT MFG. CO.

Troy, N.Y

Auto Screw Jack

Harness Snaps, Chain, Rope and Web Goods, etc.

FOR SALE BY JOBBERS AT MFRS. PRICE



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

"The Best South Wales Produces"

IN STEEL COKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.

Limited

MONTREAL

Wholesale Trade Only Supplied

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

Sales Branches and Warehouses:

172 Granville St., Halifax, N.S.	Imperial Bank Building, Montreal, Que.	Front and Yonge Sts., Toronto, Ont.	89 Princess St., Winnipeg, Man.	403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



Enameled Preserving Kettles WILL BE IN DEMAND NOW

Our brands, "ONYX," "DIAMOND" and "PEARL" Wares will satisfy the most critical patrons. Our stock is complete and we can ship promptly. Send us your orders.

KEMP MANUFACTURING CO., TORONTO, ONT.

THE KEMP MFG. AND METAL CO., LIMITED,
McDermot Ave. East, Winnipeg, Man.

THE KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

LEADING HARDWARE STORES

TOWERING above the buildings which surround it, and so high that it affords a magnificent panoramic view of the whole city, the new seven-storey building of Emerson & Fisher, hardware merchants, stands at 25 Germain street, St. John, N.B., a perpetual monument to the industry and success which have attended that firm since their establishment in that city.

With the busy throngs that pass up and down King street only a quarter block away, a more suitable situation could not be desired, and its proximity to the country market also makes the location convenient for the busy shopper.

When the members of the firm decided that, owing to increased business, it would be necessary for them to abandon their Prince William street quarters and erect a building which would be more adapted to their purpose, they took for their motto in connection with the structure the four words: "Strength, light, space, and convenience," and the building recently finished shows the wisdom of such a course. Being the largest building of its kind in the city, a detailed description of the interior, with its numerous compartments, will be of more than usual interest.

The two upper flats, the sixth and seventh storeys, are each 100 feet long by 60 feet wide, and are set apart entirely for the heavy stock which is taken up from the ground floors in a large electric elevator.

On the opposite side of the building is a smaller elevator used principally for the conveyance of customers, or members of the staff. Besides these elevators, huge stairways on either side of the building run down to the lower floors.

The fifth flat is devoted to manufacturing purposes and for that reason is especially lighted by large windows in the side as well as the end walls of the room. In these windows is found what is known as wire glass—that is glass with wire netting embedded in both sides, having been placed there while the glass was in a molten state. This prevents the glass from breaking and falling out in case it should become overheated from a gas flame, etc., and protects it from a casual blow.

On this floor the firm have established an up-to-date soldering apparatus, by means of which a gas jet does away with the old-fashioned dirty charcoal stove. The apparatus is connected with an electric motor, which drives a "fanner," which in turn forces out a stream of air, giving strength to the flame beyond.

In another section of the room is stationed an electric motor for polishing the manufactured tinware. Not only do the firm insist on having such goods made strong and serviceable, but before they are placed on the market must be finished to a fine degree, and by means of this rapidly revolving electric polisher the ware comes out looking not unlike silver.

The fourth floor is used exclusively as a packing room. All boxes of goods are opened here and unpacked, and all shipments prepared.

In one corner is set apart what is called the strong room, in which is stored cutlery and other valuable articles of small dimensions.

The front part of the flat is divided into sections for the storing of goods ready to be shipped, or placed on exhibition for the wholesale customers. Each section has twelve tiers of shelves seventy feet long, ten feet high, and each shelf from two to three feet wide. These figures give a vague idea of the quantity of small ware that can be placed there in open view. Here and there one finds a little aperture by means of which customers or clerks can conveniently pass from one section to another. At the end of every section is a large window, which makes the whole flat as light as day, and along the broad open passageway a huge truck can be run back and forth, on which is moved all the heavy goods. In this apartment all available space is utilized, even the ceiling being fixed with hangers for the purpose of holding articles of such size and shape as they can dispose of there.

Coming down to the third flat one finds it peculiarly attractive, for here are placed all the fancy mantels and grates. It is, in fact, known as an auxiliary showroom, and is sixty feet by over one hundred feet long. The size, therefore, makes it most suitable for the display of the larger and bulkier lines of goods that cannot be accommodated in the main store. In this department Messrs. Emerson & Fisher have an elegant assortment of mantel pieces, fireplaces of every description, English and American tiles for fireplaces, walls and floors. This room is particularly well lighted, having large plate glass windows in the front and several smaller ones in the rear.

The right hand section contains furnaces, hotel ranges, cooking and heating stoves, churns, pumps, and goods of that description. It is interesting, indeed, to spend a half hour wandering around such an array of stoves and ranges. Large and small, fancy and plain, they sit there a temptation to the would-be purchaser. This class of goods is manufactured by the Enterprise Foundry Co., at Sackville, N.B.

In the rear of this flat is the tile



View of Retail Department of Emerson & Fisher's Store, St. John, N. B.

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Page 19

room, where all kinds of tiles are unpacked and sorted. Next to it is the travelers' room, where those who go on the road can sort their samples unmolested by the busy staff outside. At the left are well equipped toilet rooms for men and women.

At the front of the building in the centre between the large plate glass windows is the motto of the foundry, "Enterprise Stoves and Ranges are the Best."

Coming to the ground floor one finds the whole store which is used for the retail trade wholly, finished in quarter cut oak. The windows at the Germain street entrance are the largest sheets of glass in the city, and in the space above each one is fixed with Luxfer prisms, which throws the light into the interior. In this store the firm have nearly sixty feet of "silent salesmen" and glass counters for the display of cutlery, plated ware and fancy goods. One of these which has attracted a great deal of interest is the pocket knife counter, where one hundred and eighty samples of pocket knives and razors are set on small plush covered pieces of wood, which can be taken out at will and handed to a customer to examine. Back of this is a great display of large knives for domestic use, padlocks and divers other kinds of hardware, and the latest methods have been adopted for presenting them to the view of the public. Each box, full of articles, has on the outside a sample of the contents, and all one has to do is to select from samples displayed without handling a lot of superfluous goods. The store is well equipped with traveling ladders. At the rear is the paint department, Emerson & Fisher being the local agents of Sherwin-Williams paints.

Near the front entrance is a unique arrangement for showing gardening implements. It is capable of holding 202 pieces, and being on rollers can be conveniently moved about. To the right of the store is also a line of leading stoves and ranges. The spacious, well furnished offices are at the rear. They are pleasantly situated as regards light and ventilation, and, as well as all other points of the building, are lighted with electricity.

Coming to the basement one finds all the latest arrangements for handling heavy goods. Large double doors open into the yard at the rear, and teams can back or drive in, as the case may be. At the front are several windows of prismatic glass which light the basement thoroughly.

In the spacious yard to the year of the building are the firm's stables, carriage houses, etc., and a large arch driveway leads to them from the front street. This driveway has been encased so that it is practically fireproof, and on the inside is a massive door opening to the big elevator, which makes it possible for teams to drive alongside and deposit freight for the top floor on to the elevator with a great saving of labor.

From the driveway stairs lead to every floor, and these are set apart for the employes, who thus enter the building without disturbing the clerks or office staff. Over the driveway is a supplementary flat, one end of which is used for an advertising den.

Other features of the building are the large standpipe running from top to bottom for hose attachment in case of fire, the dumb waiter connecting the different floors and the internal telephone which runs to every department of the building. The whole structure reflects credit on the architect and firm.

The formal opening of the new building took place the middle of May, and since then a most satisfactory business has been carried on. Settled in such magnificent quarters, there is no reason why Messrs. Emerson & Fisher should not further increase their already large business, their facilities for handling the increased trade being of the very best.

HENRY PHIPPS, PARTNER OF ANDREW CARNEGIE.

HARDLY one reader in a million knows that a Phipps rather than a Carnegie or a Frick laid the keel and steered the great Steel Craft over its first trial course. Yet the story of his career is even more romantic than that of his associates, for, unlike many of them, he owes nothing to speculation.

He began with nothing—in Philadelphia—and by sheer Anglo-American grit, foresight, and unwearying application built up a fortune nearly a hundred storeys high, each storey representing a million of money. Those who know say that, excepting the latest phase of it, when more than five hundred millions were paid for what a year before could have been bought for three hundred millions, pluck, shorn entirely of luck, was the principal ingredient of his success. He avoided taking chances, and he never pocketed a profit that was not earned in the strictest sense of the word—in which quality his great fortune is probably unique.

* * *

Born in Philadelphia in 1839, he inherited from a hard-working father the physical alertness which remains his dominant characteristic. From his mother, who, with his father, was English before she became American, he acquired his mental qualities, including an abiding fondness for books. During his boyhood the family moved from Philadelphia to Allegheny, where the elder Phipps embarked with moderate success in the shoe business. His prospects were bright enough to warrant the employment of three or four assistants, one of whom is now a well-known Pittsburg millionaire. Yet in time the business must have dwindled, for we hear of young Phipps in 1852 earning a dollar and a quarter a week as general utility boy with a Pittsburg jeweler named Barton.

* * *

Eventually he was employed by a small merchant named Egan, whose only other distinction was the novelty of having been a monk and having eloped with a nun, who became his partner in business as well as in life. Their partnership not proving specially profitable, young Phipps one day borrowed 25 cents from his brother and advertised for another job. That was on May 10, 1856—a date which marked a turning point in his career. For the advertisement bore fruit in an answer from Dilworth & Bidwell, who pulled a slim oar in the iron business and incidentally acted as Pittsburg agents for the Du Pont Powder Co. Beginning with them as an office boy, the new employe soon was raised to a clerical stool, and afterward to a partnership with Bidwell, when the original firm dissolved. That was in 1861.

Shortly before the young man was of voting age he also became a silent partner and night bookkeeper for Kloman & Co., who had a small forge and foundry, or rather smithy, in the suburbs of Allegheny City. The Kloman shop was about three miles from the Phipps home, and the young bookkeeper had a rough and muddy road to travel to and from his nocturnal job. As time passed the business grew and dissensions arose, until the services of Andrew Carnegie, then in the employ of the Pennsylvania Railroad, were sought as arbitrator.

In 1862 the firm was known as Kloman & Phipps, with a capital of $60,000, from which microscopic germ grew the greatest steel business in the world. Meanwhile Andrew and Thomas Carnegie had acquired an interest in the Cyclops Iron Co., which in 1865 was merged with the Kloman-Phipps Foundry under the name of the Union Iron Mills, as they are known to-day. That Andrew Carnegie was disappointed over the transaction was shown in a reproachful letter which he wrote one of the parties, complaining that he had embarked in a most hazardous enterprise. This so-called hazard was one of new fortunes indeed, since the complainant found himself fortuitously thrust upon a road which was to lead him to a fortune of $250,000,000.

Andrew Carnegie, in return for his share of the Cyclops property and a fifty-thousand-dollar bonus, received a 40 per cent. interest in the new company, fifth interests being held respectively by Henry Phipps, Andrew Kloman, and Thomas Carnegie. Thus to an accident which gave one partner 40 per cent. and to the others each 20 per cent. of Union Iron Mills stock is due the prominence of Andrew Carnegie and the comparative obscurity of the others, omitting the extreme modesty of Henry Phipps.

* * *

As financial director of the Union Iron Mills he did not limit himself to office routine, but went into the mill and watched the men at work, studied the machinery, and familiarized himself with every detail of manufacture. Then he wandered into other mills, comparing methods and results and suggesting improvements and economies in his own.

On one of his trips abroad he was passing through a mill in Germany and noticed that the piles made ready for the heating furnace, to be used for rolling beams, contained more than double the amount of scrap iron rails used in Pittsburg. He quietly made a sketch of the pile, and on his return gave orders to change the piles at the Union Mills to correspond with the sketch. As a

WIRE NAILS
TACKS
WIRE
Prompt Shipment
The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

result the cost of his foreign sojourn was saved the firm almost daily thereafter.

As part of the inside history of the Carnegie Steel Co., another circumstance may be cited in which the ingenuity of Henry Phipps is shown. On this occasion he made a series of observations at two or three mills so quietly and unobtrusively that no one was aware of what was going on, and then did some careful figuring. Having cautiously verified his conclusions, he announced to his partners that at a cost of one-third the price for which he believed he could sell what was known as the Lower Mill, he could enlarge the Upper Mill so as to make its output equal to that of both.

His subsequent career is a summarization of the Pennsylvania steel and iron industry, which is a matter of general knowledge. Its evolution has been an eighth wonder of industrial history. From a capitalization of $5,000,000 in 1886 to $25,000,000 in 1892 and to $160,000,000 in 1899, it has spread like a colossus from Bessemer to Balmoral and beyond.

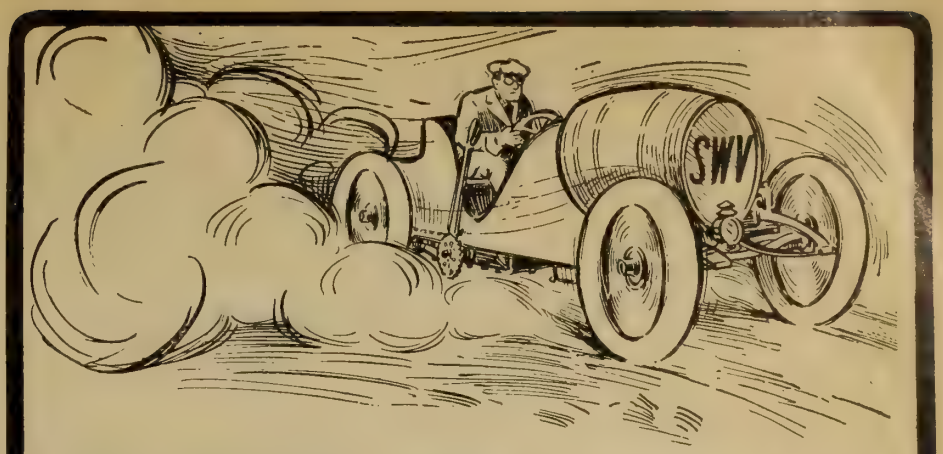
EARLY LAWN MOWERS.

THE use of lawn mowers dates back to the early years of the nineteenth century. The first patent on record was granted to Edward Budding, of Stroud, Glos., on October 25, 1830. He was a draughtsman with some mechanical ability, being the inventor of the improved Budding wrench and many machines used in the manufacture of woolen cloths. He was for a time superintendent for a manufacturer of woolen goods at Dursley, and doubtless the clipping-machine used in trimming the woolen fabrics suggested the invention of the lawn-mower. A descriptive circular of the lawn-mower, dated 1830, shows that three sizes were then offered, to cut swaths 16 inches, 19 inches, and 22 inches wide. These mowers were manufactured by the Phoenix Ironworks, near Stroud.

While there are other claims for the priority of invention, Edward Budding is undoubtedly entitled to all credit as the inventor of the first lawn-mower.

Lawn-mowers were not extensively used prior to 1855, and were at that time manufactured only in Great Britain. In the early part of that decade, Mr. A. Waterer, of Woking, Surrey, sent an English lawn-mower to a friend residing at Fishkill-on-the-Hudson, New York, which was without doubt the first lawn-mower used in America. Living in the same town was a mechanic by the name of Thomas Coldwell, a native of Lancashire, who was called upon at times to sharpen and repair this English mower. He soon became convinced that this mower could be greatly improved, and his mechanical ideas prompted him to manufacture the first American-made lawn-mower, which was somewhat after the pattern of the English machine, but he improved on it from time to time, and continued to manufacture until 1869. The total sales, however, would not exceed 200 machines per annum, as they were clumsy and quite expensive. A lawn-mower with 14-inch cut sold in those days at $45.

In the year 1869, Thomas Coldwell and George L. Chadborn jointly invented a new lawn-mower, much lighter than any which had preceded it. These inventors, in connection with others, organized a company which was incorporated under the name of the Chadborn & Coldwell Manufacturing Co., Mr. Thomas Coldwell being elected president, which office was held by him until 1891. Their new machine was known as the "New Excelsior," which has had a large sale in all parts of the world, and still holds a prominent position on the market.



SHERWIN-WILLIAMS VARNISHES LEAD

in quality, satisfaction and wear. They can't be beat. The dealer who sells them controls the varnish business of his locality and gets the greatest varnish profits. There's a reason.

S-W. Varnishes satisfy

The customer who demands best appearance and wear at an economical cost.

The painter who wants the right working and drying qualities in varnish.

The dealer who demands best quality and good profit.

We have the facilities and capital to make good varnish. Importing the gums direct and sorting them ourselves, making our own strictly pure linseed oil, making a special drier for each kind of varnish, equipped with most modern machinery and skilled workmen we are able to give the best varnish value for the money. *Write today for prices,*

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS.

Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg, Man.

1437

TWO GREAT EVILS.

OVERMEASURE and overweight are difficult to control in every store, says an exchange.

The statement is true, and the merchant needs to be on the lookout all of the time for these deviations from good business rules. Many people who lack good sense and good principle are forever tempting the clerk to do the wrong thing.

They ask him for overweight and overmeasure as a premium for their business. Once they find that he will succumb to the temptation they give him to understand that he is holding their trade because he is more liberal than others in the store.

There are many small people who think that an extra quarter yard or an ounce or two overweight is worth walking around the block after.

You have seen them in your store. They hang around until some certain clerk can wait on them. He is the clerk who gives the down weight and an extra measure.

Watch for those weak spots? When you find them, handle the situation diplomatically. You can handle it so as to drive the grafting trade away from the store, or you may be able to handle it so as to hold these customers.

But above all things drive overweight and overmeasure out of your store system. Here is where constantly coaching the clerks will accomplish a great deal.

INCREASED CAPITAL STOCK.

The Rolla L. Crain Co., Limited, Ottawa, manufacturers of loose leaf systems, have been granted supplementary letters patent increasing their capital stock to $100,000. The firm have found this move absolutely necessary owing to the increasing demand for their goods. They have, during the past year, more than doubled their capacity, and now stand out in the forefront of manufacturers in Canada.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Lavatory Hinges and Spring Butts.

A HANDSOMELY illustrated catalogue of some thirty pages has been received from the Chicago Spring Butt Co., of Chicago and New York. The information and data in general is evenly balanced throughout, and deals with the different styles of spring hinges, hangers, door handles, and several patterns of swing doors manufactured by this company. Price lists are also given in connection with the different articles spoken of in this booklet. Included in the book is a special list of lavatory spring hinges and attachments adapted to all classes of lavatory construction. The book is bound in the loose-leaf system and all buyers of the above goods should file away a copy of the catalogue. It is worth the trouble of sending for and can be secured by merely mentioning this journal when writing.

"Please Close the Door."

James Smart Mfg. Co., Limited, Brockville, have gotten out an attractive tin tablet to be tacked on store doors. It bears the request "Please close the door" in large letters, while underneath in black and gold a reminder is given of Kelsey warm air heaters. The tablets are handy and permanent articles, and can be secured by mentioning this offer in Hardware and Metal.

Steel Troughs.

Steel hog and stable troughs are tersely illustrated and described in a handy catalogue of steel goods just issued by the Steel Trough and Machine Co., Limited, Tweed, Ont. Prices and sizes accompany the illustrations, and hardwaremen who have a farmers' trade should secure a number of the booklets to show their customers. Mention Hardware and Metal when writing.

Signs for Retailers.

Martel-Stewart Co., Limited, Montreal, have issued an elaborate catalogue. As this company make signs of all descriptions, they manifest good judgment in abundantly illustrating their catalogue and using only the best of illustrations. The details are clear-cut, forceful and arranged with discretion throughout. The typography is first class. A copy of this catalogue can be had by mentioning Hardware and Metal.

Springs and Axles.

"Anchor Brand" carriage and wagon springs and axles are pictured and written about in a plain and easily-understood manner in catalogue No. 12, just issued by the Guelph Spring and Axle Co., Limited, Guelph. While the company has had 28 years' experience in manufacturing this line, they have, during the past year, increased their capacity for manufacturing fully 75 per cent. and have also introduced many new features in their new catalogue. The book is of 40 pages and cover and contains price lists and descriptive tables. It will be mailed to any reader who mentions having seen this offer in Hardware and Metal.

There are **HAMMERS** *that "Knock," and there are* **HAMMERS** *that convince. We employ the convincing kind; for instance, we say contact with the Hammer will not discharge an*

IVER JOHNSON REVOLVER

And then we use our **HAMMER** *just to demonstrate the truth of our assertion. We call this a convincing argument, not "Knocking."*

Hammer the Hammer



Send for literature.

IVER JOHNSON'S ARMS & CYCLE WORKS,
FITCHBURG, MASS.
New York Office: No. 99 Chambers Street.

"DO THE HARD THINGS FIRST."

A BANK president was asked to what one thing more than all others could he attribute his success. He pointed to a small printed motto which hung above his desk; it read: "Do The Hard Things First!"

"I came across that motto years ago," he said, "at a pivotal point in my life. I had for some time felt burdened by my position. That motto was a flashlight to my intelligence. I suddenly realized that I had been in the habit of putting off the disagreeable duties, of evading the unpleasant tasks, and they had formed a ghost which haunted me and held me back. I tacked up that motto and settled down to work on the disagreeable duties I had pushed aside; soon I had them out of the way, and ever afterwards I attempted the hardest thing first. I gave my freshest efforts to the work I dreaded most and I owe what is called my success largely to this awakening and change of tactics."

TO REMOVE.

The Nova Scotia Steel Co. directors have practically decided to remove their entire steel plant from New Glasgow to Sydney Mines, having been put to a great deal of unnecessary expense by maintaining two large plants in operation. By this removal the company will have its whole works centralized, which means a material reduction in the cost of production. The iron ore, instead of being taken to Pictou, will be landed at North Sydney, a shortening in the transportation of from 200 to 300 miles, and enabling them to land fully twice as much as at present. The company is drawing its steel workers from New Glasgow, about thirty having left to work at the new smelting furnaces at Sydney Mines. One of the furnaces at Trenton has already been taken down and removed to Sydney Mines, where the new plant is rapidly assuming practical shape.

NEW BINDER TWINE.

A new binder twine is shortly to be put on the market by the Commercial Binder Co., of Galt. It is entirely different to anything now in use. Instead of being composed of a number of loose strands, it resembles cat-gut, and is said to be cheaper and stronger than ordinary twine. The company will also have the sale for Canada of the Goff Binder, a machine for doing away with the use of twine in fastening up packages. This machine feeds out a strip of a gummed, specially-treated paper, and not only automatically moistens the gum on it, but at the same time prints on the tape any desired advertisement or trade mark. The strip is then applied to the loose ends or flaps of the paper which the parcel is wrapped in and the trick is done. The new material will also be turned into packages, pails, etc., for holding meats, fruits, liquids, paints, oils, etc., which will be waterproof, vermin-proof, and air-tight.

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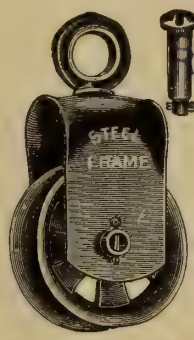
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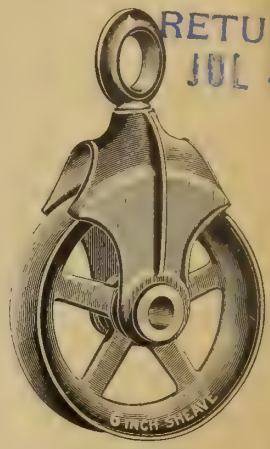
HAY FORKS, PULLEYS, Etc.



No. 112—Wood Frame



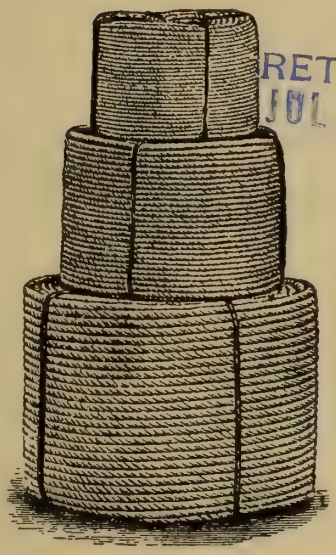
No. 210—Steel Frame
Hartz "



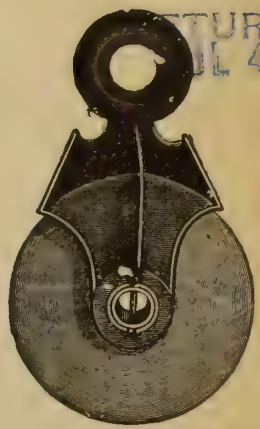
No. 115—All Iron
" 10 "



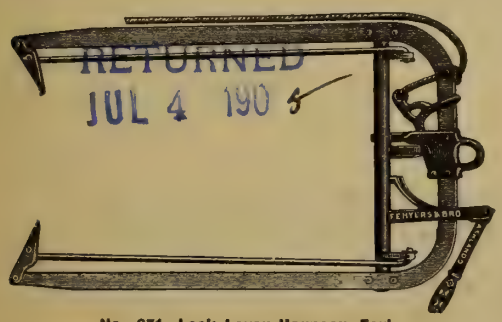
No. 118—Iron Frame
Wood Wheel



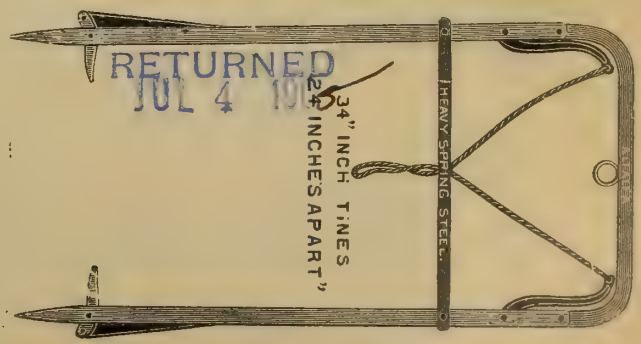
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No. 114—Iron Frame, Wood Wheel



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HEATING AND PLUMBING

LOCATION AND CARE OF STEAM GAUGES.

AS principles which cause steam gauges to give correct results are not always understood by men who have charge of them, the following illustrations and explanations taken

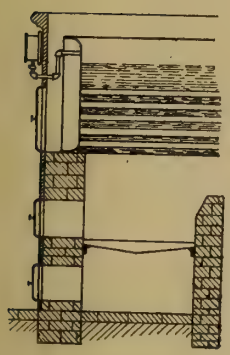


Fig. 1

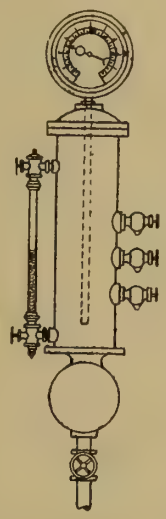


Fig. 3

from everyday practice will doubtless be of interest.

Fig. 1 shows a method of connecting gauges adopted by a firm that turns out hundreds of good tubular boilers. A ¼-inch pipe is connected into the front head above the water line. A loop is formed by nipples and ells, which causes water to stand in this pipe, thus protecting the gauge from the heat of the steam.

This method of connection works fairly well when the boiler is under a light load, but when the boiler is worked to its full capacity this little pipe is in the midst of hot gases on their way to the chimney, which heat it, and probably evaporate the water in the loop.

To avoid this possible danger, these pipes may be taken out of the boiler and located in plain sight. Each loop is connected into another pipe without a



Fig. 2

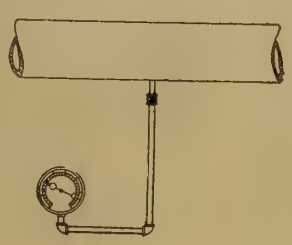


Fig. 4

valve between this connection and the steam space of boiler, although a valve may be placed in the small pipe near the connection. It is customary to locate a double-ended pet cock under the gauge in such a case, but it is omitted here, therefore leaks from the source do not annoy the fireman by dropping water on the furnace doors.

A union is located at this point so that when the pipe needs cleaning the ¼-inch valve is closed, the union disconnected and the valve opened under a full head of steam, thus blowing out all sediment. After this the pipe is allowed to cool; then the union is connected and steam turned on. Enough steam is condensed to protect the gauge. Where a pet cock is provided in a connecting pipe it is customary in some plants to draw the water out of this pipe frequently without shutting off the gauge, but this is wrong, because heat thus admitted to the spring injures it. Brass pipe should be used for such service as it does not corrode as quickly as iron pipe.

The siphon shown in Fig. 2 keeps water in the pipe at all times, but it has a disadvantage in that there is no provision made for cleaning it without disconnecting the gauge. Water cannot be drained out so that if the gauge is located in an exposed position the water is liable to freeze in cold weather, thus preventing the gauge from indicating correct uressure. Accidents have happened from this cause in the past, and probably will in the future.

Fig. 3 shows another plan for protecting a gauge. Under normal conditions this gives good results; but when the lower drip valve is opened to blow sediment out of the column the end of the connecting pipe, shown in dotted lines, is above the water line, so that steam is admitted to the gauge, endangering the spring.

The supposition that a good gauge will always correctly indicate the boiler pressure, regardless of the way in which it is connected, is erroneous, as the following illustrations will show.

Fig. 4 represents a low-pressure gauge attached to a steam-heating main. A column of water always stands in this pipe, and the vertical distance from the centre of the gauge to the top of this water is 8 feet 4 inches. The actual pressure at this point, without steam in the main pipe, is 3.6 pounds, due to the weight of the water. The dial of this gauge is graduated into pounds, so that the indicator should stand at about three-quarters of the distance between 3 and 4 pounds, when no steam is in the mains. When reading the pressure on this heating main, this amount should be subtracted from the pressure the gauge indicates.

Fig. 5 illustrates a gauge located on the floor above the boiler room. If a gauge so placed is piped so that all water drains back into the boiler, it will indicate correctly; but if the connecting pipe contains water, the gauge will indicate one pound less than correct steam pressure for each 27.7 inches vertical height of water. In other words, the result will be directly opposite to that obtained with the arrangement shown in Fig. 4, although both gauges may be correct.

Fig. 6 shows a steam gauge attached to a Manning boiler. It is connected into the shell just above the crown sheet, consequently the weight of water above the gauge creates a pressure which must be subtracted from the indicated pressure to obtain the true head of steam carried.

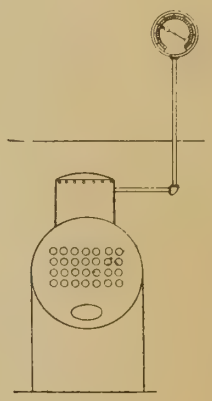


Fig. 5

In a plant where this kind of boiler is in use, the inspector objected to the pressure carried, as it was more than five pounds above the limit fixed. The engineer claimed that he was allowed to carry a certain steam pressure, and that the water as above described was responsible for the surplus pressure indicated. Now, the safe working pressure of a boiler as fixed by an insurance company is based on the estimated strength of the shell, heads and tubes; consequently the limit should not be exceeded, regardless of what causes said pressure. If a gauge located as shown in Fig. 6 shows 100 pounds, ten of which are due to weight of water, it is the same as if 100 pounds of steam were carried on a horizontal boiler, or one of the water tube type where the height of water is not enough to make much difference, therefore the gauge should never show more than the amount allowed.

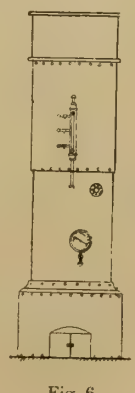


Fig. 6

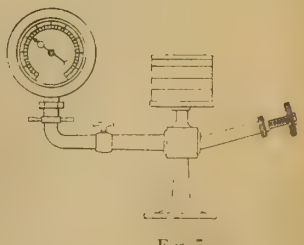


Fig. 7

Of course the ruling gives less available pressure for a vertical than for a horizontal boiler, and the difference is enough in many cases to seriously affect the engines using steam, but it keeps

one on the safe side, which is a very important point.

Although a steam gauge may be correct when new, it does not necessarily follow that it will remain so, therefore every gauge should be tested at least once a year. This does not mean that in a plant where a score or more are in use, each one should be disconnected and tested separately, as that plan would make much unnecessary work. If a certain gauge is tested each year, and all others indicate similar pressure, where they are connected in the same way, no further proof of their accuracy is needed. Where they are connected in different ways and indicate different pressures, if they maintain the same difference towards the one tested, it shows that no change has taken place in them, and this is sufficient proof of their condition.

Fib. 7 illustrates an instrument for testing gauges. The body is partly filled with oil and a small plunger inserted. This carries with it a circular platform upon which the desired number of weights are placed. Five are shown in the illustration, the three bottom ones indicate 20 pounds each, the next indicates 10, and the top one 5 pounds' pressure to the square inch; consequently, when the adjusting handle is screwed inward, so as to just float the tightly-fitting plunger in the oil, the pointer will indicate 75 pounds if all parts are properly adjusted.—American Electrician.

MEMBERSHIP IN ASSOCIATION.

MR. R. M. STARBUCK, Hartford, Conn., delivered an interesting address at the recent plumbers' convention in that state. He said:

In the business world, among business men, the first and all-important question asked before making an investment is, "Will it pay?" In viewing this matter we must not confine ourselves to merchandise or stocks that we are buying and selling. There are certain auxiliary matters that enter into business that work indirectly, yet have a direct bearing in conducting business, and while there are many such items that might be considered to advantage, for the present we will confine ourselves to a single one—the advantage of union in the respective lines of trade.

As plumbers, let us confine ourselves to our branch of trade in particular. In a competitive line of business it is difficult to overcome that insatiable thirst to down the other fellow, and so strong does this desire become that if we had on hand ten times the amount of work that it is possible for us to execute there would still be that spirit swelling up within us to jump on the other fellow whenever he showed his head above water. Would it not be well for us as men to drop this idea and question ourselves regarding the credit or pleasure in the cultivation of such a trait? Is there not enough for all of us at good, living prices? What better way is there to gain this object, or, in fact, what other way is possible, than by coming together as brothers and discussing the subject, and after having decided upon a line of action that shall be a credit to our trade and to ourselves be loyal to such line of action and to our organization? Without loyalty the whole fabric is rotten. If we by nature are so depraved and so low down in the scale of character that we cannot be honest

"Only the best is good enough."

Satisfaction comes only from the use of good goods.

Quality brings in trade and builds up business. A satisfied customer is the best advertising you can get.

One of our customers wrote us recently :

MEAFORD, ONT., May 29th, 1905.

The Montreal Rolling Mills,
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DEAR SIRS,

Referring to goods supplied us for the Meaford Harbor Works last month.

We have pleasure in advising you that Mr. White, the contractor, says this is the best lot of material he has ever had, and he has been in the contracting business for over twenty years. Every thread, nut, head, point, etc., correct and perfect.

We have no doubt you will be pleased with this report, as weare.

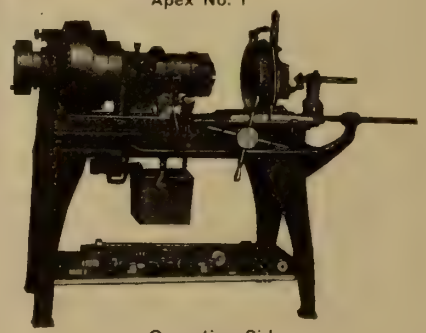
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Operating Side

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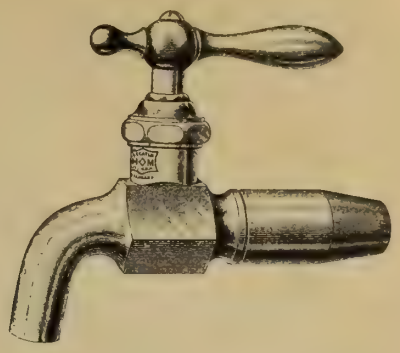
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There is great satisfaction in making a quick sale. The hardware merchant's time is money, and if the article he is selling has the reputation and the merit his customer soon sees the point and goes away satisfied.

Moral: Buy "Penberthy" Injectors and sell "Penberthy" Injectors. Accept no substitute.

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To wind new wick packing on a Fuller bibb stem, or rewind the old is difficult and may require several efforts.

The stem packing in Mueller Fuller Bibbs doesn't have to be wound on. It is made of rubber composition with a lubricated cloth insertion in the shape of a washer and can be slipped over the stem in an instant.

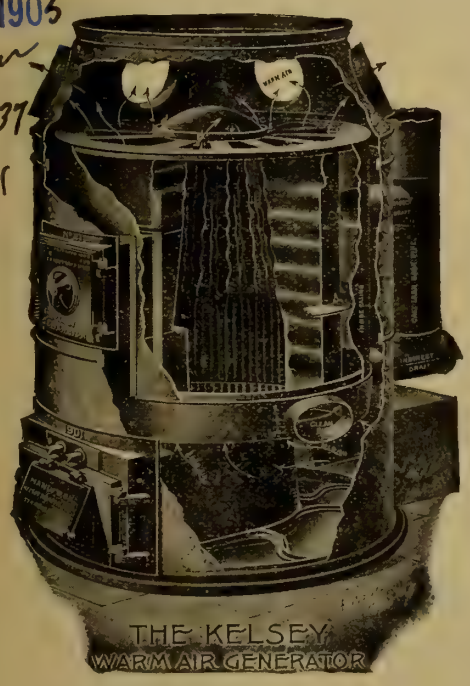
Mueller Fuller Bibbs are made in plain and hose patterns, and with tail pieces for all styles of pipe connection. The Bibb illustrated is the plain pattern with lead pipe tail piece.

Each Bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

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with our own we had better remain outside the organization until such time as nature with her wonderful developing power casts its influence over our poor, degenerate souls and brings them up to the standard of a man.

I repeat that there is enough for all of us at a fair living profit without robbing our customers or building ourselves up at the expense of our neighbors in business. On some points I differ from some of our members as regards the building of the foundations for our organization to rest upon, but this does no harm, for it is from this variety of opinion that the rational and thinking body of an association like ours can shape its course. I believe first of all in considering our association as a business proposition and nothing else. Do your eating at home or at least at some place where food is sold, and when you meet in the association rooms attend strictly to business.

I believe in building up the treasury, even at the sacrifice of pleasure, until it assumes such proportions than no one can afford to withdraw. I believe in levying a small tax on every job that is done, so small that it will not be a burden to the member or a stab at his customer, and I also believe that when our treasury holds a certain amount an investment committee should be appointed to see that the treasury continues to grow independent of contributions from the members. Every one of our associations can remember a time when it had money in the treasury. Where is it now? What lasting good has come of it?

VARNISHING THE BATHTUB.

THEY had just set up housekeeping and were working on the plan of economy. The bathtub needed a coat of varnish. He promised to attend to it if she would order the varnish.

"You'll find the varnish in the closet with the groceries, dear," she said a day or so later, "and the can-opener in the knife-drawer."

He opened the can, and, according to his contract, applied the coat of varnish and then left it to dry.

The soup for dinner that day had to be abandoned, for, somehow, it possessed a peculiar paint-shop odor that was nauseating. After dinner he took her to inspect his work on the bathtub. Now that it had dried, it had a certain unnatural appearance. The top and sides were streaked, and here and there little lumps clung to it.

"The man said that was the best varnish," she explained, taking up the can of varnish for an examination, "but—why, dear, you have varnished the bathtub with the ox-tail soup."

"Then it was the varnish we ate, dear," he added, horror-stricken.

HEATING CONTRACTS.

Smith & Fergusson, Regina, who are agents for the Pease-Waldon Co., Winnipeg, have recently installed in St. Mary's Church, Regina, a Pease Economy steam heater and ventilator. Samuel Hooper, of Winnipeg, is the architect who designed the building.

The Moose Jaw Hardware Co. have recently obtained the contract to instal in the Moose Jaw Public School a Pease Economy steam heater and ventilator, together with modern sanitary closet arrangements. The contract was secured after very keen competition.

HOW TO CLEAN BRASS.

The United States Government is said to have sanctioned the following method of cleaning brass: Make a mixture of one part common nitric acid and one-half part sulphuric acid in a stone jar, having also a pail of fresh water and a box of sawdust. Dip the articles into the acid, and then soak them in the water and finally rub them in the sawdust and they will take on a brilliant color. If the brass is greasy, it must be first dipped into a strong solution of potash and soda in water, and then rinsed, so that the grease may be removed, leaving the acid free to act.

TIT FOR TAT.

A plumber who was sent to the house of a wealthy stock broker to make repairs, was taken by the butler into the dining room, and was beginning his work when the lady of the house entered.

"John," said she, with a suspicious glance towards the plumber, "remove the silver from the sideboard at once and lock it up."

But the man of lead was in nowise disconcerted. "Tom," said he to his assistant, who accompanied him, "take my watch and chain and these few coppers home to my missus at once."

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RAMSAY'S SHINGLE STAINS

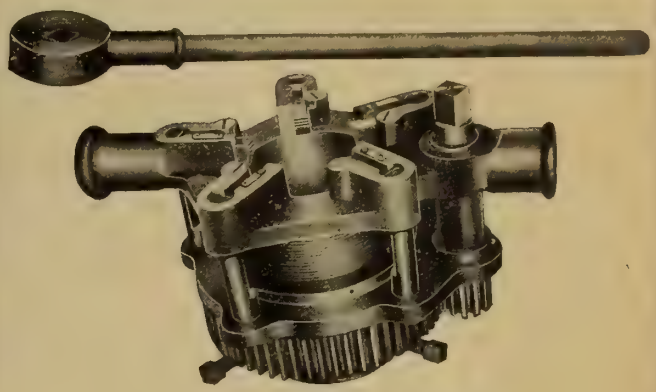
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ALL STEEL Orders accepted for September delivery.

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Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

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Your customer, the farmer, wants a fence that can be put up quickly and easily just when he wants it. Hand made fences cost too much when you figure the time it takes to build them, to say nothing of the hard work.

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Have you seen the Ideal? Let us send you a sample and catalogue showing why Ideal fence made from No. 9 hard steel wire throughout is the strongest and the best value.

Ask us about the Ideal all metal farm gate.

The McGregor-Banwell Fence Co., Limited,
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Sole Agents for Man. and N.W.T.

OTTAWA PLUMBERS ON STRIKE.

A press despatch says: Members of the Plumbers' Union, Ottawa, have gone out on strike. They number about 75, and are asking for 30 cents per hour for a nine-hour-day and Saturday afternoons off without pay. The employers, who number about a dozen, are offering 28½ cents per hour, which is about a cent an hour above the highest pay that was being given. The employers also refused to concede the Saturday half-holiday.

Two shops are not affected by the strike. Knox Bros., Bank street, and D. Belleau, Dalhousie street, have signed an agreement for a nine-hour day, no work Saturday afternoons, and 30 cents an hour. They together employ about ten men. It is possible that the strike will last some time, as work is not greatly rushed in the holiday season, and there are only a few big jobs, such as the Ottawa University, that require immediate attention in order to give the finishers and decorators an opportunity of completing their work.

PLUMBING GOSSIP.

Mr. Atchison, of Atchison Bros., plumbers, Stouffville, visited Toronto this week.

* * *

Andrew Mann, manager of the Canada Brass and Supply Co., London, spent a few days in Toronto this week. The company have been reorganized recently and are now backed by one of the wealthiest and most successful men in London.

* * *

Mr. R. J. Morris, of the Central Supply Association, spent Tuesday and Wednesday in Detroit. Messrs. Charles Morrison, of the James Morrison Co., and C. F. Somerville, of the Ontario Lead and Wire Co., also spent a couple of days in the City of the Straits, the occasion being the gathering of the representatives of American and Canadian plumbing supply men to confer over trade matters.

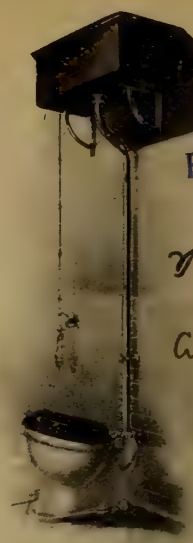
* * *

The Canada Brass and Supply Co., London, will not build a warehouse on York street, Toronto, but have opened up a branch warehouse at 149 King street west, near the Iroquois Hotel. Mr. R. W. Crashley, formerly with the James Robertson Co., is in charge of the branch and, as a full line of plumbing supplies will be carried, Mr. Crashley's long experience and connection with the trade should aid him in developing a good business for his company.

The Standard Plumbing & Heating Co. has been organized in Winnipeg, with a capitalization of $60,000. T. A. Irvine, J. Mould, J. Turner, A. F. Irvine and H. W. Hollis, are the incorporators.

JOINED THE BENEDICTS.

One of the most popular of Lewis Bros. Co.'s travelers, Mr. B. S. Saunders, was married on Wednesday, June 28, to Miss L. Edna Gerald, of Prescott. The wedding took place at the bride's family residence in Prescott and Mr. and Mrs. Saunders were the recipients of many handsome gifts. They will reside in Brockville when they return from their wedding trip.



The NATURO Closet

is the Plumber's friend. That is to say, the progressive plumber.
That's you.
Your customers look to you to supply them with the best of everything.
That, along the Water Closet line, is the NATURO
Not because we say so—
But we say so because it is so—
And every one who knows it says so.
Put it in your showroom, introduce it and—
Watch your sales grow.
We will advertise you along with it
Drop us a line for further particulars.
Don't wait and let this good chance slip by you and be seized by someone else.

THE NATURO COMPANY

Salem, N. J.

C. H. MUCKENHIRN,
PRESIDENT.

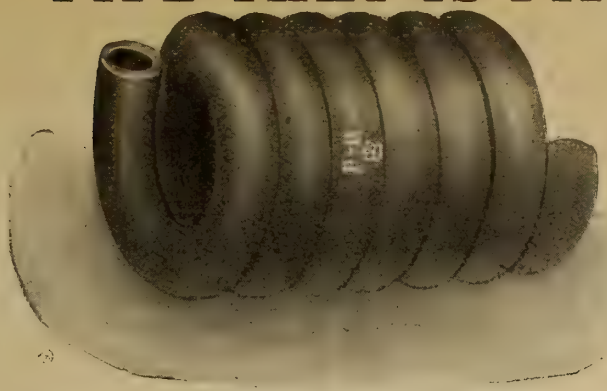
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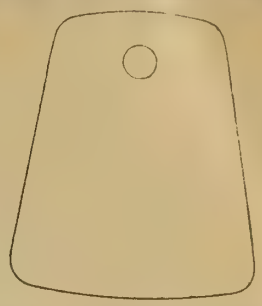
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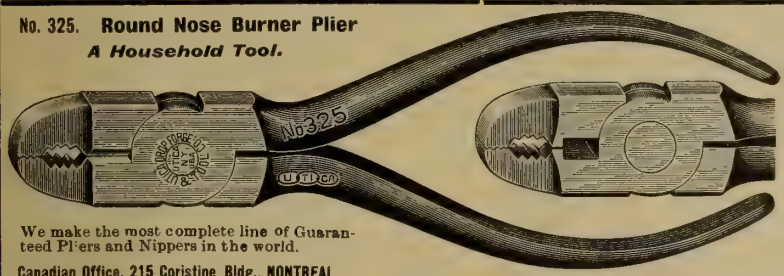
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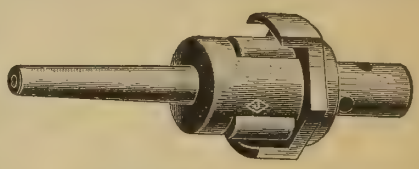
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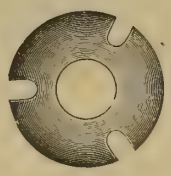
SPRINGS



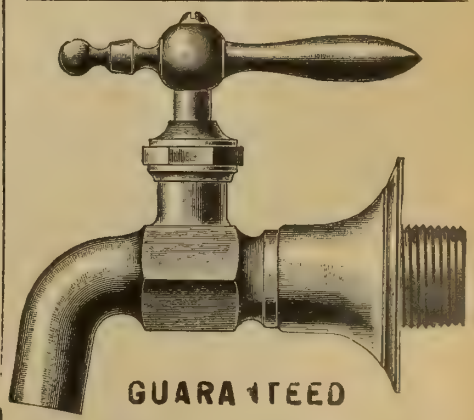


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UPHOLSTERY SPRINGS, CARRIAGE SEAT SPRINGS, HELICALS, BRAKE POLE, ETC.

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Agent for T.W. & J. WALKER, Wolverhampton

Plumbing Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, June 30, 1905.

THE strike among carpenters has had a slightly blighting effect upon the local trade, but it appears to have stimulated the plumbers, because in many cases buildings are sufficiently advanced that plumbers are able to go right ahead. All over the city plumbers are very active, and supplies are selling rapidly and for good prices. Heating apparatus is also selling well, and large firms like the Thomas Robertson Co., for instance, report an unusual activity for the time of year. Plenty of orders are coming in all the time, and building trades are all alive. The strikers will no doubt look for sympathy from the plumbers, but it is generally conceded that no strike is probable with the plumbers.

Range Boilers—No change. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—No change in pipe. Trade is good and promises to continue. We quote as follows: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—Steady prices hold and the trade is sound and natural. We quote as follows: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Manufacturers are still busy, and are likely to remain so. Trade is brisk and prices remain unchanged. Our quotations are as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 1-2 per cent.; 3-8 inch, 62 1-2 per cent.; 1-2 inch, 72 1-2 per cent.; 3-4 inch, and upwards, 74 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—No actual change has taken place in quotations, although during the week prices went up and down and then resumed normal state. We quote as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East.
Toronto, June 30, 1905.

REVISED price lists are not yet completed, although it is expected that the supply men will have completed their readjustment during the next few days. It is understood that, in addition to brass and copper goods, on which closer quotations will be made, iron pipe fittings will also be shaded somewhat.

Very satisfactory business is reported



An English Plumbing Job.

by jobbers, some exceptionally large shipments being made by eastern supply houses to British Columbia and Manitoba houses. Buying is active in both city and country districts, and orders for roughing in material usually include the finishing supplies as well.

Lead Pipe—Buying is very active, with prices the same. We quote as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Purchases are large, and prices steady, with no change probable. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—The demand is strong. Prices are firm, but lower discounts are expected. Our quotations are still as follows: Malleable fittings 20 to 25 per cent. for American and 35 per cent. for Canadian; cast iron (standard), bushings, 65 per cent.; headers, 60 per cent.; flanged, unions, 60 per cent.; lipped unions, 60 and 5 per cent.; malleable bushings, 60 per cent.; nipples up to 6 inch inclusive, 75 per cent.

Copper Range Boilers—No change is noted, demand continuing active. The discount of 15 per cent. continues.

Galvanized Iron Range Boilers—The volume of business being done is considered very satisfactory. Prices are the same. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Market conditions are very similar to last week. Buying is active at steady prices. Demand continues active. We still quote: Black, 1-4 inch, $2.03; 3-8 inch, $2.06; 1-2 inch, $2.29; 3-4 inch, $2.87; 1 inch, $4.12; 1 1-4 inch, $5.62; 1 1-2 inch, $6.75; 2 inch, $9. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.14; 3-4 inch, $4.02; 1 inch, $5.77; 1 1-4 inch, $7.87; 1 1-2 inch, $9.45; 2 inch, $12.60.

Solder—Large quantities are being used on contract work, and buying is active. We quote: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware—Heavy buying is reported in both city and country. The expected advance has not yet materialized. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

AN ENGLISH PLUMBING JOB.

The accompanying illustration shows a sample of lead soil pipe work as executed at a country seat in Surrey, England, which will probably be of interest to Canadian plumbers who have not been across the water and seen similar work themselves.

The photo was supplied Hardware and Metal by Mr. F. Dare, 100 Mutual street, Toronto. Other plumbers who have photos of jobs performed by them will confer a favor on us by sending them to Hardware and Metal for reproduction and criticism by members of the trade in Canada. Criticism of the job illustrated is invited.

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We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

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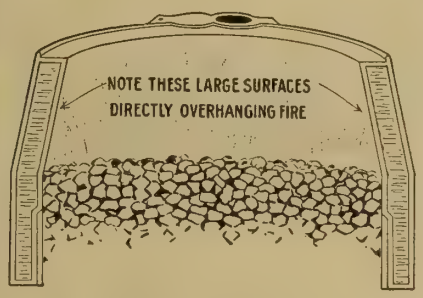
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THE OXFORD BOILER

Nothing in the way of Heating Apparatus for modern homes has ever equalled The Oxford Hot Water Boiler, ("B" Series.)





Its constructional detail is scientifically perfect and results in a greater utilization of a given amount of generated heat and a lesser waste of it up the chimney than any other boiler made.

The walls of the firepot slope inward above the fire and the heat impinges thereon in its upward course with consequent absorption, utilization and fuel economy. The same action ensues as the heat strikes the first water section which is deeper than the others and provided with bell shaped flues to secure maximum heating surface.

All sections are joined by tapered steel push Nipples which do away with the use of rubber gaskets or packing of any kind. This makes a "metal to metal" unleakable joint.

Our hollow grate bar provides for ample draft and complete or partial removal of ashes.



We would like to send you our free Catalogue giving full details of the Gurney Oxford Steam and Hot Water Heating Apparatus.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, P.Q.
The Gurney Standard Metal Co., Limited, Calgary, Alta.



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REFRIGERATORS

PROMPTLY

Are you taking advantage of this hot weather to sell refrigerators ?

A little hustling will sell them fast these days, and the profits are good.

We can supply the

Model, Iceberg and Leonard

Write for Summer Goods Booklet

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

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THREE-GALLON TEA POT

YOU WANT THE BEST



ALSO MADE IN
6, 9 AND 12 CUP SIZES

WE MAKE THE BEST

Aluminum utensils take and retain the heat better than any other kind.

Aluminum does not rust, no danger of poison, does not taste the coffee, and can be set on the stove without any detrimental effects to either the coffee or the pot.

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Catalogue on Application. CHAMBLY CANTON, QUE.

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WESTERN HARDWARE CONVENTION.

IT has been decided by the executive of the Western Retail Hardware and Stove Dealers' Association to call a general convention, to meet in Winnipeg, during the Exhibition. Scott Memorial Hall has been secured again, this time for two full days, July 26 and 27, and ample opportunity will be given for a full and free discussion of association matters. The first meeting is called for nine o'clock on the morning of July 26, and, if necessary, meetings can be held morning, afternoon and evening, for two days. The convention last February was conducted too hurriedly—by the time all the ice was thawed and the different members were beginning to talk freely of those grievances which lay closest to their bosoms, the hour of closing had arrived. This time there will be ample opportunity for a thorough discussion, and it is the earnest hope of the executive that merchants will come prepared to unburden themselves of all grievances. That is the purpose of the convention.

It is satisfactory to be able to state that substantial progress has been made since the convention last St. Valentine's day. Shortly afterwards the executive appointed Mr. J. E. McRobie as secretary and organizer. The months that have intervened have proved the wisdom of their choice. The new secretary is well acquainted among the western trade, and he has proved a tower of strength to the ambitious young association.

In the last four months Mr. McRobie has covered the greater part of Manitoba, calling personally upon all the hardware men in every town. So far only four hardware men have refused to join the association, a showing which is very encouraging. The secretary has not yet found time to visit the trade in the Territories, but they will be called upon in due course, and no fears are entertained but that they will prove themselves equally alive to the benefits of a strong retail association.

The value of the association has been tested already in several instances, and the secretary has been able to straighten out several nasty little tangles simply by bringing the members of the trade together. There are many matters which require attention and the help of the association as a body to settle. The convention is called for the discussion of such questions, and the executive are anxious that all western hardware men will avail themselves of this opportunity.

CANADIAN IRON BOUNTIES.

IT appears that the iron industry of Nova Scotia is depressed because of the increasing use of foreign ore in this country under the present tariff and system of bounties. The Halifax Chronical sets forth the grievance of mine owners, that the fiscal system of the Dominion places them at a serious disadvantage. Iron ores are on the free list, and foreign ores are driving native ores out of use.

Prior to 1896 iron bounties were granted in a way to support and develop the iron mining industry of Canada. Two dollars a ton was paid on all pig iron made in Canada from native ore; two dollars per ton on all iron puddled bars made in Canada from Canadian pig iron manufactured from Canadian ore, and two dollars per ton on all steel billets made in Canada from pig iron made from Canadian ore, and such other ingredients as necessary and usual; no payment to be made with respect to foreign ores used in the products mentioned. The bounties were exclusively limited to Canadian products.

The present Government, however, has increased the bounty tax, while cutting down the bounty benefit to the iron mines. Three dollars is now paid in bounty on steel ingots made with fifty per cent. of pig iron made in Canada. On pig iron a bounty of three dollars is paid on the proportion produced from Canadian ore and two dollars per ton on the proportion produced from foreign ore.

The bounty on foreign ore is not as large as on the home article, but the difference is so slight that no appreciable advantage is afforded the Nova Scotia mines. Another great change introduced in the legislation of 1897 was that it placed no limitation as to Canadian ores in the bounties payable on puddled bars and steel billets. There may not be a pound of Nova Scotia ore or other Canadian ore entering into the iron used in those bars or billets, yet every ton of them is entitled to a $3 bounty. The result of the policy has been to reduce the production of iron ore in Nova Scotia from 58,810 tons in 1896 to 16,172 tons in 1902.

Government statistics throw another light on the manner in which the iron mining industry of Nova Scotia has been sacrificed to the foreigner. In 1903 the Dominion Iron and Steel Co. used no Canadian ore, but 205,540 tons of foreign, on which bounties of $136,875 were paid. The Nova Scotia Steel and Iron Co. used 4,653 tons of Canadian ores, and 15,395 of foreign ores, on which $40,276 was paid in bounties. Of the $412,000 of bounties on pig iron alone, less than one thirtieth part was paid in respect of iron from Nova Scotia ores; while as to the bounties paid on puddled bars and steel ingots, the new laws give Nova Scotia ores no advantage whatever.

THE TURPENTINE CORNER.

REPORTS from the south are to the effect that the recent corner in turpentine was not a temporary condition, but is apt to re-assert itself again and have its effect on the market all season, the general result being continued high prices. A feature of the event is the increased use of benzine as a substitute, and of efforts being made in all parts of the world to procure an article which will take the place of southern "turp." British Columbia, Russia and India are the scenes of various experiments, and it is possible that some success may crown some of the efforts, although as yet the real article has not been equalled by any substitute.

During the past six months an organization known as the Producers' Export Co., with offices at Savannah, Jacksonville and Mississippi ports, have been making an endeavor to corner the supply, which has had a tendency to make the market bullish. In order to offset the action of the Savannah men, another dealer has sent out men, not only to buy up the supply, if possible, but failing in this, to buy turpentine farms, a drastic measure, but a decidedly successful one, if accomplished. The railroads also have been brought into the case, and a big contract was closed recently with the Atlantic Coast Railway, whereby that road will deliver special

trainloads of the spirits of turpentine from Savannah to Jacksonville.

With these endeavors to corner the market there are, of course, others who are determined to balk the plans of the syndicate. Several firms have attempted to place upon the market "doctored" spirits, but have been caught in the act. Then another firm in Georgia claims that it has delved a secret from nature whereby it can make from pine knots and refuse lumber a product that smells and looks like spirits of turpentine and which may be the means of causing a break in the corner now threatened. Experts who have seen the product declare it to be an excellent imitation of the real article of trade. The war will be waged as strongly as possible, and plants for the making of this new product will be installed throughout the turpentine belt of the southeast.

DOMINION EXHIBITION AT HALIFAX.

EXHIBITIONS have much to do with the commercial development of growing cities, not only in the newer districts, but also in well-settled and conservative sections. Toronto has gained greatly through the fame won by its annual Industrial Exposition and many manufacturers and business men have been attracted to the city by the advertising done by the Fair Board.

The holding of an annual Dominion Exhibition in the various commercial centres is a progressive step which has already proven successful. Winnipeg used the exhibition last year to good advantage, and it is probable that many of the firms who exhibited there last year have since opened branch factories or warehouses in the Prairie City. And New Westminster is this year preparing to have its Dominion Exhibition prove to be an attraction second only on the Pacific Coast to the Lewis & Clark Exposition at Portland, Oregon. Its situation in the Fraser River Valley and near the islands of the Delta, makes it an ideal location to make an exhibit of fruits, grains and live stock which should astonish all visitors to the British Columbia city.

The announcement that Halifax has secured the Dominion Exhibition for 1906 should be good news to all who have interests at stake in the Maritime Provinces. Every merchant should cooperate with the Halifax association in advertising the event and inducing manufacturers from other provinces and states to make exhibits, as well as in encouraging growers of agricultural products and live stock, and manufacturers of staple articles to join in making the Halifax Exhibition a success. It is not too soon to take up the matter now and lay plans as to how best to make the 1906 exhibition a success. The Maritime Provinces have much to gain by adopting an enterprising advertising campaign so that the growing west will not receive all the attention of those who have to do with the commercial development of Canada.

WESTERN CROP REPORTS.

CROP reports compiled in Western Canada by the railway officials continue most optimistic in tone. Not in several years have conditions been so favorable at the end of June, and there is every reason to expect a "bumper crop." Perhaps it is only natural that when all conditions seem favorable there should be some exaggerations in the reports received. No doubt many of the early predictions as to the size of the crop will look foolish when the wheat has all been marketed and reliable statistics are available; but, nevertheless, unless some disaster overtakes it, this season's crop will be a vaster crop than has been.

It would be foolish, however, for the trade to risk too much upon the size of the season's crop. A big harvest means a large amount of money for the western farmer and an added impetus to all branches of trade. Hence there is a strong temptation to overload with stock in many lines in anticipation of a big demand in the Fall. But this is a temptation to be avoided. A partial failure of the crop in any district would mean trouble for any store that had overstocked, and there is always danger of rust in some sections. The burden of credit is too heavy now, and nothing should be done to increase it. It is satisfactory to note that crop prospects are excellent, but it is the part of folly to discount the future. Go slow.

WINNIPEG'S CENSUS.

WINNIPEG citizens profess keen disappointment at the result of the special census which the city council ordered to be taken. According to the census man the population of Winnipeg proper is 78,367, and including the suburbs of St. Boniface, Norwood and Louise Bridge, which are really a part of the city, the total population is 85,829.

Had not the people of Winnipeg been led astray by the sanguine calculations of real estate agents, whose interest it is to exaggerate the growth of the city, there would be general satisfaction and no disappointment with the result announced. But people have become accustomed to hearing calculations ranging from 90,000 to 115,000, and hence the actual figures come as a surprise to many.

Nevertheless, these figures indicate a steady, satisfactory growth. In the census report of 1891, Winnipeg is credited with a population of 24,068; in 1901 this had increased to 44,778, and a jump to 78,367 in four years should not be thought unsatisfactory. Surely it is an indication of a rapid and steady growth.

While Winnipeg continues only a distributing centre, dependent for almost all its manufactures on outside points, there are limits to its growth. If the power problem can be solved and Winnipeg can manufacture as well as distribute, her growth will be much more rapid than it has been even in the last four or five years. Cheap power from the Winnipeg River seems likely to be secured very soon, and in that case many eastern manufacturers will establish branch plants in Winnipeg to supply the western demand. In the meantime there is every reason to be satisfied with the substantial, steady growth of Manitoba's capital city.

A GOOD CUSTOMER.

A RECENT issue of Bradstreet's contains some interesting statistics which would seem to indicate that the special tariff advantages in favor of Great Britain, as opposed to the United States, have failed to offset the effects of contiguity and the popularity of American goods in Canada. The present fiscal year promises to break all records in the volume of American-Canadian trade. U. S. Government returns show that for ten months ending April, 1905, Canada took American products to the extent of $115,000,000, and the prospect is that by the end of June the total will reach $140,000,000. The value of imports from the United States for the preceding year was $131,274,346 —up to that time a record breaker in the history of United States trade with Canada.

The gains made by American producers in supplying the requirements of the Canadian market may be illustrated by the following figures, compiled from the Dominion Trade and Navigation Returns :

(Three figures omitted.)

Imports from—	1890.	p.c.	1897.	p.c.	1904.	p.c.
United States	$52,291	46.4	$61,649	55.4	$150,826	60.0
United Kingdom	43,390	38.5	29,412	26.4	61 777	24.5
Other countries	17.085	15.1	20,232	18.2	38,860	15.5

Canada, it will be seen, took 60 per cent. of its imports from the United States in 1904, as against 24.5 per cent. from the United Kingdom, and 15.5 per cent. from other countries—a growth indicating a trebling of takings of American goods, with less than a doubling of the values of British goods. During

the period from 1855 to 1866 a reciprocity treaty was in operation between the United States and Canada; from 1867 to 1897 commerce between the two countries was unaffected by special trade arrangements; from April, 1897 to August, 1898, products from the United Kingdom entered the Dominion at a reduction of 12½ per cent., as compared with the duties charged on importations from the United States. On August 1, 1898, this reduction in favor of the United Kingdom was increased to 25 per cent., and on July 1, 1900, was still further increased to 33 1-3 per cent. One-sixth of the Canadian takings in the present fiscal year were of coal, while raw cotton, steel rails, corn, lumber, and canned goods, were other important imports.

Exports from Canada to the United States have likewise grown, but at a much slower pace. This year they will reach $57,000,000, as against $51,406,265 for the fiscal year ending June 30, 1904. Canadian exports in 1890, 1897 and 1904, were distributed among the different countries as follows:

(Three figures omitted.)

Exports to—	1890.	p.c.	1897.	p.c.	1904.	p.c.
United States	$40,522	41 9	$49,373	55.8	$ 72,772	34 1
United Kingdom	48,353	49.9	77,277	55.9	117,591	55.8
Other countries	7,872	8 2	11.349	8 3	23.156	10.1

NEED OF THE MAIL ORDER.

THE growing tendency among retailers to use the mail order does not lessen the necessity for traveling salesmen, says the Hardware Trade. It is simply a new condition to which the salesman and the wholesaler must adapt themselves.

Conditions in retailing in most sections of the country are such that the retailer cannot hold his order for the salesman as he did in days gone by. He needs the goods right away and he cannot afford to invest in an extra big order simply to make sure that he will have stock enough until the salesman comes again.

Every progressive wholesale house is recognizing this by improving the facilities of its mail order department and for the prompt shipment of goods. The retailer who holds his investment in stock down and uses the mail order is working on right lines. The progressive traveling salesman freely acknowledges this. The traveling salesman who combats it is in nine cases out of ten the man whose best record is behind him.

REGARDING COMPLAINTS.

WE are anxious that our subscribers as far as possible should receive copies of Hardware and Metal on Saturday. The paper is mailed every Friday and all subscribers between Windsor, Ont., and Quebec City, and as far north as North Bay, should receive their paper on Saturday.

We would like any of our subscribers in this district who do not receive their paper till Monday to enter a formal complaint with the postal authorities. We do this ourselves when we find the paper has not been received, but our case would be much stronger if our subscribers would take the trouble to write the deputy postmaster at Ottawa.

DECLINE OF NOVA SCOTIA'S IRON MINES

PROBABLY some of our readers remember that Canada inaugurated the North American iron ore mining industry in 1737, and that the first blast furnace in America was built in Canada during the same year, says the Halifax Chronicle. This furnace and the iron mines that fed it remained in almost continuous operation until 1883, and were succeeded in 1891 by a newer furnace, which is still in operation.

Canada's iron manufacturing industry is therefore now fully 167 years old, and in urging the Federal Government to remove a weakness still inherent in it, by stimulating the production of native ores for its support, Nova Scotians aim at the welfare of a Canadian industry older than the British regime in this Dominion.

The extraordinary dependence of this primary industry on foreign ores, 167 years after its foundation, is thoroughly disappointing when we remember that it is coeval with iron mining in Canada, and that the two closely allied industries were expected to make, at least, equal progress.

That these expectations have not been realized is, we think, due to our failure to equally support them. Let us summarize Canada's iron policy to date. Since 1884 we have paid $5,000,000 in cash to the iron manufacturers to encourage them to make iron, etc., but nothing at all to iron miners to encourage the output of native ores. We have protected the iron manufacturers from foreign competition, and left the iron miner exposed to it. Briefly, we have given everything to the iron manufacturer, including even the right to import duty free foreign ores, rivals of our own, and we have left our iron mines to shift for themselves. Or, to put it even more briefly, to date we have nursed our iron and steel industries and neglected our iron mines.

The mining of iron ores is a more arduous operation than the smelting of those ores, and it is decidedly impolitic to leave the most difficult of the two industries without the slightest direct aid, and exposed to the competition of rival foreign ores. Moreover, it is contrary to the principles of our fiscal system.

The disproportionate progress of iron mining and iron manufacturing in Canada need not excite surprise, when the disproportionate support extended to them by the state, since 1884, is weighed. To expect iron mines to become highly productive under the fiscal conditions that now prevail in this country is to ask too much, and to regard their enforced inactivity as indicative of a lack of native ores, as some of our foreign rivals do, is in the highest degree unreasonable. What inducement is there to invest capital in Nova Scotia iron mines and make them more productive, while foreign ores pour into their home markets and some assistance calculated to offset this serious handicap is withheld by the state? Little or none. We are convinced that our iron lands will continue to lie dormant until the national policy toward iron mining is altered. Until this is done, the present subsidies to our iron and steel industries will stimulate foreign ore mines that embarrass our own, and the capital invested in some of our most important iron industries will remain exposed to legislative interference by the foreign executives that control distant ore deposits.

To regard these important local iron enterprises as national industries, like our coal mines, while they remain upon their present basis appears to us self-deception and, if the celebrated United States iron master who recently criticized them, had in mind their extraordinary dependence on foreign ore, his criticisms were not wholly unreasonable.

Fortunately, the power to put an end to all this and place our ore industries on a sounder basis is in our own hands. The iron and steel industries, that we have created at a direct cost of $5,000,000 in bounties provide the increasing demand for iron ores that we have long desired, and this is probably the best return we have got for our large expenditures, for it is obvious that there are legitimate methods by which we can use this large domestic demand for iron ore to stimulate the development of our iron and steel corporations to consume native ores until iron mining and iron manufacturing in Canada are once more interdependent on each other, as they originally were in 1737.

After attentively considering the industrial situation, we are of the opinion that further iron and steel legislation should be deferred until the Federal Government decides how best to do this, and we think it may be advisable to refer the whole matter to the proposed tariff commission for equitable arrangement. We are decidedly opposed to further "iron legislation" unless it adequately encourages iron ore mining in this country.

Curiously enough, some of those in accord with us take rather seriously the "fears" of our foreign rivals that our iron lands may not be capable of supporting large iron and steel industries. They suggest that perhaps we should prove the existence of native iron ores before we adopt a broader policy for their development. Without pausing to explain in too much detail, the truism that the adoption of an adequate policy for the encouragement of iron ore mining would be the best of all methods for settling once and for all whether we have any, if doubts as to its prevalence existed, we may say that Nova Scotia contains abundance of iron ore, including one deposit which is probably among the most extensive on the coast of America. This abundance of native ore was long since explained by competent authorities, and has been demonstrated by our miners and prospectors. Moreover, nothing can be clearer than the fact that the decline of iron mining in this favored province is not due to the failure of the main ore beds, which, it is significant to note, are not yet owned by our ore consuming companies. But the iron policy we advocate, although superfluous, would not cost Canada anything, if she had not any ores. Before any sums of money are paid to our iron miners they will have to produce the iron ore, and the iron miner who fails to do so will not get public assistance.

We can see no objection to Canada adopting a policy for the further encouragement of iron mining, on such terms, and cannot imagine any quarter from which opposition to it would reasonably come. There is, on the contrary, every reason why we should adopt such a far-seeing policy, if for no other than that the lamentable decline of iron mining in this important province will thereby be arrested.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 58.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street.
Montreal, June 30, 1905.

GENERAL business is described as good for the time of year. Quite a number of travelers are taking their holidays just now, yet orders are frequent, and plenty of stock is moving. The building trade and its accessories has been affected by the carpenters' strike, which is now in force in the city. It is reported, however, that many of the buildings are so far advanced that the plumbers are able to do their work. The lull in horse nails and shoes has set in, and it is not expected that these lines will awaken much before the Autumn. In the big warerooms of wholesale houses the shippers are very busy sending out ammunition to all parts of the Dominion.

Immense quantities of sporting goods of all kinds are disposed of also. In accordance with the season, apple parers are in extra demand, and garden tools, etc., are firm and in good demand. It is interesting news in the middle of Summer that snow shovels are going to be dearer by five per cent. This is said to be occasioned by the scarcity of wood from which they are made. One dealer stated that he expected all kinds of wooden tools to advance in price shortly.

Sleigh shoe bolts have been reduced and are now being sold from the carriage bolt lists. Barb wire and staples are moving freely. Screws and rivets are quiet and firm. Cut nails and wire are going slowly, while in building paper and binder twine there has been a boom and it is likely to continue.

Axes—Good business is being done by leading firms, and the market is in a very healthy condition. No change in price. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Steady demand has kept up and supplies are abundant. We quote as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines — Considerable activity has been noted in the trade, and there is a steadily increasing sale of first-class sewing machines. Our quotations are as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Good business is being done and the trade is active. First-class lanterns are in stronger demand than they were last year at this time. Large numbers of lanterns are used at Summer homes now and even at the seaside places. We quote: Cold Blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—Moving freely is the word all over, and as this is the season for fencing excellent sales are reported. Our quotations are as follows: $2.75 for 100 lbs. f. o. b. Montreal: $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Moderate activity has shown itself, and demand, of course, is measured by the barb wire sales. We quote as follows: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—Prices are unchanged, but business is active and steadiness rules. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Trade is quiet and firm. It is said that now is a good time to buy screws, as the prices may advance. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent.; brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Sleigh shoe bolts are reduced in price and are being sold from the carriage bolt list subject to the following discounts: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger, 55 to 5. Activity rules.

Wire Nails — Demand has eased slightly, and a quieter tone has been noticed this week. We quote: $2.25 a keg f.o.b. Montreal.

Horseshoes—Very little business is being done, and it is confidently expected that little improvement may be seen for some months. Our quotations are ats follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4. $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—Prices are the same with a fairly steady trade.

Sporting Goods—Some record sales of ammunition and shooting materials have been made lately, and piles of boxes are being shipped. Fishing tackle is also booming, and all the accessories to outdoor games, etc., are selling freely. We quote as follows: Canadian-made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—It is expected that the carpenters' strike which is on in the city may have a bad effect on the building paper trade, but so far it has not been disturbed at all. Demand is increasing all the time, and it is likely that all kinds will sell freely for some months. Building activity is at its height.

Cordage—This is the season for twine, and as the harvest approaches the increased demand will continue. Manufacturers are very busy, and orders are booked ahead for some time.

Cement and Firebrick—The fall in prices has held out, and business is not so active. An advance is expected any day. We quote: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $1.90 to $2.00. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—Firm prices with steady business, somewhat easier than last week. We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth—Practically off the market for this season. It is selling at per hundred square feet $1.50.

Poultry Netting—Scarcity continues in some sizes, and the demand has increased with firm prices. Discounts for two inch nineteen gauge standard, and sixteen gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges—In keeping with the boom in building, the trade has increased in volume, and there seems to be a heavy demand for high-class hinges. We quote as follows: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Excellent business is reported all over for first-class practical

apple parers. The fruit season always causes stimulation in these lines. We quote: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east.
Toronto, June 30, 1905.

CONTINUED activity is reported amongst the hardware jobbers, large assorting orders being received from the trade in all sections of the province. Trade in hay forks, rakes, scythes and other farm tools is particularly active, while garden and lawn accessories are still in strong demand.

Summer goods, such as fly screens and doors are being sold in large quantities, and fishing tackle, guns and ammunition are called for actively.

The practical immunity from strikes in the building trades in Ontario gives all building materials a boom, the result being that merchants' stocks are diminishing rapidly, and calls for more goods are becoming frequent.

The Association of American Portland Cement Manufacturers of the United States was in annual convention at Atlantic City last week. The gathering represented $50,000,000 capital and 30,000,000 barrels of cement per annum. The convention decided to raise prices five per cent. per month, owing to scarcity of stock. It was also voted to establish a laboratory for the study of methods for the manufacture of cement blocks and other material for building. The insurance companies were asked for a lower rate on concrete buildings.

No changes in prices are noted.

Lawn Mowers—Trade continues very active. The season is nearly over, however.

Sporting Goods—Fishing tackle and camping outfits are having a good sale, while shooting materials are improving.

Washing Machines—Demand continues very good for the Summer season.

Chain—Trade is in its normal state. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Step Ladders—A fair business is being done. We quote at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders.

Extension Ladders — Movement of goods is reported as very satisfactory. Waggoner, 40 per cent. off list.

Galvanized Wire—Large orders are still being placed with the jobbers. We quote: $2.37 1-2 f.o.b. Cleveland.

Poultry Netting—Demand for goods is exceptionally good.

Barb Wire — Many merchants have been cleaned out by the active demand, and repeat orders are common.

Wire Nails—Stocks are being called upon heavily. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—A large trade is reported. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is falling off owing to the Summer season. We quote as follows: "P. B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horsenails—Demand during the Summer season is less active. Prices are the same.

Screws—Stocks are fairly large and demand good.

Rivets and Burrs—Demand is reported good at unchanged prices.

Bolts and Nuts—Stocks are being diminished slightly. The same quotations rule.

Cordage—Sorting-up orders are the rule, with some orders for binder twine still coming in. We quote as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—The large demand and possibility of a shortness in the supply causes prices to hold firm. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.85; American Portland, $1.85 to $1.90. For small orders ex warehouse: Canadian Portland, $2 to $2.10; American Portland, $2 to $2.10.

Firebrick—Business is expected to be more active this month. Prices are firm. Our quotations are as follows: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—A large business is being done, the general activity in the building trades keeping the demand for goods steady.

Hides, Tallow, Skins and Wool—The market is quiet and without particular indications. Advances, however, are noted in country hides, flats, and lamb skins and shorn pelts, due to the fact that some buyers in the country are offering prices higher than city dealers can afford to pay or the export market will warrant. We quote the following:

Hides, No. 1 green steers, per lb		0 10
" " 2 " "		0 09
" No. 1 green, per lb		0 09½
" " 2 " "		0 08½
Country hides, flats, per lb	0 08½	0 08½
Calf skins, No. 1, selected		0 11
" " No. 2		0 09
Deacons (dairies), each		0 80
Sheep skins		1 25
Lamb skins, each		0 45
Shorn pelts "		0 35
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb		0 15
Wool-washed fleece		0 23
Pulled wools, super, per lb	0 21	C 23
" " extra "	0 22	0 24

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, June 30, 1905.

BUSINESS in metals generally is sound and healthy. Antimony has held firmly to the advance of last week, and there is not the slightest indication of any decline. Copper has firmed up, and a slight advance was reported. Ingot tin is very firm and steady, and although there were some fluctuations no change in current quotations was warranted. There is an easier market for ingot zinc, and prices are shaded for large quantities. Pig lead has advanced from $3.45 to $3.55, and has reached a price higher than it has been for the past three months. If pig iron follows suit then the prophecy of this paper will have been completely fulfilled.

Pig Iron—The expected advance has not yet taken effect, and some prominent wholesalers declare that there is not so much probability of an advance now. At any rate, prices are firm, and a good business holds everywhere. We quote:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	"	"
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—Indications all point to a declining market, and there is every chance of the present decline being maintained for some time. We quote: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—There has been a steady demand for tool steel, and certainly the large firms are busy selling fine varieties of tool steel. Free sales reflect on the development of industrial activity, and so tool steel is an unerring indicator of how prosperous the working people are. We quote: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—The market is still quiet, and not much change is expected for a while. Our quotations are as follows: Sleigh shoes, $1.97 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold-Rolled Shafting—Plenty of busi-

ness is being done, and prices are firm and steady with no change. Our quotations are as follows: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—Increased demand has been noted, and first-rate prices are in force. Plenty of orders are available. We quote: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—No change has taken place in prices, and the market remains firm with every indication of maintaining that attitude. We quote as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra.

Black Sheets—Good trade is being carried on, and orders are plentiful. Our quotations are as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The remarkable advance has held firmly, and it is not likely to change, at least for some little time. Lively trade is being done, and there are some rumors of a further advance. We quote: 11 3-4 to 12c.

Sheet Zinc—No change has occurred in the price, but a steady market continues with fairly good business. We quote: Cask lots, $7; small lots, $7.25.

Tin Plates—Good demand and prices remain firm and unchanged. We quote: Cokes, $3.75; charcoal, $4.

Ingot Tin—Firmness dominates, and there is a strong tone to the market, with a tendency towards an advance. We quote: Present prices range from 33 to 33 1-2c.

Ingot Copper—Copper generally has grown much firmer, although no change has been made in the prices. We quote: 16 to 16 1-4c.

Ingot Zinc—An easier tone has been noted, and the current prices are shaded when large quantities are sold. We quote: 6 to 6 1-4c.

Pig Lead—An advance has taken place of from $3.45 to $3.55, and pig lead is thus higher than it has been for the past three months. We quote: $3.45 to $3.55. No concession.

Boiler Tubes—Business is good and prices are firm and unchanged. We quote as follows: British and American tube, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—Considerable business is being done locally in copper and brass. These metals are in a strong position and are said to be likely to hold that. Our quotations are as follows: Heavy copper and wire, 12 3-4c.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 3-4c.; machinery cast scrap, $14; wrought scrap, $13; stove-plate scrap, $10; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-4 to 5 1-2c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
Front street east,
Toronto, June 30, 1905.

MORE confidence is evident in metals owing to the increasing firmness in demand and prices. All ingot metals are strong. Tin has advanced, and a rise is looked for in galvanized sheets. Copper is in a stronger condition, and lead is also in better shape. Spelter is not so strong. Antimony has jumped upwards again, and is reported firm at the higher quotations. Coal has been advanced 10c., according to schedule.

Pig Iron—Trade is more active, and large sales are reported. We still quote:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "		18 50
" No. 2, "		18 00
Radnor, at furnace		30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Stocks are fairly large, and calls for goods are very satisfactory. Prices continue as follows: $1.85 f.o.b. Toronto, with discount of 2 per cent.; for extras as cut to length, while rolling, 2 feet and over, 10c. per 100 lbs., 1 foot and under 2 feet, 15c.; under 1 foot, 20c.; over 20 feet, by special agreement according to length and size.

Tin—Prices are advancing, and the light stocks held indicate no falling off. The demand is active. We quote: 34 to 35c. per lb.

Galvanized Sheets—Conditions are unchanged, the demand being heavy. Prices are advancing in England, but unchanged here.

Tin Plates—General activity is reported at steady prices.

Canada Plates—Active demand for goods is reported. Prices are the same.

Brass—Trade continues active and prices firm. Discounts are 10 per cent.

Lead—Increased prices are reported in outside markets. Stocks are light and demand steady. We still quote: Pig lead, $3.80 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market is somewhat quieter. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Demand is more active and prices unchanged. We quote as follows: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—Business is more active, and prices continue to advance, the ruling quotation now being 13c.

Old Material—Business is quiet in most lines, prices being steady. Dealers buying, prices are as follows: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Importations have been fairly large, and dealers are well stocked. Prices of anthracite have advanced 10c. per ton. We quote: Anthracite in cars at bridges: Grate, $5.05 per gross ton; egg, stove and nut, $5.30 per gross ton; pea, $3.70 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80.

For Manitoba Metal Markets see page 40.

MINES AND MINERALS.

Another record in the line of cargoes on the great lakes was established when the steamer Elbert H. Gary, of the Pittsburg Steamship Co., the largest boat in commission on fresh water, passed through the Canadian Soo canal, carrying the largest load of iron ore ever taken down the great lakes. The Gary, which is 569 feet in length, had on board 11,42[illegible] tons of ore, but although she thus broke one record and established another the fact excites little more than passing comment, as the commerce of the lakes is growing so fast that such feats are being accomplished several times each year. While the Gary now holds the records, there are other boats in course of construction on shipyard docks of the lakes that will carry much larger cargoes than she is capable of.

* * *

The output of the collieries of the Crow's Nest Pass Coal Co. for the week ending June 23 totalled 11,972 tons, a daily average of 2,394 tons. All the mines were idle one day for the monthly holiday.

* * *

An application has been made for the right to develop coal lands on the Porcupine River, Whitney Township, which is in New Ontario's famous clay belt. The parties who make the application are confident that a good quality of coal, in large quantities, is contained in the property.

* * *

The shipment of ore from the Vermilion range to the works of the Dominion Iron & Steel Co., at Sydney, N.S., has commenced and promises to be as large as in any previous year.

* * *

In May the Granby Co. treated 55,420 tons of ore and 242,124 tons for the first five months of this year. Shipments for May would indicate net earnings of

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between $70,000 and $75,000. The Granby Co. recover about 26 lbs. of copper per ton of ore, and, crediting the gold and silver values against copper costs, the company are securing a net profit of about 5 cents per pound, with 15 per cent. copper. The company will shortly blow in two large furnaces which will materially increase both production and profits.

* * *

The American Institute of Mining Engineers will hold their annual convention in Victoria, B.C., July 1 to 4. The delegates will visit Atlin and Dawson City and a baseball match will be played at midnight at the latter camp.

* * *

Engineers engaged on the surveys for the Grand Trunk Pacific Railway are reported to have made a rich discovery of oil just east of Lake Abittibi, in the farther Temiskaming district. A huge well pouring forth quantities of oil, estimated at 700 barrels a day, has been located, and it is evident that the flow has been going on for years. The constant flow has resulted in the formation of a lake of oil. The oil field is located on land belonging to the Province of Quebec.

* * *

A particularly promising discovery of copper has recently been made in Awenge Township, ten miles from the Soo, on the line of the Algoma Central Railway. A syndicate of residents of the two Soos have a vein of 500 feet uncovered, which shows throughout its whole length ore rich in copper and silver, as well as to the bottom of a shaft that has been sunk to a depth of thirteen feet. The average rock shows an assay of $37.98 per ton, while picked samples run as high as 30 per cent. copper. The company will immediately sink a shaft to a depth of 150 feet and then drift.

* * *

The total production of steel ingots and castings in Canada in 1904 was 148,784 gross tons, against 181,514 tons in 1903, a decrease of 32,730 tons. Bessemer and open-hearth steel ingots and castings were made in each year. Almost all the open-hearth steel reported in 1903 and 1904 was made by the basic process. The direct steel castings made in 1904 amounted to 6,505 tons. Canada has not made crucible steel prior to the present year.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, June 20, 1905.

VERY little has occurred during the past week calculated to throw light upon the tendencies which are shaping the markets. Those who watch the water rushing into the mill are satisfied; others who study the reports of rainfall over the watershed are more doubtful. It certainly has not rained orders very hard for some time past, and while the great majority take that fact philosophically, a few are becoming a little uneasy.

In foundry pig iron the markets have weakened further and $11.25 for No. 2 at Birmingham has been done on a modest scale. The buying movement has not yet set in. How much longer it can be postponed is the question. Many consumers are pretty well covered well

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OPEN HEARTH STEEL

into the third quarter, the furnaces being correspondingly booked. Still pig iron is accumulating at the furnace banks, and the demand for pig iron for steel-making purposes, in particular, in the central west, is light. The statement is emphatically made by the highest authority that the leading interest needs no outside iron for July, reports from other sources to the contrary notwithstanding.

The conditions in raw material are not readily reflected in the finished branches, with their "official" prices. The big mills in the heavy lines are busy for months to come; and in some instances are crowded beyond capacity, so that they must dole out the product with the aim to placate the maximum number of irate customers. But that is not true in all branches or in all parts of the country.

There are prospects of additional work from the lake shipbuilding yards. The railroads are still buying and large building operations in nearly all our great cities are flourishing.

The independent manufacturers of sheets and of bars have declined to sign the scale presented by the Amalgamated Association and it looks as though we were heading for a strike, with the odds heavily against the men.

Reports are current that several of the prominent mills are extending and renewing certain of the low-priced contracts on sheets and bars made some time since.

There are no particularly interesting developments in the export trade, which is being pushed vigorously and which promises to be larger than ever before.

LONDON METAL MARKETS.

From Metal Market Report, June 23, 1905.

Pig Iron—Middlesboro No. 3 foundry is quoted at 45s. 6d, and Scotch warrants at 49s. 4d, making prices as compared with last week unchanged for Middlesboro and unchanged for Scotch warrants.

Tin—Spot Tin opened firm at £140, futures at £138 17s. 6d, and after sales of 150 tons of spot and 260 tons of futures closed steady at £140 for spot and £138 17s. 6d for futures, making price as compared with last week 15s. higher on spot and £1 2s. 6d higher on futures.

Copper—Spot copper opened quiet at £66 3s. 9d, futures £66 2s. 6d, and after sales of nil tons of spot and 25 tons of futures closed quiet at £66 2s. 6d for spot and £66 for futures, making price as compared with last week unchanged on spot and unchanged on futures.

Lead—The market closed at £13 6s. 3d, making price as compared with last week 6s. 3d higher.

Spelter—The market closed at £24, making price as compared with last week unchanged.

The James Warnock Co., Limited, of Galt, share capital $200,000; purpose, to manufacture and deal in tools and implements. The directors are: K. B. Warnock, and C. B. Massey, of Toronto; and J. B. Warnock and F. T. Strong, of Galt.

British Columbia Trade News

Vancouver, June 22, 1905.

SOME prospect now exists of a settlement of the troubles at the Nanaimo collieries, which have closed the mines down for the present and threatened the business interests of the city with disaster, for the owners at one time considered closing the mines down permanently, as they declared it was impossible to work them under the new regulations enacted at last session of the legislature. Under these, it is made imperative that the 8-hour shift which the miners work, according to law, is to be from bank to bank. That is, eight hours from the time the men descend the shaft till they reach the surface again.

Contract miners, those working by piece, and that meant practically the whole force, were handicapped by this, for they had fully half an hour less time to work. The company, on the other hand, were unprepared to make further concessions, so the mines have been closed down pending a settlement. It is now thought possible that some arrangement can be reached.

Manager Stockett, of the company, issued a statement showing the net daily earnings of all miners to be $3.75 to $3.80 per shift for the last two months the mine was worked. This included boys working as miners' helpers, all being classed as miners, thus reducing the average of those properly classed as miners. Some of these made as high as $5 for the day of eight hours. Nanaimo business men will welcome a settlement, as present conditions spell ruin to many of them.

* * *

The B. C. Telephone Co., operating in all the principal cities of the province, are at present engaged in litigation with the City of Vancouver, the question immediately at issue being the right of the company, under its legislative charters, to enter upon lanes and streets of the city to lay conduits for underground wires without the consent of the civic authorities. The city council does not object to the laying of wires underground, but it stands upon the right it has to sanction such action, while the telephone company claims the right independent of civic permission. To test the matter the city has issued an injunction, which it seeks to have made perpetual, restraining the company from laying conduits on the lanes and streets without first making an arrangement with the city.

The question is much the same as that arising in Eastern Canada over a year ago, on similar claims by telephone companies.

* * *

Some interest is aroused in lumber circles by the announcement that the Great Northern Railway has instituted new rates of freight on shingles shipped from Puget Sound points to points reached in Eastern Canada. It would appear at first that there was a danger of American shingles from Puget Sound mills becoming a serious competitor to the B. C. manufacturer. However, the fact develops that the C.P.R. has always had in force rates similar to those now charged by the G.N.R., and the fact that B. C. shingles are better in quality than those from the Sound will hold the trade.

* * *

Preparations are well ahead for the erection of the superstructure of the magnificent million dollar hotel being built by the C.P.R. at Victoria. The first scowload of stone for the walls has been delivered, and will be followed rapidly by others. Other material is also being assembled, and as the foundation is in, the work will proceed with all despatch. The building will not be completed in less than a year and a half.

* * *

The opening ceremonies in connection with the turning of the waters of Coquitlam Lake through a 2½ mile tunnel, constructed by the Vancouver Power Co., were carried out on Friday last, a distinguished company of prominent civic and legislative officials, including most of the members of the B. C. Government, headed by Premier McBride, being gathered to see His Honor Lieut.-Governor Sir Henri Joly turn the golden key which operated the electric switch and opened the portal of the tunnel.

In 35 minutes from the opening of the portals the wall of water, 4 ft. in height, rushed out of the western end of the tunnel and dropped with a roar into Lake Beautiful, which has been made a reservoir to hold the waters of the two lakes in store for generating power. An installation of plant for 30,000 h.p. has been made, though that is far in excess of the quantity now used. The tunnel is 9 ft. square, and is cut through solid rock the entire two miles and a half. By raising the water level in Lake Coquitlam several feet, which is to be done with a dam at the outlet, the full limit of power can be kept up right through the year. Cheap power for manufacturing purposes, as well as reduced lighting cost in Vancouver, New Westminster, and adjacent districts, is anticipated as a result of the success of the enterprise.

* * *

Building is extremely active in both business and residential property in Vancouver and Victoria, promising to be above all previous records. New Westminster, too, has experienced a regular boom through the stimulus of preparations for the Dominion Fair, to be held in the Royal City in September. The usual labor troubles so familiar in Vancouver have been reduced to a minimum this year, and are practically all settled now. Very little, if any, disturbance has been caused by strikes, and the prospects are for a peaceable and prosperous building season throughout the Summer and Fall months.

The mills are running full capacity both on local business and for export to the Northwest. From the prairie districts, where prosperity smiles everywhere this year, the orders for lumber and material are coming in very satisfactorily.

* * *

So great has been the increase in the movement to the land in B. C. during the past year or two, it is now being materially felt as a factor in business. There are thousands of acres of lands available for agriculture in this province, and in most part favorably situated as to transportation, being within reach of railway facilities or steamboat service. Not only in the famed Okanagan District, but in all parts of the province, and nowhere more than in the

coast and Fraser River districts, hundreds of people are buying and settling down on land, in large or small holdings, and the movement has apparently just begun.

* * *

Rather a serious business difficulty is that which has caused the assignment of N. Thompson & Co., a leading machine works in Vancouver. The concern have been operating for a number of years and were thought to be in a prosperous condition, having in hand the ambitious project of building a very large floating drydock, similar to that at St. John, N.B., bonused by the Dominion Government. The liabilities of the company are set at $136,000, with assets nominally some $6,000 greater, on first preliminary survey of the affairs by the assignee, F. Burnett.

While Mr. B. N. Thompson, the senior member of the company is in hopes of reorganizing with fresh capital, the works are for the present practically closed down. The Molsons Bank is the principal creditor, being represented in the list at nearly $100,000.

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Nova Scotia Trade News

Halifax, N.S., June 27, 1905.

NO change worthy of special note has occurred in the hardware business since last report. The turpentine market is a trifle easier, and there has been a slight decline in price, but it is not expected that the decline will continue, as holdings are light. There is a good demand for paints and oil, and some sales have been made of haying tools, but they are very light as yet.

Orders are coming in quite freely for wire fencing and a good jobbing trade is being done in nails and glass. Explosives are in good demand, and trade is showing a slight improvement in some lines. Collections continue fairly satisfactory.

The Dominion Iron and Steel Co. have awarded a contract to Heyl & Patterson, of Pittsburg, for the remodelling of battery No. 9, and for the building of fifty new coke ovens. This same firm built the company's wash plant. Battery No. 9 is the only lot of non by-product ovens in the plant, and has not been used heretofore. These ovens will be remodelled into by-product ovens. The new ovens, which will comprise battery No. 10, will be by-product ovens of the same type as those now in use. This addition to the ovens will increase the coke supply to the extent of about 150 tons per day. The new ovens will supply blast furnace No. 3 with coke. Work will be commenced as soon as the excavation and concrete work, which is being done by the steel company, is completed. It is expected that the remodelling and the construction of the new ovens will be completed in about four months.

The Robb Engineering Co., Amherst, has received an order from the Dominion Coal Co. for two 100 horse-power Robb-Mumford boilers, from the Standard Manufacturing Co., Sackville, for a 125 horse-power boiler, and from R. S. Carter, Maccan, N.S., for a 65 horse-power engine.

The workmen at the Nova Scotia Steel Co.'s pier, North Sydney, did some record-breaking at North Sydney last week, when the steamer Trold was discharged of her cargo of iron ore from Wabana in nine hours.

It is estimated that it will require a train of twenty-one cars to haul the wire that it will take to fence the railway right of way on the South Shore, between Barrington and Shelburne, N.S.

The first shipment of steel rails by the Dominion Iron and Steel Co. was made to-day, when a car, containing fifty tons, was sent forward from Sydney to Montreal for the Grand Trunk Railway. This is the first instalment of the 25,000 ton contract recently made and the balance will be shipped continually as the rails are made until the contract is filled. Everything is working satisfactory at the mill, and the officials expect to make a record output in the near future.

PERSONAL MENTION.

Mr. J. B. Reid, of H. S. Howland & Sons, lost a few days during the past week owing to illness.

C. A. McDonald, of Winnipeg, is erecting a large building for general hardware at Mortlach, Assa.

Mr. J. B. Learmont, of Caverhill, Learmont & Co., Limited, has gone to the country for a short rest.

Mr. W. G. Jones, treasurer of the Pease Foundry Co., is making a fortnight's business trip to Winnipeg.

Mr. Wm. Smaill, manager of the Canada Horse Nail Co., Montreal, spent a few days in Toronto during the past week.

Mr. T. G. Hodgson, of the staff of Geo. D. Wood & Co., Winnipeg, who has been ill for some weeks, returned to work on Monday last.

The George Hunter Hardware Co., Vancouver, have opened a branch of their business in Fairview, at 2021 Granville street. A complete line of hardware, etc., will be carried.

Mr. J. O. Thorn, of Toronto, manager of the Metallic Roofing Co. of Canada, Limited, is in Winnipeg at present superintending the erection of the company's branch on Notre Dame avenue.

Mr. Cherry, of Sargent & Co., New York, was in the city the early part of this week. He was jubilant with the way business was looking in Canada and his firm were getting a very generous share.

Richard Howse, who has carried on the tinsmith business in St. John, N.B., for the past fifteen years, left for the west this week, where he will in future reside. His family will join him in a few months.

Mr. L. E. A. Cholette, who has been connected with the Canadian Rubber Co., Limited, of Montreal, for over 25 years in various capacities, has severed his connection with the company, to take effect July 1.

During the electrical convention in Montreal last week the windows of the headquarters of the Syaer Electric Co. were beautifully decorated with flags and electrical insignia and the effect was remarked by a large number of the delegates.

McLennan, McFeely & Co., Vancouver, have secured the contract to supply construction implements for the Nicola, Kamloops & Similkameen Coal & Railway Co. The order includes all hardware goods, picks, shovels and everything else in their line.

At the convention of the Canadian Electrical Association in Montreal last week, one of the features which added very materially to the happiness of the meeting was the courtesy extended by the management of the Montreal Street Railway Co., which took the form of a substantial book of pass tickets on their cars all over the service, around the mountain and to Lachine. Hundreds of women and children were given great happiness by these tickets and in addition they saw Montreal in a way that otherwise would have been missed. The Street Railway Co. and its service came in for much praise from the delegates and others.

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Orders filled same day as received.

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PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, June 30, 1905.)

Office of HARDWARE AND METAL
Room 511 Union Bank Building,
Winnipeg, Man.

A CONVENTION of the Western Retail Hardware and Stove Dealers' Association is to be summoned by the executive to meet in Winnipeg during the exhibiton. Scott Memorial Hall, on Princess street, has been secured for two full days—July 26th and 27th—and ample time will be given for a thorough discussion of all association matters. In the months that have passed since the last convention was held an energetic canvas of the trade has been made by Secretary McRobie, and many new members have been added to the list. The association is growing in strength, and a uesful and enthusiastic convention is assured. The first meeting will be held at nine o'clock on the morning of July 26th.

* * *

Mr. W. W. Wright is a late addition to the staff of The Miller-Morse Hardware Co., coming to this city from Louisville. Kentucky, where he was in the employ of the Belknap Hardware & Manufacturing Co. Mr. Wright is the second to join the Miller-Morse Hardware Co.'s staff from the Belknap Hardware Co., Mr. Theodore Kork, of catalogue fame, being the first.

* * *

The Dominion Bridge Co., of Montreal, will open a branch plant in Winnipeg very soon, to supply the western demand for structural steel.

* * *

Business continues very brisk, particularly in all lines of builders' hardware. Prices are steady throughout, and there are no changes of importance to note.

* * *

Screen Wire Cloth—Price is steady at $1.55 per 100 square feet.

Poultry Netting — In brisk demand. For the 2-inch mesh in No. 19 gauge wire, prices are as follows:

24-inch roll, perroll	$1 20
30 " "	1 50
36 " "	1 80
48 " "	2 40
60 " "	3 00
72 " "	3 60

Wire—There is considerable activity in the wire market, but prices are steady. We quote again as follows:

Barbed wire, 100 lb.	$2 85
Plain galvanized, 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 85
Staples	3 35
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
" 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—In normal demand for the season. Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Moving in very large quantities. Base price: $2.85 per keg.

Cut Nails—Base price $3 per keg. Very few selling.

Screws—In very brisk demand. A temporary shortage in some sizes is complained of. Discounts continue as follows:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are quoted as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 5-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4 60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

"Arcade"	70 and 10 p.c.
"Black Diamond"	60 p.c.
"Nicholson's"	62½ p.c.

Building Paper—In very brisk demand, and large quantities are moving. Prices are quoted as follows:

Anchor, plain	55c.
" tarred	70c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—Prices and discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—The price is 20 cents per lb. for ordinary quantities, with concessions for large orders.

Iron and Steel—A steady, featureless market is reported this week. Prices are quoted as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—This market is active and steady. Prices are firm. We quote:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	10

Galvanized Iron—Business continues exceptionally brisk. Prices are steady and are still quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 55
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

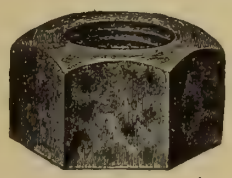
WIRED GLASS

The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

ASK FOR VEST POCKET MAP OF MANITOBA

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

OUR AGENTS

MESSRS. WAYLAND, WILLIAMS & DADSON
28 BOARD OF TRADE BUILDINGS, MONTREAL

are carrying a stock of our goods and will be pleased to have your inquiries for **Hex.** and **Square Cap Screws, Square Head Set Screws, Bright Washers,** and **Bright** and **finished Hex. Nuts.** The quality is right, and we can give you good deliveries.

ACME LATHE & PRODUCTS CO., LTD.
MANCHESTER.

YOU, US AND THE OTHER FELLOW

No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

The Manufacturers List Co., - - - Toronto.

CONDENSED OR "WANT" ADVERTISEMENTS.

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

BUSINESS FOR SALE.

HARDWARE, stoves, tinware stock and good will of Rogers hardware store, Keele and Dundas streets, Toronto Junction, Ont., for sale on easy terms to suit purchaser; stock can be inspected and particulars obtained on premises or by writing to above address. (27)

HARDWARE and tinsmithing business on Main Line C.P.R. in Manitoba. Stock and fixtures $9,000. Solid stone store $3,500. Terms: Half cash, balance on easy payments. Purchaser can lease store if preferred. This is an old and well established business, paying handsome profits. Good reason for selling. For full particulars apply P.O. Box 32, Oak Lake, Man. (29)

SITUATION VACANT.

WANTED—Tinsmith for eavetroughing and furnace work; state wages. H. Andrews, Orillia, Ont.

TRAVELER WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

PITCH FOR SALE.

ONE carload hard carbon pitch now in our warehouse. Canadian General Electric Co., Limited, Peterboro'. (28)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildihgs," will be received at this office until Tuesday, August 8, 1905, inclusively, for the supply of Coal for the Public Buildings throughout the Dominion.

Combined specification and form of tender can be obtained on application at this office.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, June 26, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (27)

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—Since the reduction in turpentine noted in these columns last week there have been no further changes. Oil is steady at the prices quoted for some weeks, and the paint and color list is unchanged. There is a heavy movement of all classes of painting material. We quote again as follows:

White lead (pure)	$5 00 to $5 50
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure in barrels	$ 1 00
Less than barrel lots	1 05
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—Prices are maintained firmly, as there is a strong demand, and supplies are none too large. There has been no change since the advance about six weeks ago, which left prices as follows:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
6 to 100 "	

HINTS FOR HUSTLERS.

Show your clerks what hustle is by hustling yourself.

A smiling clerk is a better advertisement than a gilt sign.

A clean show window is a better trade drawer than a surplus stock of soap.

Unfailing politeness will do your store more good than daily bargain sales.

A bright gossipy handbill with some real bargains on it will do a lot of talking for you.

Remember that so far as your store and stock are concerned, your customers prefer cleanliness to Godliness.

Keep your promise to deliver goods on time. If you don't you will spoil some dinners and lose some good trade.

Never get wrathy either with customers or clerks. If you do you're sure to sour something.—From the Retailers' Journal.

Are you handling our



STEEL FEED TROUGHS?

If not we can make you an interesting proposition as our NEW TROUGH CATALOGUE and other literature are now ready to assist the trade. We supply you liberally with them and give exclusive agency. Let us hear from you.

STEEL TROUGH & MACHINE Co., Limited
TWEED, Ontario

REFRIGERATORS



Up-to-date dealers buy our lines because our refrigerators are unequalled for their finish, construction and general appearance. Write for Catalogue.

C. P. FABIEN
Refrigerator Manufacturer
MONTREAL, - - CANADA

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3893

CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

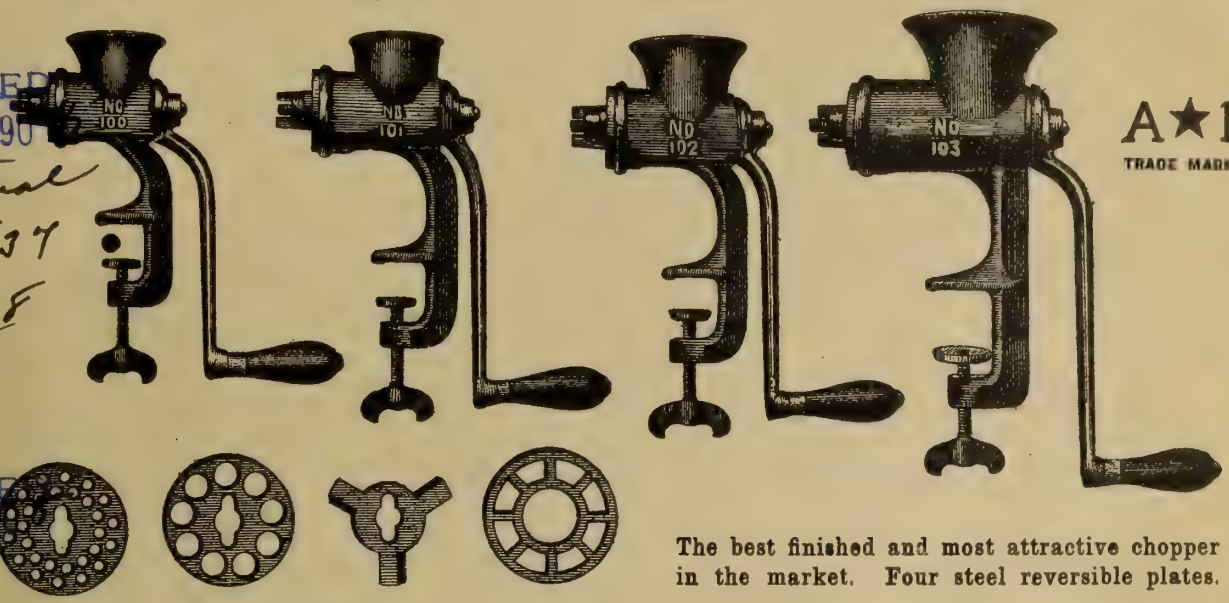
GUELPH AXLE WORKS

THE GUELPH SPRING & AXLE CO. LIMITED
GUELPH, ONT.

The A1 Tinned Food Choppers

IN FOUR SIZES

No. 100 No. 101 No. 102 No. 103



A★1
TRADE MARK

The best finished and most attractive chopper in the market. Four steel reversible plates.

F. W. LAMPLOUGH & CO. = Montreal

RETURNED JUL 3 1905

Montreal
Book 37
Page 28

RETURNED JUL 3 1905

Work up a Trade

It is easy for you with the field at your command to work up a trade for the

METALLIC ASH-SIFTER

It is made in Canada; it is cheap; it will last as long as ten wooden sifters, besides, with the use of **Our Patent Wire Bale** and **Metal Cover,** labor is saved and dust kept from rising. Illustrated circular and price on request.

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

HARDWARE TRADE PARAGRAPHS.

Lawn swings and hammocks are in great demand. The variety of the latter enables the purchaser to suit himself in style, price and color. To display the hammocks hang them by one end from the ceiling and have a pole with a hook handy so that any one of them can be detached easily. They will hang low enough to allow inspection and at the same time will be out of the way to a considerable extent.

* * *

Water filters are in demand more in the Summer than in cold weather. With so much surface drainage now the drinking water of many towns is contaminated. A good line of these ought to be in every hardware store.

* * *

Just for a change make a "kitchen furnishings department." All that is needed is a counter—and the goods. They would include food choppers, paring knives, pot scrapers, wire dish cloths, cooking spoons, egg beaters, graters, coffee pots, tea kettles, pots, kettles, pans, enamel-ware, toasters, asbestos mats, tea strainers, griddles, waffle irons, cork screws, etc., etc. A counter filled with these things and placed near the centre of the store ought to attract attention.

* * *

How are your fellow merchants fixed for nail pullers? Next time the grocer comes in ask him. And try the druggist, the drygoodsman, the shoe dealer, and all of them. You may sell a dozen this way.

* * *

It is unsatisfactory business handling a low grade of lawn hose. About the first time it bursts—as it will do very soon, in all probability—the purchaser will forget that you told him it was a cheap brand and all that he will remember is that you sold it to him and that it "busted" and sprinkled him instead of the lawn. He will not be so friendly toward you after that. A good, substantial hose, though costing a little more, gives satisfaction to everyone that has anything to do with it.

* * *

Builders' hardware is still a strong number. The demand is rather increasing as the season advances and the jobbers have been unable to get their orders filled with anything like promptness. The manufacturers are doing their best just now, but if they had made up a reasonable amount of stock in advance there would not have been the trouble that there is. Some jobbers are more fortunate than others and have in fair stocks, but none of them are boasting much about the condition of their builders' hardware stock.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

786. A Sheffield firm manufacturing butcher knives, painters' and glaziers' knives, paper and painters' scrapers, graining combs, etc., ask for communication with Canadian buyers.

787. A Sheffield firm manufacturing cutlery, imitation ivory knives, razors, pocket, farriers,' putty and palette knives, steel-cased carvers, etc., desire communication with wholesale buyers of these goods in Canada.

796. Two French companies of automobiles want active agents for the Dominion.

797. The most important manufacturer of arms in France wishes an active representative in Canada.

PAINT, OIL AND BRUSH TRADES

LINSEED OIL AND WHITE LEAD.

FOR some time past a spirited controversy has been waged in the Oil and Colourman's Journal, of London, Eng., as to whether linseed oil combines with white lead? A contribution to the subject by the well known chemist, George H. Hurst, of Manchester, is of interest to all who have looked into this subject. He says :

"I am not going to discuss the controversy in detail, but would like to be allowed to record the result of some experiments which I have had in progress for some weeks. I have had in my possession some old samples of paste white lead and it occurred to me that if such a thing as saponification did occur these would be likely to show it. I proceeded to extract these samples with methylated ether, petroleum ether, and alcohol. The solutions obtained were submitted to evaporation to get rid of the solvent, and the oil obtained was quite clear and fluid (none was got with alcohol). This oil was tested for lead, which was found to be absent. The residual lead was quite dry and powdery when the solvent had been evaporated off, and on examination showed no sign of containing any oily or fatty matter. Evidently the mere grinding of white lead with linseed oil in the ordinary course of work does not cause any saponification to occur.

"The question arose : Is linoleate of lead soluble in ether, petroleum ether, and alcohol ? Some was made by boiling linseed oil with caustic soda to make a linseed oil soap, care being taken to have the saponification complete and to produce a perfectly neutral soap. This was then poured into a solution of lead acetate, the lead linoleate formed carefully washed free from any excess of lead acetate or sodium acetate and dried. Weighed amounts were next put into methylated ether, petroleum ether, and alcohol. I found that methylated ether will take up 2 to 3 per cent. of lead linoleate, petroleum ether takes up 3 to 3½ per cent., while alcohol only takes up 1 per cent. All these solutions show markedly the presence of lead. These results go to show that if, when white lead is mixed with linseed oil, any saponification does occur, the linoleate of lead would dissolve in the ethereal solvent used, and its presence could be detected in the oil left behind. As stated above, such was not found to be the case."

TURPENTINE PRODUCTION IN INDIA.

ACCORDING to an article in the Chemist and Druggist, the production of turpentine on a large scale, and the manufacture of turpentine into oil and colophony, has lately also been taken up in India, since it was found that this industry is capable of development. The turpentine is obtained from the extensive pine forests of the Himalayas in the northwestern provinces and in the Punjab, and in this case "Pinus longifolia" yields the balsam. The first turpentine oil distillation in the northwest provinces was established in 1888, at Dehra Dun, but it did not pay because it was too far away from the forests, the cost of transport of the balsam making the manufacture too expensive. For this reason two more distilling stations have been erected, in 1895 at Naina Tal, and in 1899 at Nurpur, District Kangra, Province Punjab, both of which promise to be more remunerative on account of their more favorable position. They show good results, so that it may be expected that the products manufactured there, for which there is a good demand in the country itself, will soon begin to compete seriously with the imported articles. This is all the more probable, as the British Government shows considerable interest in this young industry.

CANADA'S OIL FIELDS.

THERE is a difference of opinion in regard to the future of the new oil field in the vicinity of Leamington, Canada, says the Derrick. The two strikes of the New York Oil Co., which started at 75 barrels an hour, have ceased flowing. The owners say that the stoppage was due to salt water, and that as soon as the wells are put to pumping, they will again show a remarkable oil production.

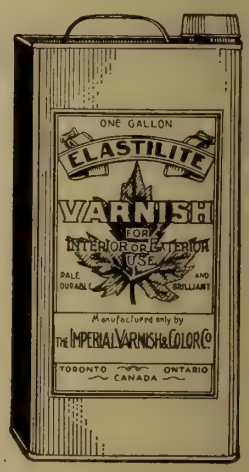
The small producers throughout the district appear to be holding up nicely, and are dividend paying propositions. Of the 134 wells drilled in the field, 100 are now yielding oil, while three are gas wells, supplying the town, and the remaining 31 are dusters.

The "proved" territory lies north of Leamington, and is about six miles long and less than a mile wide. At Wheatley, seven miles east, and Comber, to the north, a few wells have been drilled, which led to the belief that a considerable area of profitable territory may yet be developed. The industrious oil promoter is largely in evidence, and the same methods that have been common in nearly every American oil field are employed with considerable success.

In spite of numerous 100-barrel wells reported, the shipments from the field have not exceeded 200 carloads or 30,000 barrels a month. This represents an average daily production of about 1,000 barrels, which probably represents the limit of the field's capacity.

STOP BAD HABITS,

buying varnish without a reputation. Stock Elastilite Varnish, with the highest reputation, established on quality, that has always pleased the people. Equally good for inside or outside.



The Imperial Varnish & Color Company, Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.

TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

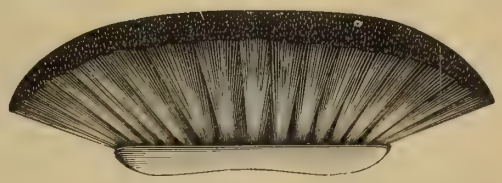
MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.



NONE OTHER

as good as

SKEDDEN BRUSHES

The practicality of our men accounts for this. Every variety brush, but all "good" brushes. Look for stamp, "Skedden." Write and get Catalogue.

The Skedden Brush Co., Limited, Hamilton, Ont.

Toronto Office—57 Queen Street East.
Phone Main 3431. F. W. KNIGHT, Agent.

Please mention HARDWARE AND METAL when writing.

Brandram's B.B. Genuine White Lead

BRANDRAM BROS. & CO. BRANDRAM'S B.B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

has long been known as the best white lead the world produces. It is unequalled for

WHITENESS, FINENESS and BODY

and will cover more surface than any other white lead made. It is the only white lead used in

ANCHOR or ENGLISH LIQUID PAINTS

making them the leaders on the market.

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, June 30, 1905.

THIS is the busy time for all paint and oil makers, and the demand continues to increase every day. The decline in turpentine was maintained, and there are signs of a further drop. This will no doubt be adjusted inside of another month. Linseed oil is inclined to be scarce, and the mills are very busy. White lead continues to be in good demand. The run on Paris green keeps up, as it is the most effective means of attacking the potato bug.

Canadian Paris Green — Barrels, 15 1-4c.; arsenic kegs, 15c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound packages, 17c.; half-pound packages, 19c.; one pound tins, 18c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Pure English Paris green, petroleum barrels, 15 1-4c.; arsenic kegs, 15 1-2c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound paper boxes, 17c., one pound tins, 18c.; one-half pound paper boxes, 19c.; one-half pound tins, 20c. Terms, 2 per cent. off thirty days, or ninety days net from date of shipment.

Turpentine—Single barrels 93c. per gallon; two to four barrels, 92c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels, 52c.; five to nine barrels, 51c.; boiled, one to four barrels, 55c.; five to nine barrels, 54c. f.o.b. Montreal., Net 30 days.

Ground White Lead — Best brands Government standards, $4.70 to $4.85; No. 1, $4.45 to $4.60; No. 2, $4.20 to $4.35; No. 3, $3.87 1-2 to $3.97 1-2; No. 4, $3.50 to $3.60, all f.o.b. Montreal.

Dry White Zinc—Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure. 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil—8 3-4c. to 9 1-4c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—No change has occurred on this market. Prices are steady. Our quotations are: American prime white 14 1-2c., American water white 16c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, June 30, 1905.

PRICES of linseed oil and turpentine hold firm at the quotations named last week, the light stocks preventing any drop, even though conditions in outside markets warranted a change. New stocks of turpentine should be received at any time, but prices are not likely to fall very much during the coming week.

Paris green and mixed paints are moving lively, no falling off in the demand for either line being reported. One firm having a branch in Toronto reports sales to have been $14,000 in excess of any previous year up to the end of June. This, too, remembering that last year was a record season.

White lead is unchanged, and the new budget is still hanging fire, while the politicians talk on the school question. Those who made large purchases some months ago in expectation of a jump in prices have got good money locked up in goods which, fortunately, have no chance of decreasing in value.

White Lead—Ex Toronto, pure white lead. $4.75; No. 1, $4.37 1-2; No. 2, $4; No. 3, $3.62 1-2; No. 4, $3.35 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $4.25.

Red Lead—Genuine in casks of 560 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75; No. 1, in casks of 500 lbs., $4 to $4.25; ditto in kegs of 100 lbs., $4.50.

White Zinc—Genuine French V. M., in casks, $6.50 to $7; Lehigh, in casks, $6 to $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 57c.; boiled, 60c.; 5 to 9 barrels, raw, 55 to 56c.; boiled, 57 to 58c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrels, $1; 2 to 4 barrels, open; 5 barrels

Quick Drying and Durable

An excellent floor paint for resisting the rough usage to which floors, piazzas, steps, and kindred surfaces are necessarily subjected.

Granite Floor Paint

It is made from the purest and finest materials, and without doubt is the best floor paint on the market. Try an order. Quantities and prices on application.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.

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SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited

TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES of every kind, and for every purpose. Our glues enjoy large sales in almost all countries of the world, and our brands are generally to be seen amongst good stocks of glues. We believe we are giving better value than any other manufacturer, and we want to submit our lines to the Canadian test. Samples gladly sent in reply to inquiries.

GROVE CHEMICAL CO. Ltd., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON

OTTAWA WINNIPEG



YOU DON'T

need to worry about selling your paint stock if you fill your shelves with the **ISLAND CITY BRAND** of house and floor paints. Inquire of your customers the satisfaction they derive from using these paints.

P. D. DODS & CO. MONTREAL, VANCOUVER WINNIPEG, TORONTO

CANADA PAINT

THE CANADA PAINT COMPANY, LIMITED

HEAD OFFICE AND WORKS
William Street
MONTREAL, Quebec

OXIDE MINES
ST. MALO, Quebec

GRAPHITE MINES
(near) ST. JOHN,
New Brunswick

VARNISH FACTORY
TORONTO, Ontario

LINSEED OIL MILLS
WINNIPEG, Manitoba

THE LARGEST SHIPPERS OF PAINTING MATERIAL IN THE DOMINION OF CANADA.

All communications should be addressed to

THE CANADA PAINT COMPANY LIMITED

MONTREAL CANADA

and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c. extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—A normal business is being done. We quote: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Crude Petroleum—Conditions are unchanged. We quote: Pennsylvania, $1.29; Ohio, 84c.; Somerset, 81c.; Indiana. 88c.; Canadian, $1.27.

Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

The window glass situation is growing more complex every day. Very little glass is coming in, and the big wholesalers are by no means free from nervousness over the problem facing them. The shortage in certain sizes is very troublesome, as it involves a lot of extra cutting, and it is almost always a source of loss of time and glass. We quote: First break, 50 feet, $2.00; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do.. $20; eleventh do., $24, and twelfth do., $28.50.

A shining array of cutlery in a clean case is sure to catch the eye of the customer.

BRITISH COLUMBIA TURPENTINE.

VICTORIA, B.C., is to be the scene of an experiment conducted by a new company aiming to utilize the native fir tree for the production of resin, turpentine, and other by-products. The preliminary work has been carried out without ostentation, and there has been no attempt to exploit the public in selling stock, those interested having put their own capital in the business, feeling assured that it will be a success. The works will probably be in operation in a small way before the end of July.

The process employed is new and machinery recently patented and being manufactured specially for this plant will be installed. C. M. Holbrook, of Wyoming, who has made a thorough investigation into the working of plants in the United States and other countries where the manufacture of turpentine is followed, is to have charge of the enterprise.

For a little time at first the process will be in an experimental stage. Those interested have little doubt as to the success of the new machinery, and have invested a large sum in it.

The raw material is unlimited, the native fir being rich in resinous and other valuable substances. The industry is one which is capable of enlarging to vast proportions. Those interested are prepared to extend it just as soon as the machinery has proved itself economical in the recovering of the by-products. The industry, when in full swing, will employ a considerable staff.

SECURED CHARTER.

The Electric Development and Securities Co., of New York, and the International Electric Sureties Co., of Toronto, have secured the charter of the Niagara-Welland Power Co. The latter company were originally chartered in 1894, and have until 1913 to complete their work. The site of the proposed power house will be about four miles east of St. Catharines, at a point on the escarpment where a fall of 210 feet can be secured. The water will be brought to this point by a canal, eight miles long, from the Welland river, which will be tapped at Montrose. The water, after the fall, will be conducted by a tail race to Lake Ontario, a further distance of six miles. The present intention is to construct a canal of sufficient size to provide water for the development of 100,000 horse-power, which will be converted into electricity and distributed to the present centres of industry in South Western Ontario.

REMOVING RUST FROM IRON.

It is often very difficult to remove rust from articles made of iron. Those which are most thickly coated, are most easily cleaned by being immersed in a solution, nearly saturated, of chloride of tin. The length of time they remain in this bath is determined by the thickness of the coating of rust. Generally twelve to twenty-four hours is long enough. The solution ought not to contain a great excess of acid, if the iron itself be not attacked. On taking them from the bath, the articles are rinsed, first in water, then in ammonia, and quickly dried. The iron, when thus treated, has the appearance of dull silver. A simple polishing gives it its normal appearance.

Business Changes

Ontario.

J. McGrory, blacksmith, London, is dead.

C. R. Colwell, wagonmaker, Cooksville, has advertised business for sale.

W. T. Trott, proprietor of hub and spoke factory, Oil City, has suffered loss by fire.

A meeting of the creditors of the Oshawa Wire Fence Co., Limited, Oshawa, is called for July 5, to consider the advisability of assigning or going into liquidation.

Quebec.

Barlow & Budd have been registered as plumbers, Montreal.

Bithell Bros. have been registered as saddlers, Montreal.

Gagne & Co. have been registered as contractors, Montreal.

The J. W. Harris Co. have been registered as roofers, Montreal.

Moll & DesOrmeaux have been registered as plumbers, Montreal.

The assets of G. Lachange, saddler, Beauceville East, have been sold.

A Prudhomme & Frere, wholesale and retail hardware merchants, Montreal, have dissolved partnership, and A. Prudhomme & Fils. have been registered.

Nova Scotia.

Chappell Bros. & Co., Limited, contractors, Sydney, have been burned out. The loss is estimated at $30,000, with $5,000 insurance.

New Brunswick.

R. Howes, tinsmith, Sussex, has assigned.

Manitoba and N.W.T.

A. McLeod, pump dealer, Portage la Prairie, has advertised his business for sale.

Van Wart & Bell, dealers in agricultural implements, Calgary, have dissolved partnership.

Burkett & Betts, carriagemakers, Neepawa, have dissolved partnership. J. R. Betts continues in business.

British Columbia.

D. Anderson, hardware merchant, Vancouver, has been succeeded by J. A. Gray.

Brown & McKie, foundrymen, Grand Forks, have been succeeded by Boundary Iron Works, Limited.

Desrosier & Slater, hardware merchants, Vancouver, have dissolved partnership. H. A. Slater continues in the business.

N. Thompson & Co., foundrymen, Vancouver, have assigned to F. Burnett. Creditors are requested to file claims before July 17th.

The Glenora Power Co., Limited, of Picton, Ont., share capital $100,000; purpose, to acquire and develop water and other powers for the production of electricity, etc. The directors are: W. Boulter, D. L. Bongard, and W. J. Carter, of Picton; S. E. Foster, of Wiarton, and W. H. Crow, of Welland.

Globe Brand Files and Rasps

WARRANTED

Possess all the merits of the Best Hand-Cut Files. For sale by all prominent Hardware Dealers.



Thirty years' experience has taught us how to produce a Perfect File, consequently we are just fied in giving our customers an absolute warranty with our product.

NICHOLSON FILE COMPANY

FACTORIES: Providence, R.I., Paterson, N.J., Beaver Falls, Pa., Anderson, Ind., Port Hope, Canada.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKINS & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.

Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR

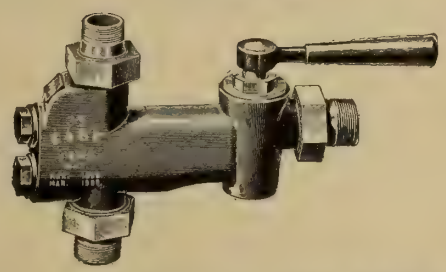
GILBERTSON'S

COMET

Brand Galvanized Sheets

They are carefully selected. They are soft, smooth and well galvanized. Price lower than for other high-grade brands.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts.

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

A New Revolver!

MODEL 1904



H. & R. Double Action
Model 1904
38 Caliber
also 32 Caliber
6 Shot.

A solid frame revolver following the pleasing lines of our famous H. & R. Automatic, and which we are supplying in place of the American Double Action, as made by us for more than twenty years.

SPECIFICATIONS

32 caliber; 6 shot; 2½ inch barrel; weight 16 oz; C. F. S. & W. cartridge; also S. & W. Long and Colt New Police Cartridges.

38 Caliber; 5 shot; 2½ inch barrel; weight 15 oz.; C. F. S. & W. cartridge.

FINISH—Nickel or blue. We can also furnish with 4½ and 6 inch barrels.

Harrington and Richardson Arms Co.

Worcester, Mass., U. S. A.

Makers of H. & R. Single Guns. *Catalog on Request*

SOL-A-RINE

The Great Polish

For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO



OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

'WELLINGTON'
KNIFE POLISH

JOHN OAKEY & SONS, LIMITED
MANUFACTURERS OF
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England

Agent:
JOHN FORMAN, 644 Craig Street
MONTREAL.

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CONTRACTS

mean dollars for the pockets of contractors. The weekly reports in the

CANADIAN CONTRACT RECORD

Tell where contracts may be had
$2 per year buys them. Address

THE CONTRACT RECORD
TORONTO, MONTREAL, WINNIPEG and VANCOUVER.



Cole's Spiral Tubular Radiator

Can be used on any stove

Best radiator—at half the cost of inferior goods.

Only radiator made adapted for both hard or soft coal.

Size pipe collar 5, 6 and 7 inches.

These radiators give the best satisfaction, and have yet to receive a single complaint.

FOR SALE BY

E. T. Wright & Co., - Hamilton

STOVES AND TINWARE.

STOVE MANUFACTURERS CONFER.

CANADIAN stove manufacturers had a pleasant session last week at the Del Monte Hotel, Preston.

Clare Bros. entertained the members of the association to a trolley party to Berlin, which was greatly enjoyed.

Among those in attendance at the convention were: Adam A. Stewart, of the Jas. Stewart Mfg. Co., of Woodstock; G. P. Buck, and W. E. Buck, of the Buck Stove Co., Brantford; O. G. Carscallen, of the Gurney-Tilden Co., Hamilton; John Milne and Jas. G. Insole, of the Burrow, Stewart & Milne Co., Hamilton; W. H. Carrick and R. G. Lockhart, of the Gurney Foundry Co., Toronto; J. K. H. Pope, of the McClary Mfg. Co., London; Geo. A. Clare and F. Clare, of Clare Bros., Preston; and J. F. Stewart, of Hamilton, secretary of the association.

No important business came before the conference, prices and discounts remaining unchanged. The next meeting will be held at Hotel Brant, Burlington, in August.

TIN IN BOLIVIA.

RECENT consular reports from Bolivia state that if the Bolivian output of tin expands in the future in the same proportion as it has done of late years, Bolivia will shortly occupy the first place as a tin-producing country. The exports during 1904 were 455,979 quintals of 100 lbs., or something in excess of 200,000 tons. The vice-consul of the Oruro Province says that the prosperity of that district is due entirely to the great increase in the production of tin. During 1904 the quantity despatched from Oruro was 8,000 tons of metallic tin, against about one-half that amount in 1903. The American capitalists who endeavored to secure control of the tin product of the Straits Settlements some time ago without success have turned their attention to Bolivia, where they have acquired a number of properties in the Tres Cruces region near La Paz.

DEMONSTRATING STOVES.

DEMONSTRATING is undoubtedly an excellent means of advertising, says the Hardware Trade. This is especially so in the smaller communities where such things are not so common. The fact that a stove man will have an expert in his store to bake biscuits and make pancakes and give them away is a piece of news of real importance in the rural community. If there is not a large crowd there at the time of the demonstration it will be because the people were not sufficiently advised of the fact or on account of very bad weather. And what better chance to advertise is there than to have an audience of several hundred people to talk directly to and to show the stove in all its good points to? Frequently in connection with the demonstrations of the cooks or ranges there is given away a stove or possibly a small sized range. Baking contests for the young girls are frequently arranged with the prize a small sized, but perfectly constructed, range. These are good attractions, also, though possibly not quite so good as a first-class demonstration with an expert in charge.

FROM THE HARDWARE TRADE.

How about camp stoves?

Well polished is half sold.

Oil cook stoves are selling better each year.

When in doubt polish up the stoves on display.

Now is a good time to put a cook stove in the window.

Instantaneous water heaters are good sellers in the Summer months.

It is not always the best appearing stove that does the best cooking.

There is no season for stove polish. It sells twelve months out of the year.

You can't judge a stove by the amount of nickel there is in the trimming.

Why not fix up a few of those old gasoline stoves and sell them to Summer cottagers?

With so much prosperity floating around the stove man should get a full share of it.

Use cuts in your stove advertising, but do not trust them to do all the talking. Some explanation should be run with them.

It is no easy matter to become an expert stove salesman. There are many points about an ordinary cook stove that are not always clear. The salesman cannot know his goods too well.

There is always something in the tinware stock that will do for a special sale. If it is not tincups it is coffee pots or tea pots or dishpans. These are staple lines that will attract trade any time if offered at the proper prices.

Rightly priced the profit on a stove is enough to make the salesman take every care to sell it. He cannot afford to take fifty cents' worth of time to sell a ten-cent damper, but a dollar's worth of time or more will not be misspent in selling a good stove.

NON-BURNING BREAD TIN.

Messrs. Hoods, Limited, of the International Exchange, Birmingham, Eng., are now introducing to the trade a new line in the shape of a non-burning bread tin. The tins are made in four sizes, 1, 1½, 2 and 3 lbs. respectively. The novel feature of the tin is the double bottom. Upon the bottom proper of the tin is fixed a perforated metal stamping, which raises the tin itself from contact with the oven shelf, and allows a steady current of air to play between the tin and the shelf. The effect of this construction of the tin is that the bread is never likely to burn, neither will the crust be hardened. Practical tests that have been given to the tin prove the correctness of the theory upon which the inventor has worked.



EASE OF OPERATION

is one of the many advantages of the Russwin Food Cutter. It CUTS—does not tear, grind or mash. Knives are self-sharpening—easily adapted to cut coarse, cut fine, or pulverize. Try it. For sale everywhere. Made by

RUSSELL & ERWIN MFG. CO.
NEW BRITAIN, CONN.

—FOR SALE BY—
The KENNEDY HARDWARE Co., Limited
49 Colborne St., TORONTO, Ont.

THE
Walker Pilot Steel Range



Nearly every stove catalogue contains this assertion, "No range has what is called a draft, the chimney provides the draft." But when the range is hitched to the chimney, consider the importance of a wide, evenly distributed draft along the entire length of the grate, as embodied in the Walker "PILOT," and affording perfect, even combustion, and then look at the small retarded draft under the fire door at the end of the grate as seen in so many ranges. The difference is obvious—Economy, Perfect Regulation and Quick Results.

WRITE FOR PARTICULARS

THE WALKER STEEL RANGE CO., LIMITED
GRIMSBY, Ont.



There is something more than mere glitter to the

Imperial Oxford Range

It is built for business and looks the part.

Devoid of useless devices, it is possessed of many unique advantages over other Ranges that make easy trade talking points with which to convince intending purchasers.

The principal of its diffusive flue which keeps the oven at an even temperature for hours at a time is so plain as to be readily understood by any customer. Thrifty housewives everywhere are talking about the remarkable oven that bakes evenly and perfectly without burning. Interest is being stimulated constantly by our aggressive advertising.

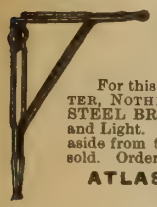
The superiority of its oven makes the Imperial Oxford Range a ready seller.

Write for trade particulars.

The Gurney Foundry Co., Limited
Toronto Winnipeg Vancouver
The Gurney-Massey Co., Limited, Montreal,
The Gurney Standard Metal Co., Limited, Calgary, Alta

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Wat-r Proof Floors for Malt Houses, Brewer ies, Slaughter Houses Cheese Factories, Cellar, Stable Floors, etc.
Walter Mills, General Manage
Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U. S. A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery." Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

The Best Door Closer Is . . .
NEWMAN'S INVINCIBLE FLOOR SPRING
Will close a door silently against any pressure of wind. Has many working advantages over the ordinary spring, and has twice the wear. In use throughout Great Britain and the Colonies. Gives perfect satisfaction. Made only by
W. NEWMAN & SONS,
Hospital St., - - BIRMINGHAM

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO, LIMITED.
TORONTO, ONT.

...FULL STOCK...
Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT.
ST. JOHNS, QUE.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

A MASS meeting of the leading Chinese merchants in Vancouver, B.C., assembled under the auspices of their Board of Trade Monday evening and declared a boycott on U. S. goods. Eight hundred Chinamen listened to strong speeches criticizing the insolence with which immigration officials of the United States treat distinguished natives from China, visiting the Republic. The sum of $1,000 was subscribed on the spot to be forwarded to the merchants of Shanghai, the receipt of whose circular to all Chinese bodies abroad was the cause of the meeting being held. Money will be used to pay Chinese coolies for refusal to work at cargoes on ships containing U. S. goods. The difference in the treatment received in Canada was pointed out and all pledged themselves to buy Canadian goods in preference to American. There are many thousands of Chinese resident in Vancouver and this will make a considerable difference to Canadian manufacturers.

The Welland-Thorold Electric Railway is to be constructed at once.

Guelph has voted to spend $55,000 to extend and improve the gas plant which is municipally owned.

The Dominion Bridge Co. have decided to install a plant in Winnipeg to manufacture for their western business, and a site is being looked for.

J. Y. Griffin & Co., pork packers, etc., Winnipeg, are looking for a location in Fort William with a view to establishing a branch there.

E. G. Barrett, of the Vulcan Iron Works, Winnipeg, is spending a few days in Calgary investigating the situation, with a view of establishing a branch.

An American firm, manufacturing composite roofing, is to establish a branch at Brantford. An Ontario charter will be secured and the business conducted as a separate concern.

Guelph is offering inducements to the Fielding Chemical Co., of Toronto, and they may locate in the Royal City in the premises formerly used by the Guelph Linseed Oil Co. Twenty men are to be employed.

The Western Counties Electric Power Co., with headqdarters in Hamilton, are negotiating with Brantford regarding the construction of a line to the latter city and the supplying of power for lighting and other purposes.

The Robb Engineering Co., Amherst, N.S., have received an order from the Dominion Coal Co. for two 100 horse-power Robb-Mumford boilers; from the Standard Manufacturing Co., Sackville, N.B., for a 125 horse-power Robb-Mumford boiler, and from R. S. Carter, Maccan, N.S., for a 65 horse-power engine.

The Mundy Lumber Co., composed chiefly of Pennsylvania capitalists, will open its new lumber mill at Three Valley Lake, near Revelstoke, on July 1. The mill, which was installed by the Waterous Engine Co., is what is known as a double-cutting band mill, equipped with the latest details of machinery. It will have a capacity of about seventy thousand feet of lumber per day.

The first shipment of steel rails was made by the Dominion Iron and Steel Co. on June 26, when about 50 tons were shipped to Montreal, being an instalment of the 25,000 ton contract for the Grand Trunk Pacific. Further shipments will be made from time to time, until the order is filled. The mill is now producing rails at the rate of 75 tons per hour. It is only about a week since it was put into commission.

The assignment is announced of N. Thompson & Co., engineers, boilermakers, etc., of Vancouver. The firm of N. Thompson & Co. has consisted of N. Thompson, Wm. McCulloch and Andrew Muir, and has been brought conspicuously before the public during late years as promoters of the Vancouver dry dock in respect of which a substantial subsidy was voted them two years ago by the Federal Government.

The Dominion Government has appropriated $15,000 for making experiments with the electric process of smelting ores and manufacturing steel at Sault Ste. Marie, and the Consolidated Lake Superior Power Co. will furnish a building and dynamo capable of supplying 400 electric horse-power for four months free of charge. All kinds of ores will be experimented with, and important results are expected to be obtained. It can easily be seen what enormous possibilities for Canada underlie the inauguration of a cheaper process for manufacturing pig iron and steel than is now in use. Ontario is dotted with extensive ore bodies, the development of which is at present prevented by lack of cheap fuel. There is coal in abundance in the eastern and western parts of Canada, but the cost of conveying it to points where coke is needed for smelting purposes is prohibitive. On the other hand, there are a great many waterpowers throughout the Province of Ontario where electricity can be developed and utilized. If the electric system proves to be commercially feasible, we may look for the inflow of a large amount of capital and considerable mining development.

Companies Incorporated.

Canadian Oil Co., Limited, have been granted the right to increase their share capital from $1,000,000 to $1,500,000.

The Gananoque Bolt Co., Limited, have been authorized to transact all matters comprised within the powers of the said company with W. T. Sampson, Gananoque, its attorney.

Canada Radiator Co., Limited, have been authorized to issue one thousand five hundred shares of preferred stock of the company. The board of directors is to consist of seven, as at present.

The Sharples Separator Co., of the State of Pennsylvania, have been granted the right to manufacture and sell centrifugal separators to the extent of $40,000, with C. A. Masten as its attorney.

The York Brick & Cementware Co., Limited, Lambton Mills, share capital $40,000; purpose, to manufacture and sell brick, cementware, etc. The directors are: Wm. Beith, Toronto; R. Weddell, Trenton, and R. Beith, Bowmanville.

Seibert Curtain Pole Co., Limited, Toronto, share capital $20,000; purpose, to manufacture articles made from iron, metal, wood and fibre. The directors are: T. C. Seibert, E. J. Butler, E. Williams, J. Williams, and E. Lewis, all of West Washington, Pa.

Petrolia Torpedoes Co., Limited, of Petrolia, share capital $50,000; purpose, to pursue mining operations for oil, water, gas and other minerals. The directors are: D. Barr, of Dutton, Ont.; W. M. Lowery, of Petrolea, and J. H. Kittermaster, of Sarnia.

Western Construction Co., Limited, of Toronto, share capital $4,000,000; purpose, to carry on a general contracting and construction business. The directors are: A. P. Murray, J. G. Pyke, F. H. Hewitt, P. M. Robertson, and Geo. Smith, all of Montreal, Que.

R. Macfarlane & Co., Limited, of Montreal, share capital $100,000; purpose, to carry on the business of general contractors and builders The directors are: H. D. Smith, of Compton, Que., and R. Macfarlane, F. S. Macfarlane, R. E. Parker, and F. G. Bush, all of Montreal, Que.

Kakabeka Power Co., Limited, Fort William, share capital $2,000,000; purpose to carry on the business of power and electric heating and lighting. The directors are: H. S. Holt, C. R. Hosmer, F. W. Thompson, and H. W. Norton, all of Montreal, Que., and F. H. Phippen, Winnipeg, Man.

The Standard Wire Fence Co., of Woodstock, Limited, Woodstock, share capital $100,000; purpose, to manufacture and deal in all kinds of metal fencing. The directors are: J. L. Hosack, G. H. Cock, and C. Jones, of Woodstock; A. M. Keeney, of Ann Arbor, Mich., and G. Robb, of Windsor.

The Brintnell Adjustable Roller Bearing Co., Limited, Toronto, share capital $100,000; purpose, to manufacture and deal in roller and other bearings and machinery. The directors are A. Nelson, E. H. Adams, A. S. Dewar, A. L. Lougheed, W. H. Scott, C. D. Scott, A. H. Brintnell, and J. E. Cook, all of Toronto.

Banner Oil Co., Limited, Petrolea, share capital $100,000; purpose, to explore for and deal in natural gas and petroleum, and to manufacture and deal in well drilling tools and machinery. The directors are: J. C. Winters, Mount Morris, N.Y.; C. H. Palmer, Rochester, N.Y., and D. S. Robb, London, Ont.

The Stratford Fuel, Ice Cartage & Construction Co., Limited, Stratford, share capital $100,000; purpose, to manufacture and deal in fuel, ice and building and construction material. The directors are: M. Lachlan Leitch, of London, Ont.; W. J. Mooney, C. E. Nasmyth, S. J. Cook, and J. J. Coughlin, all of Stratford.

The Dunnville Mutual Natural Gas Co., Limited, of Dunnville, share capital $15,000; purpose, to construct and operate works for the production and distribution of natural gas for purposes of light, heat and power. The directors are: W. H. Penny, W. E. Traver, C. D. Trimble, G. Reid, and O. E. Willson, all of Dunnville, Ont.



No. 11. OSHAWA, ONT. June 30, 1905

NEVER LATH

Metal Lath had a purposeful origin. If the split board lath of a hundred years ago, or the sawed wood lath of later date, had weathered the vicissitudes of time, there would have been no metal lath. But they **did not.** And while some builders tried to condone wooden laths' ordinary faults, because they **erroneously** thought it was cheap, they could not condone its great fault—its complete **subservience** to **fire.**

WORKED LIKE

Expanded metal lath on the ordinary process came into being with fire prevention as its distinctive feature. It fulfilled this function in a way, but its cost made it practically useless. Our process of manufacturing produced **Perfect Metal Lath** at 10c. per sq. yd.—the necessary article at the necessary price. This process enables us now to turn out 10,000 sq. yds. daily, which product sells the world over.

"PERFECT" LATH

Perfect Metal Laths' excellencies don't stop, however, at triumph over fire and price. It was made specially to lessen labor, facilitate construction, improve buildings and safeguard health. Other metal laths could not prevent rust. **Perfect Metal Lath never** rusts Other metal laths could not hold plaster for an indefinite length of time. **Perfect Metal Laths'** "accurate-to-the-second" mesh **holds plaster** for all time. Other metal laths gave Hardwaremen no chance for profit. **Perfect Metal Lath** gives Hardwaremen **excellent chances** for profit. The opportunity is before **you now.** Buildings everywhere, contractors everywhere. Our inducements are as **good** as the opportunity for **sales.** Decide **to-day.**

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

"DOMINION BRAND" TARRED FELT
(THE OLD RELIABLE QUICK SELLER)

ROOFING PITCH
COAL - TAR

WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

CONSULT THE WELL-KNOWN MANUFACTURERS

LOCKERBY & McCOMB, 65 Shannon St., Montreal

The Finest on Earth

When seeking quality in saws the intelligent mechanic need go no further than the Atkins high-grade Silver Steel Hand Saws. In material, temper, finish, and cutting qualities they are perfect.

The Atkins Silver Steel Hand Saws with Perfection handle sell at sight. Dealers everywhere find them a good investment.

Write for catalog and prices.



ATKINS ALWAYS AHEAD

E.C. ATKINS & CO.
LEADING SAW MANUFACTURERS
INDIANAPOLIS, IND., U.S.A.

Canadian Branch
56 KING STREET EAST,
TORONTO, CAN.



GURNEY CYLINDER LOCKS

are the criterion of other locks, the hope of other makers. Good proof this of skill as well as of diligent craftsmanship. Good proof of "knowing how," on our part. **Gurney Cylinder Locks** are better and cheaper than American locks. Guaranteed. "Made in Canada." We also have numerous designs in artistic trimmings. Write for Catalogue No. 7 and Supplements.

THE GURNEY, TILDEN CO., Limited
HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCIES
Montreal—Nicoll & Barr, 85 St. Peter St.
St. John—Nicoll & Barr, 38 Dock St.

BUILDING AND CONSTRUCTION

FIRE LOSSES IN 1904.

THE annual fire waste is a serious problem, for in spite of all precautions that are being taken in modern building construction and the wide adoption of every improvement in the way of fire prevention and fire fighting, the losses from this cause are growing steadily from year to year. In the last calendar year the total fire losses for the United States and Canada, as compiled by the New York Journal of Commerce, reached a larger sum than for any preceding year, with the single exception of that of the great Chicago conflagration, 1871. The aggregate fire waste for the 12 months is figured in excess of a quarter of a billion dollars, the actual amount being 252,364,000. Of course this sum was immensely swollen by the $70,000,000 loss involved in the Baltimore fire of February and also by the $12,500,000 loss in Toronto, Canada, and a serious fire in Rochester, N.Y., which involved a loss of $3,200,000; but, eliminating these three sums, the total of the smaller and moderate fires is still found to be greatly in excess of that of any recent year, being $166,664,000, as compared with $137,365,000, the average for the ten preceding years. The effect of these great losses has been disastrous to the fire insurance business, resulting in the retirement in Baltimore of all but three of the local insurance companies, while a number of smaller companies throughout the country have also given up the struggle during the year. No less than 3,100 fires occurred in 1904, each of which represents an aggregate loss of over $10,000, as against an average of about 2,400 fires of similar range in preceding years. From the fact that these losses represent to a large extent the absolute wiping out of property and wealth it will be seen how serious a drain on the country's resources the annual fire losses represent.

BUILDING NOTES.

W. H. Cooper is to build a $2,000 dwelling at Hamilton.

New machinery is being installed in the brickyards at New Westminster.

Frank Crawford, Hamilton, has been issued a permit for a $2,000 brick residence.

Alterations and additions to be made to the Hamilton Opera House will cost $24,000.

The Traders Bank are to erect a fine new branch bank on the northeast corner of King and Spadina, Toronto.

The Bank of Commerce is placing another branch near the corner of West Queen street and Dunn avenue, Toronto.

Permits issued for three days last week in Toronto were for over 100 houses and other buildings, to cost $296,000.

The Temple Realty Syndicate, of Santa Rosa, Cal., will build a $25,000 store and office building on Pender street, Vancouver

The permit for the erection of the new Roman Catholic church, at Regina, has been granted. It calls for a building valued at $25.000.

The Cockshutt Plow Co. are building a fine warehouse at Regina. It will be of brick, three storeys high, and its dimensions 60 x 100 ft.

Mr. D. G. Macdonell, Vancouver, has taken out a permit for a $4,500 residence, to be erected at the corner of Nelson and Gilford streets.

The William Weld Co., publishers of the Farmers' Advocate, are to erect a three-storey building on Donald street, near Notre Dame avenue, Winnipeg.

The new lumber mill at Terra Nova, N.S., for the Terra Nova Lumber Co., is now nearly completed, and is expected to be in working order by the 24th inst.

Two large permits issued in Montreal are for a store on St. Catharine street, for E. P. Charlton, to cost $30,000, and for the Boys' Home on Mountain street, to cost $20,000.

W. J. McTaggert, Alexander street, Vancouver, has been issued a permit for a $3,000 building. Others who have secured permits for new structures are: A. Duclos, Haro street, $2,000, and E. Burns, Powell street, $3,000.

A large storage building for fire brick is being erected at Sydney, N.S., by Messrs. Falconer & Dixon. The same firm will shortly erect a building near the blast furnaces, to be used as a storehouse and repair shop for that portion of the works.

Work has been commenced on a large business block to be erected for Mr. Bell-Irving, on Granville street, Vancouver. The building will occupy three 25-foot lots, running back 115 feet and will be of brick and iron construction. The total cost will be about $30,000.

J. H. G. Russell, architect, Winnipeg, is advertising for tenders for the erection of an office building for Bulman Bros. The structure will be erected on the site of the firm's building which was destroyed by fire last Winter, at the corner of Bannatyne avenue and Albert street.

The steel bridge over the Pecos River, Tex., is a marvel of mechanical skill and extreme simplicity of construction. It is considerably more than 300 feet in height and is 2,180 feet long yet it is supported by stone pillars so small that it seems incredible to a beholder that they can sustain the enormous weight of passing trains, which invariably stop on the bridge to allow passengers to view the structure and the bleak, desolate surroundings.

One of the most interesting building enterprises recently projected in Salt Lake City involves the erection of twenty-four attractive houses on a block at the crown of First street hill. The idea is to build the rooms in the form of a circle, fronting on a beautiful park in the centre. Opening into this park will be private entrances, so that the public will be excluded and all the pleasures of the place reserved for the occupants of the rooms on the block. The building improvement is estimated to involve an expenditure of not less than $150,000, and it is expected that the enterprise will prove one of the attractions of the city.

It is said that the largest steel flume ever built is at Niagara Falls, on the Canadian side of the river, where the Ontario Power Company has secured rights for the development of 180,000 h.p. The flume in question has a length of 6,180 feet. Its inside diameter is 18 feet, and it will divert 3,900 cubic feet of water from the river above the Horseshoe Falls every second. This flume is so large that it was necessary to establish a temporary shop on the grounds for its construction. It runs through Victoria Park, and is laid in a trench. In order that it may not mar the beauty of the park lands, the great pipe is covered with earth, but before being so concealed was given a jacket of concrete so that there would be no unequal pressure of the earth. The flume is protected against electrolysis. From the water that will flow through this pipe it is expected to develop 60,000 electrical horse-power. Three such flumes will be constructed.

TORONTO BUILDING PERMITS.

E. Sandham, brick dwelling, Avenue road, $5,000.

F. Phillips, two pairs dwellings, Montrose avenue, $5,600.

F. Phillips, one pair dwellings, Montrose avenue, $2,800.

Home for Incurables, brick addition, Dunn avenue, $2,000.

O. C. Hammer, roughcast dwelling, Seaton square, $1,600.

Duncan Donald, stone and brick dwelling, Elm avenue, $4,000.

W. J. Clark, one pair brick dwellings, Dovercourt road, $6,200.

Dominion Paper Box Co., brick stable, King street west, $4,000.

R. Gilday, four pairs roughcast dwellings, Salem avenue, $8,000.

W. E. Booth, stone and brick dwelling, Gibson avenue, $2,500.

James O'Leary, roughcast dwelling, St. Clarens avenue, $1,000.

Angus McMurdy, brick dwellings, Chestnut park road, $5,000.

Arthur Bryce, brick and stone residence, Walker avenue, $3,000.

M. G. Knowles, alterations to studio, 340 Bloor street west, $2,000.

Albert Dale, brick residence, Palmerston avenue boulevard, $4.000.

Henry Larkin, one pair brick dwellings, Delaney crescent, $2,400.

H. H. Suydam, one pair brick dwellings, Madison avenue, $8,000.

W. H. Marks, brick veneered dwelling, 400 Margueretta street, $1,700.

Mrs. Emma Coutie, summer dwelling, frame, Bellfair avenue, $1,800.

Edward Jones, stone and brick dwelling, 39 Dagmar avenue, $2,000.

W. O. McTaggart, one pair brick dwellings, Fern avenue, $3,600.

F. B. Poucher, two pairs brick dwellings, Broadview avenue, $9,000.

S. B. Coon, stone and brick dwelling, Roxborough street west, $3,500.

Love Bros., five detached roughcast dwellings, Grant street, $9,000.

Dominion Paper Box Co., brick factory, King street west, $6,000.

William Simpson, brick and stone dwelling, Seaton square, $1,500.

H. J. & E. R. Reynolds, brick dwelling, 25 Alexander street, $2,800.

T. McNea, one pair brick dwellings, 11 and 13 Verrall avenue, $4,000.

M. L. Hogg, one pair dwellings, 53 and 55 Summerhill avenue, $4,000.

G. E. Vanderburgh, roughcast dwelling, 109 Brooklyn avenue, $1,700.

Wm. Davidson, alterations to dwelling, 146 St. George street, $2,000.

Charles Roberts, one pair roughcast dwellings, Preston avenue, $1,500.

Stone & Huffman, one pair roughcast dwellings, Markham street, $3,000.

F. W. Whimbey, store and dwelling, Peel and Gladstone avenues, $5,000.

L. C. Sheppard & Co., six brick dwellings, Beatrice street, $10,800.

Mrs. C. E. L. Metherall, roughcast dwelling, Lansdowne avenue, $1,000.

T. M. Mallord, two brick dwellings, 562 and 564 Dovercourt road, $5,000.

R. J. Huffman, one pair stone and brick dwellings, Beatrice street, $4,000.

Geo. J. Foy, two pairs stone and brick dwellings, Langley avenue, $8,000.

George Phillips, one pair brick dwellings, 584 and 586 Huron street, $4,000.

A. J. Woodley, one pair brick dwellings, 156 and 158 Davenport road, $5,000.

H. M. Deeth, two pairs stone and brick dwellings, Hepbourne street, $8,500.

C. M. Essery, one pair brick dwellings, 117 and 117½ Mutual street, $4,500.

Robert Lankin, one pair roughcast dwellings, 20 and 22 Brighton avenue, $1,500.

S. J. Graydon, one pair dwellings, corner of Crescent road and Park road, $8,500.

Butler & Barnhardt, one pair stone and brick dwellings, Beatrice street, $5,400.

City Corporation, brick fire hall, corner Queen street and Herbert avenue, $20,000.

Bank of Nova Scotia, brick and stone bank, Dundas street and Brock avenue, $13,000.

J. Lancaster, one pair roughcast dwellings, 624 and 626 Ossington avenue, $3,000.

McArdle & Staunton, one pair and one detached dwelling, 55, 55½ and 57 Fuller street, $6,500.

Kay Bros., one pair roughcast dwellings, Broadview avenue and Elliott street, $3,500.

S. Frank Wilson, warehouse and office building, concrete, 60 and 62 Front street west, $50,000.

IRON MEN MEET.

DURING the past few days the traveling representatives and selling agents of the Montreal Rolling Mills Co. have been in session, the occasion being their annual convention.

The idea of meeting annually for the purpose of conferring on trade matters in general and questions of particular interest has passed the experimental stage and these meetings have proven of much advantage to those participating and at the same time the opportunity of getting in closer touch with one another is much appreciated

Wednesday morning was spent inspecting the main plant of the company, going through the rolling mill, pipe mill, wire mill, wire nail factory, tack works, horseshoe works, horse nail works, lead works, shot tower and cooper shop. In the afternoon, after lunch in the company's dining room, business matters were attended to until the close of the afternoon.

Thursday morning was spent going over St. Patrick street and Mill street works, bolt and nut works, cut nail factory, spike factory, rivet and washer department and the rolling mills connected with these departments. The afternoon was again devoted to business.

Friday, with the kind permission of the Canadian Pacific Railway authorities, a visit was made to the new Angus shops, and in the afternoon the business meetings were brought to a conclusion by a dinner given by the general sales agent, Mr. J. R. Kinghorn.

Owing to the extensive interests of this company a great deal of time is necessary to cover their products in detail, and it is probable the sessions will in future be more lengthy.

Trade reports from all territories were very encouraging and, while the business in the first part of the present year has considerably exceeded that done last year, further increases are looked for.

THE ACT A BOOMERANG.

ACCORDING to the Montreal Gazette, the Act passed at the last session of the Quebec Legislature, imposing a tax of $300 on commercial travelers representing firms outside of Canada doing business in the Province of Quebec, promises to become a boomerang. "Already English travelers who annually have large business transactions with Montreal and Quebec houses, are giving this city the go-by and will in future conduct their business from Ontario centres. It is reported in the news columns that three departed yesterday for Toronto, without attempting to do any business here, in order to avoid a tax which would almost dissipate any profits they might make. The damage which this tax will probably do to many business concerns in Montreal can readily be seen, whereas its purpose is beyond comprehension.

"If Mr. McCorkill, who fathered this interesting enactment, intended it as a revenue producer, his object is frustrated, as might have been expected, for incoming travelers will not pay the license fee. One would rather suppose that a patriotic motive inspired Mr. McCorkill and he desired that this measure should throw the work and the profits of English and American travelers into Canadian hands, but here again is his judgment at fault, for in the language of the commercial men, the Canadian agents 'don't know the goods.' The penalty imposed for each contravention of this Act is from $500 to $1,000.

"Considered from every standpoint, this Act is as futile for obtaining any benefit as the measure at first proposed to tax each resident agency $500 for each foreign firm represented. That would have meant driving those agents from Quebec Province; this means that travelers will henceforth make Toronto or Winnipeg their Mecca, and will give Montreal and Quebec a wide berth. A $300 tax upon travelers upon whom Montreal houses must rely to a great extent, is going to be simply a drag upon trade. The only thing that this Act is calculated to raise is trouble, but a great deal of that."

CANADA'S IRON TRADE

THE total production of steel ingots and castings in Canada in 1904 was 148,784 gross tons, against 181,514 tons in 1903, a decrease of 32,730 tons. Bessemer and open hearth steel ingots and castings were made in each year. Almost all the open hearth steel reported in 1903 and 1904 was made by the basic process. The direct steel castings made in 1904 amounted to 6,505 tons. Canada has not made crucible steel prior to the present year.

The production of Bessemer and open hearth steel rails in 1904 amounted to 36,216 gross tons, against 1,243 tons in 1903; structural shapes, 447 tons, against 1,983 tons in 1903; cut nails made by rolling mills and steel works having cut nail factories connected with their plants, 99,000 kegs of 100 pounds each, against 118,686 kegs in 1903; plates and sheets, 3,102 tons, against 2,450 tons in 1903; all other finished rolled products, excluding muck and scrap bars, blooms, billets, sheet bars and other unfinished forms, 135,243 tons, against 118,541 tons in 1903. The total quantity of all kinds of iron and steel rolled into finished forms in Canada in 1904 amounted to 180,038 tons, against 129,516 tons in 1903. Of the 180,038 tons of finished iron and steel reported for 1904 about 126,850 tons were steel and 53,188 tons were iron.—From the Bulletin of the American Iron and Steel Association.

CONTRACTS AWARDED.

The Canadian Fairbanks Co., Montreal, have, in competition with other manufacturers, been awarded the contract for supplying the transmission material to be used in the Canadian Government Canal Repair Shop at Cornwall. The machinery ordered consists of Fairbanks Universal Giant Hangers, shafting, etc.

The James Smart Mfg. Co., Brockville, have secured the contracts for installing heating and ventilating systems in the Presbyterian church and public school at Blythe, Ont. Kelsey warm air generators will be used.

HARDWAREMEN AT BASEBALL.

On Saturday, 24th instant, teams representing Caverhill, Learmont & Co., and Lewis Bros. & Co., of Montreal, had a friendly game on the former's grounds. Both teams were evenly matched, and the game was interesting throughout. After nine innings were played, Caverhill, Learmont & Co.'s team won out by 28 runs to 20. The umpire was Mr. C. Cormick.



NEW MILO BARN DOOR HANGERS

These are Roller Bearing, with Malleable Iron Frame, Steel Straps and Heavy Bolts.

Sold by

KENNEDY HARDWARE CO.
Toronto

Manufactured by

TAYLOR FORBES CO. Limited
Guelph

We carry full supply of 1¼ in. track suitable for hanger.

"Ring Out the Old"

Ring out the old, faulty, ineffective systems of daylight-creating glass! Ring in the new system never found wanting.

MAXIMUM LIGHT GLASS

Maximum Light Glass works wonders wherever adopted. Buildings going up; buildings being remodelled—**Maximum Light Glass** is serviceable anywhere. The only system that can stand the severest test. The only system that darkness cannot balk. Samples of this glass, with prices, will be sent **you** on request. **Write** us.

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

READY ROOFING

IS A FAVORITE FOR

THREE REASONS

1 It is easy to put on

2 It is fireproof and waterproof

3 It lasts longer and is therefore cheaper

A brand that you can guarantee will increase your sales. Trade is broadening—get in the swim—

ALEX. McARTHUR & CO., LIMITED, - - 82 McGill Street, MONTREAL.

CURRENT MARKET QUOTATIONS.

June 30, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$32 00 $33 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50
"Dominion Crown Best"—Double Coated, Tissued.	Per box.
I C	5 50
I X	6 50
I X X	7 50
I Allaway's Best"—Standard Quality.	
I C	4 50
I X	5 50
X	6 50

X Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. } " 14x60, " } " 14x65, " }	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 25	7 50
" " 26 "	7 75	8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M." Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	011
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 40	....
22 to 24 gauge 3 50	3 50
26 " 3 75	3 75
28 " 4 00	4 15

Comet Bell.	Queen's Head
16 to 20 gauge 3 40	....
22 to 24 gauge 3 45	3 65
26 " 3 70	3 90
28 " 3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 25	16 50

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut " 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	....	21 00
Plain, 14 oz	....	22 00
inned copper sheet	....	24 00
anished	....	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	....	0 22
" 35 to 45 " "	....	0 21
" 50-lb. and above "	....	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 41½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 00
Part casks	....	7 25

LEAD.

Imported Pig, per 100 lb.	3 50	3 75
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06¼
Sheets, 3 to 6 lb. "	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c 1is. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-f. lengths, lists at 8c.

ANTIMONY.

Cookson's per lb. 0 09½

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ " "	17 50	15 50
5½ "	2½ " "	19 00	17 00
Plate 123 E, lavatories		1st quality	8 90
" 123 E,	"	2nd "	7 50
" 127 E,	"	1st "	5 70
" 127 E,	"	2nd "	4 80
" 128 E,	"	1st "	5 60
" 128 E.	"	2nd "	4 70
" 129 E,	"	1st "	5 40
" 129 E,	"	2nd "	4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 77
1¼ "	7 88
1½ "	9 45
2 "	12 60

Malleable Fittings—Canadian discount 35 per cent. American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c.
Cushion work, discount 50 per cent.
Fuller work, discount 65 per cent.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 55 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I. B. B. M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 " "	"	1 90
No .7 Fuller's	"	2 20
No. 4½, "	"	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $31; 5 and 10 per cent. discount.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21.00	24.00
100	29.00	34.00
120	34.00	40.00
144	47.00	55.00

Clauss Dressmakers' Shears

CLAUSS BRAND—Fully Warranted

This shear is made after the pattern **"TAILORS' SHEARS"** and is just the thing long wanted by the dressmakers.



Manufactured by Our Secret Process.

Ask for Discounts.

THE CLAUSS SHEAR CO., Fremont, Ohio.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 17¾
Wiping	0 15½
Refined	0 16¼

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.
Pure	4 75
No. 1	4 50
No. 2	4 30
No. 3	3 37½
No. 4	3 35
Munro's Select Flake White	4 75
Elephant and Decorators' Pure	4 75
Tiger brand, pure	5 00
Decorators' Special for exterior use	4 25
Monarch	5 00
Decorator's Pure	4 75
Essex Genuine	4 25
Sterling Pure	5 00
Island City Pure	5 00
Ramsay's Pure Lead	5 00
Ramsay's Exterior	4 75

RED LEAD.

Genuine, 560 lb. casks, per cwt	$4 50
Genuine, 100 lb. kegs, "	4 75
No. 1, 560 lb. casks, per cwt	4 25
No. 1, 100 lb. kegs, per cwt	4 75

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	4 50
Pure, kegs	4 75
No. 1, casks	4 00
No. 1, kegs	4 25

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each— Per M.

11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	8 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63¾ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb. 0 07½ 0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross 7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent.

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz. 2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.
Button's imitation per doz. 5 00 9 00
man " 0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

EXPANSION.

Thirty years ago Mr. J. W. Paterson, the originator of this Company, commenced business in Montreal with a daily output of **TWO TONS.** To-day we operate three large Modern Factories and an equal number of Paper Mills, with a combined daily output of fully **SEVENTY-FIVE TONS.**

Promptness, Courtesy and the Superior Quality of our Building Papers,

Roofing Felts and Wire-Edged Ready-Roofing have made us successful.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10 per cent.
Arcade	70 " 10 "
Kearney & Foot	70 " 10 "
Disston's	70 " 10 "
American	70 " 10 "
J. Barton Smith	70 " 10 "
McClellan	70 " 10 "
Eagle	70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5	"
Royal	80 "
Globe	70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2¼ 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" " 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½
Light T and strap, discount 65 and 5 per cent.		
Screw hook and hinge—		
6 to 10 in.	per 100 lb.	4 50
12 in. up		3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned c 35 per cent.

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60
Screw, bright, discount 62½ per cent.		

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.'Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut	$ 8 50 to $11 00
Star, 9 -in. "	6 00 to 6 50
Daisy, 8 -in. "	5 25 to 5 75
Philadelphia, 7½-in. "	6 00 to 7 50
Woodyatt 10½-in., ball bearing	13 25 to 18 00
Grass Boxes	1 75 to 2 00
King Edw'd 12-in., 14-in. cut	9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0 10 00
9-in	5 50 6 25
8-in	4 90 5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent
Russell & Erwin, steel rim ..per doz 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ..... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	2 50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 50 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

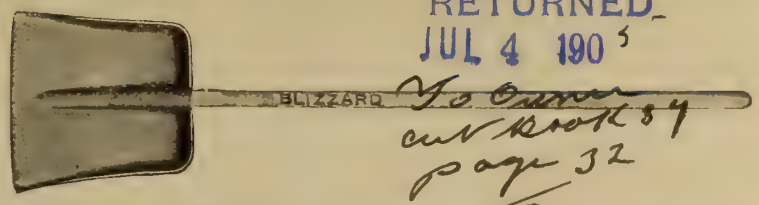
ETURNED
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THE BLIZZARD

Solid, Strong, Steel Shovel for Stable, Store or Furnace

RETURNED
JUL 4 1905

Crowning at point for Cutting Ice.



Two Sizes: No. 1, 14 in. wide; No. 2, 9½ in. wide.

Factories:
NEWMARKET, ONT.

Branches:
WINNIPEG, OTTAWA, MONTREAL.

The best and strongest STEEL SHOVEL of its kind ever offered to the trade. Write for quotations.

THE OFFICE SPECIALTY MFG. CO., LIMITED

Everything in Business Furniture and Card Systems in Stock.

97-105 Wellington St. West, (near York), TORONTO

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid..... per set	....	0 72
" hollow..... per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Kivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅛ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's...per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" " common frame. 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb.....	0 28	0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz.	0 65	1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net.....	6 00	9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb.....per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel. discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	...	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 5
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin.....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb.	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 4 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots. fo

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 70
" No. 11	3 35
" No. 12	2 95

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

Give that man a **UNION PLANE** when he asks you for a

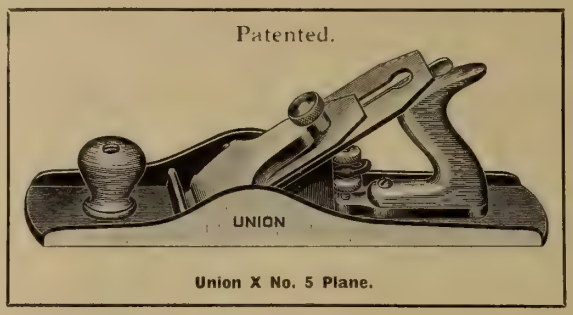
GOOD PLANE

They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best Tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever Adjustment and Solid Frog.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

New Britain, Conn., U.S.A.

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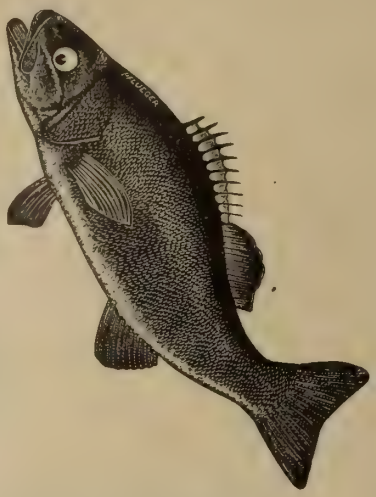
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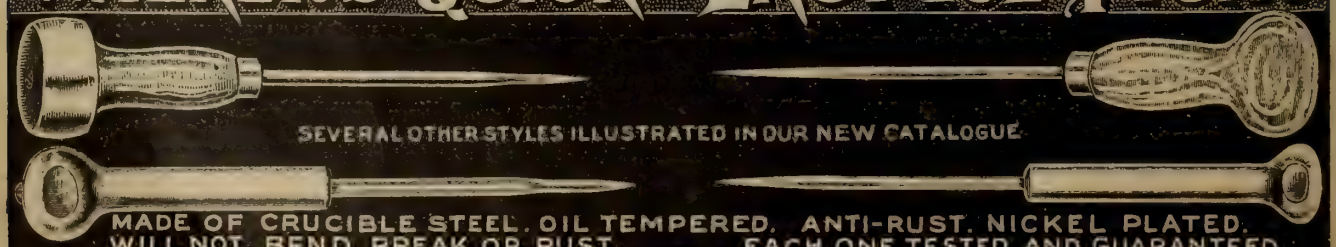
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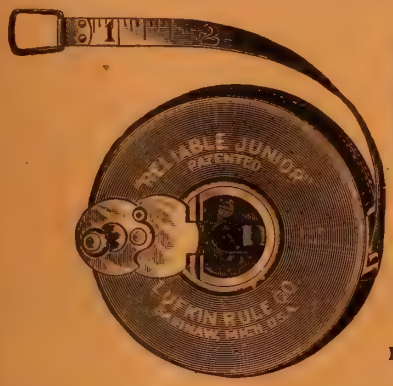
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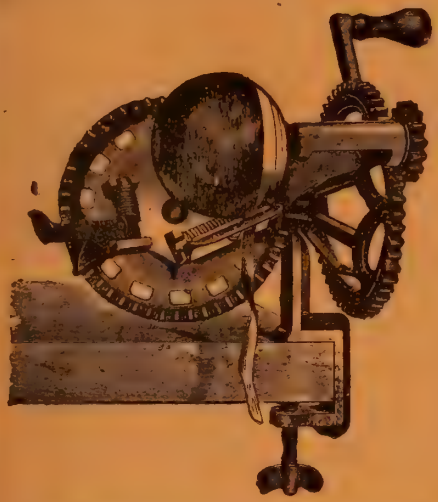
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A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch



EVERYTHING WE MAKE GUARANTEED.
EVERYTHING WE MAKE CARRIED IN STOCK.
EVERYTHING ORDERED SHIPPED QUICK.

These are good reasons for business—reasons which have brought us business—reasons which are bringing us business. Just now it is

Apple Parers

The season is at hand. You will be certainly stocking a goodly supply of this saleable article. We are the only makers in Canada of Apple parers. We manufacturer the famous **HUDSON PATTERN**—the best in the world. Equal to anything made in the United States and lower priced.

WE SHIP SAME DAY AS ORDER IS RECEIVED. EVERY MACHINE PERFECT AND GUARANTEED.
ORDER FROM YOUR JOBBER. IF HE CAN'T SUPPLY YOU SEND TO US FOR QUOTATIONS WE'LL SEE THAT YOUR ORDER IS FILLED QUICK.

Taylor-Forbes Company LIMITED.

Montreal Branch :
9 De Bresoles St.

GUELPH, CANADA.

THE LARGEST MANUFACTURERS OF HARDWARE IN CANADA.

Classified List of Advertisements on Page 71.

ICE CREAM FREEZERS

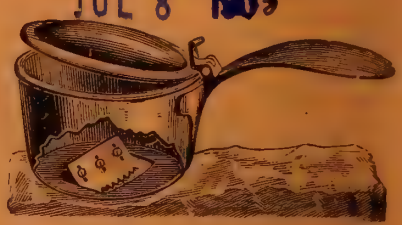
ICE TONGS AND CHIPPERS

RETURNED JUL 8 1905



ICE TONGS

RETURNED JUL 8 1905



No. 33. ICE SHREDDER

RETURNED JUL 8 1905
V. Owner
cut Book 37
Page 51A



No. 2
ICE BREAKER

RETURNED JUL 8 1905



TWIN
ICE CREAM FREEZER

RETURNED JUL 8 1905



GEM ICE CREAM FREEZER

WRITE FOR PRICES

RICE LEWIS & SON

LIMITED

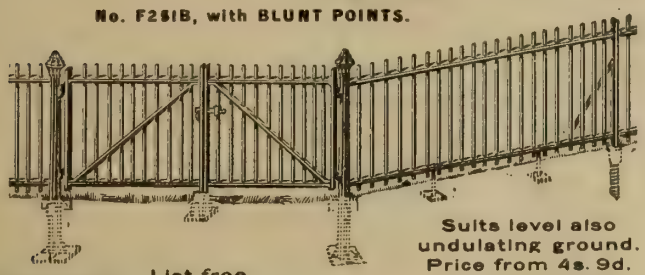
TORONTO.

BAYLISS, JONES & BAYLISS, LD.

MANUFACTURERS OF
PATENT SELF-ADJUSTING, ROUND-BAR, UNCLIMBABLE

RAILING.

No. F2518, with BLUNT POINTS.

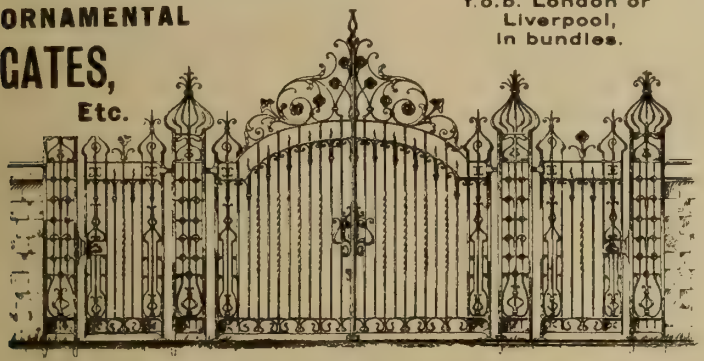


Suits level also undulating ground. Price from 4s. 9d. per lineal yard, f.o.b. London or Liverpool, in bundles.

PLAIN AND ORNAMENTAL

GATES, Etc.

List free.



Also Manufacturers of IRON AND WIRE FENCING, BOLTS, PATENT NUTS, TIE-BARS, Etc. Catalogue Free.

VICTORIA WORKS:— **WOLVERHAMPTON,** (ENGLAND).

LONDON OFFICES AND SHOWROOMS: 139 and 141 CANNON ST., E C.

To the

Hardware Merchants

and

General Store Keepers

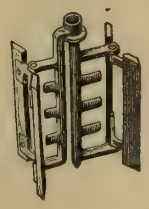
we solicit a call or inquiry.

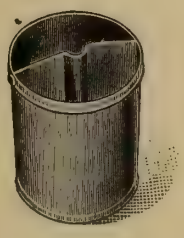
THOS. BIRKETT & SON CO., LIMITED

WHOLESALE HARDWARE MERCHANTS

OTTAWA, ONT.







"AMERICAN" (2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.

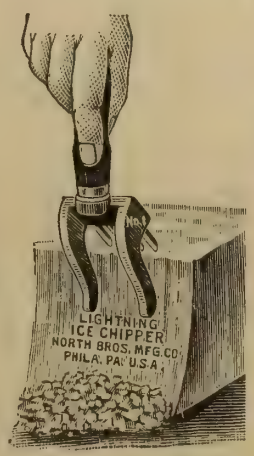
PHILADELPHIA, PA.

"LIGHTNING" "GEM" "BLIZZARD"

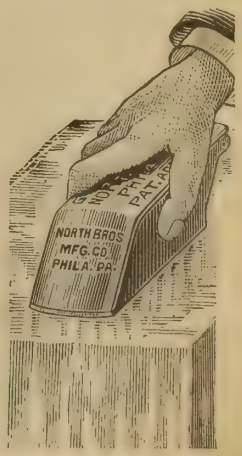


THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, **Automatic** Tin Scrapers.







"LIGHTNING" ICE CHIPPERS "CROWN" "GEM" ICE SHAVE



A Catalogue showing a full line of these stoves mailed on application

The "Standard" Blue Flame Wickless
COAL OIL AND GASOLINE STOVES

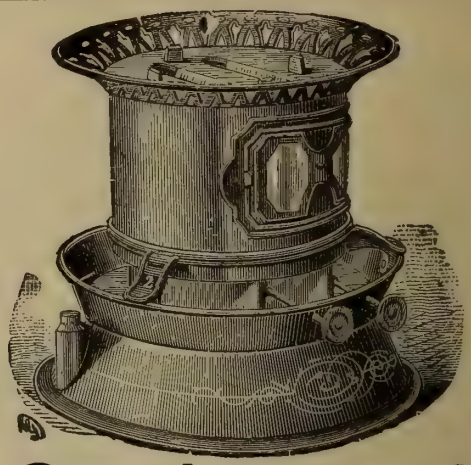
Absolutely Safe and Easy to Operate
Lights Instantly and Cooks Quickly

Simply turn on the oil and apply the match

"Standard" Safety Gasoline Stoves are constructed according to the safety requirements of the National Board of Fire Underwriters, and are on their list of "Permitted Stoves"

THE

"PRINCESS" COAL OIL STOVE



(TWO BURNERS)

A Good Serviceable Stove and a Powerful Cooker, at a very low price.

We have also in stock the "Summer Girl," "Eagle" and German Oil Stoves, Extension Tops, Wicks, etc. Write for prices.

The Thos. Davidson M'f'g Co., Limited
MONTREAL

GALVANIZED SHEETS

"Gordon Crown" "P.F. Crown"

None Better **Lots Worse**

Enquiries solicited for shipment from stock or for import . . .

M. & L. Samuel, Benjamin & Co.
503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

TAKING CHANCES!!! NO

We will Ship your Mail Orders Promptly

Moving to our new Warehouse and Head Office, Nos. 14 to 28 Bleury St., will not delay your Shipments.

GIVE US YOUR MAIL ORDER BUSINESS

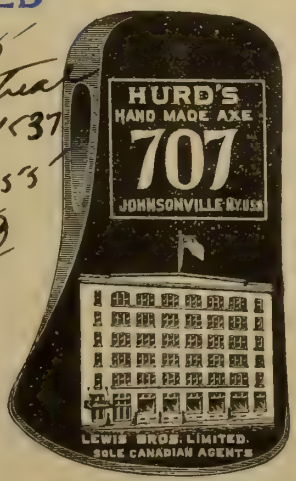
Our Arms, Ammunition and Sporting Goods Catalogue No. 34 is now Ready

LEWIS BROS., Limited

RETURNED
JUL 8 1905
To Montreal
Ref. Book 37
Page 53

Shelf Hardware

Heavy Hardware



OTTAWA
TORONTO
VANCOUVER
CALGARY

MANUFACTURERS AND DISTRIBUTERS

Always address Head Office at

MONTREAL

Best on the Market

FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

IN CASES

Table Cutlery, etc.

SOLD BY

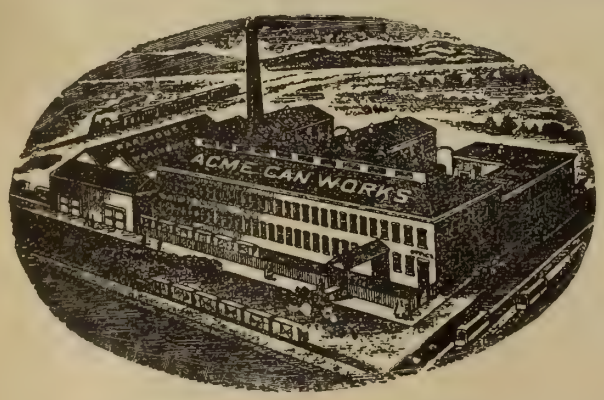
E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.



When in Need of Cans, Serve Your Best Interests and Consult Us

Acme Can Works

make the largest assortment of any factory in America of **TIN CANS** by the latest up-to-date automatic machinery.

We are the only makers in Canada of
KEY-OPENING MEAT CANS, POULTRY CANS.
They are our specialties.

Manufacturers for Canada of
Jewett's Self-Heating Can.

We solicit inquiries for prices on

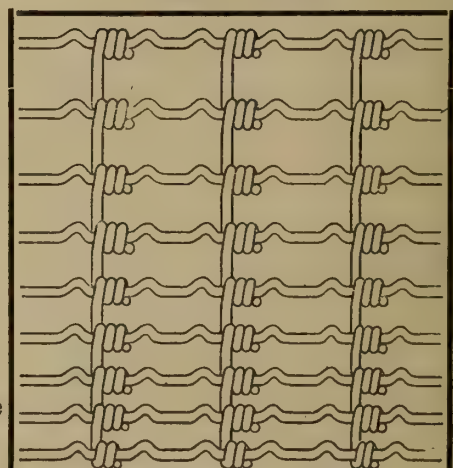
Baking Powder, Oil, Syrup, Lye, Paint, Varnish, Condensed Milk, Poultry, Fruit, Vegetable } **Cans** **Lard, Syrup, Butter** } **Pails**

ACME CAN WORKS
Ontario Street East, - - MONTREAL, P.Q.

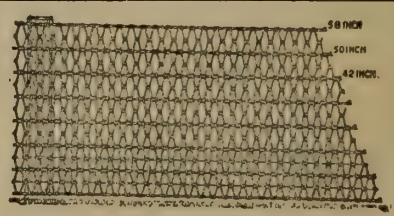
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



Ellwood Field and Lawn Fence

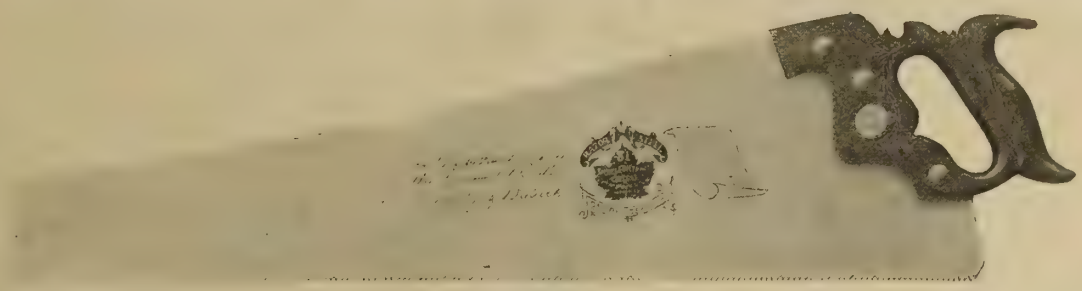
We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us

THE CANADIAN STEEL AND WIRE CO., LIMITED
WINNIPEG, MAN. HAMILTON, ONT.

Canada Leads the World in the Manufacture of

HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our Illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

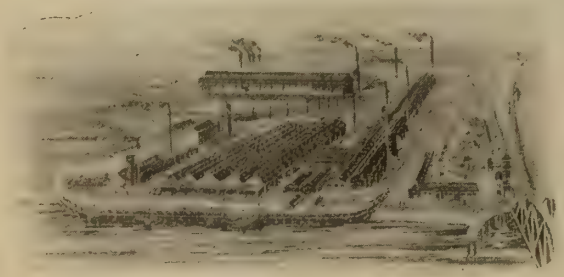
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



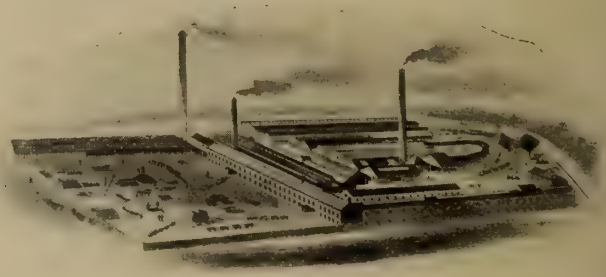
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.

LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

TRADE MARK
WIND MILL BEST BEST

Made from steel of our own manufacture straight from the raw materials; we are therefore able to guarantee the quality.

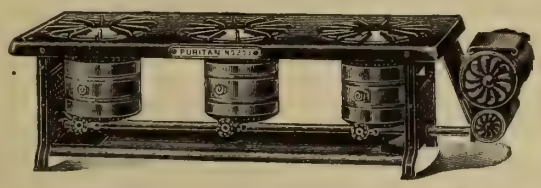
It will not pay you to buy inferior sheets.

Dead Flat Sheets

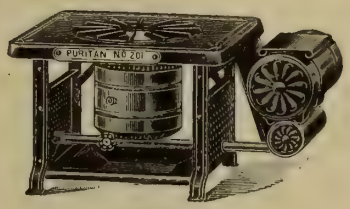
Tough and pliable.
Will stand any amount of working up.
Right Material. Right Quality. Right Price.

Agent: F. Hankin, Montreal

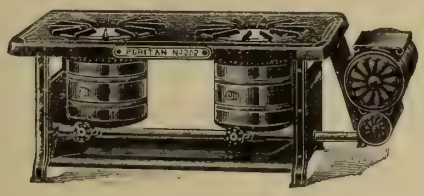
BLUE FLAME COAL OIL STOVES



No. 203



No. 201



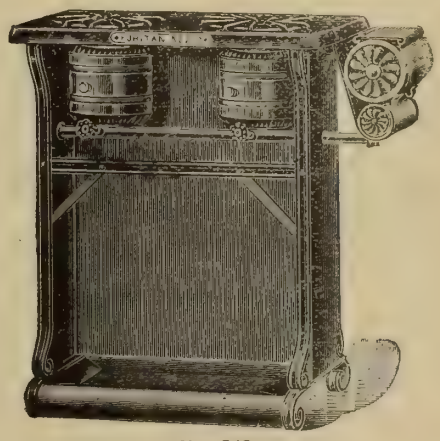
No. 202

Nos. 811, 812, 813, are "Sterling-Puritan." Nos. 201, 202, 203, 212, are "Puritan," which is quite similar in construction, the principal difference being in the construction of the valve. The "Puritan" is cheaper. We stock this stove and Nos. 811, 812, 813, 852, 853, 844, and 845 of "Sterling-Puritan."

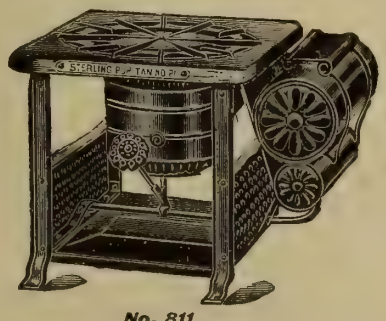


No. 812

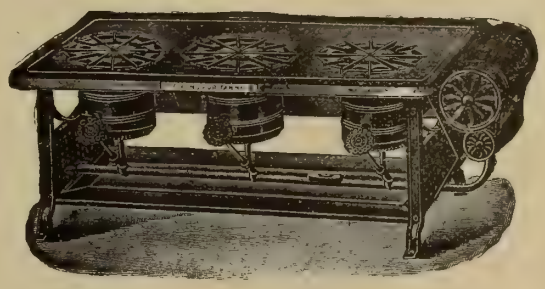
The best wickless stove on the market. Simple in construction, perfect in operation; cheaper than gas, coal, wood or gasoline, and much cooler and more satisfactory to work with. Will do any kind of cooking. Just the thing for kitchen, camp, nursery and bath-room. Special features, such as the improved vaporizing bowl, and specially constructed top grates, covered by strong patents. Every stove guaranteed.



No. 212



No. 811



No. 813

Write for Particulars

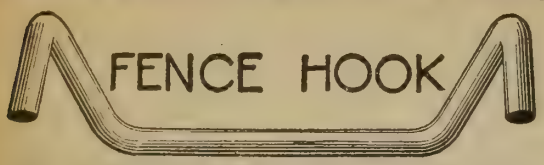
FOR SALE BY

The Hobbs Hardware Co., Limited

London, - - Ontario

Manufactured by The Cleveland Foundry Co., Cleveland, Ohio

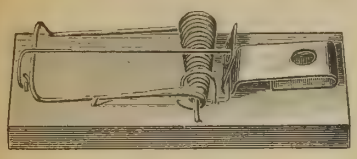
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.

LITITZ, PA.

GLAZIERS' DIAMONDS

Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

Established 181

ALSO Lead Vices, Carbon Tools, Etc., Etc.,



Agents for Canada: **A. Ramsay & Son Company, Montreal**

GLAZIERS' DIAMONDS



Ahead of all others in **quality** and **workmanship**. If **sparks** of **fine quality, set by experts**, are what you require, buy Diamonds of **A. Shaw & Son's** make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 155 Chambers St
NEWARK, N.J., U.S.A.

HENRY T. SEYMOUR SHEAR CO. NEW YORK.

SEYMOUR SHEARS

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK.

TRADE MARK

TRADE MARK



Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

IDEAL COMBINATION COOKER AND BAKER

This cooker should be in every home for its fuel-saving qualities alone. With it you can do as much cooking on one burner of a Gasoline, Gas or Oil Stove as is usually done on three burners.



Saves one third of the food lost by ordinary methods of cooking. Retains all the nutriment of the food. Entire meal of five or six articles may be cooked over one burner on any stove. No scorching. Gives excellent results as a baker as well as a cooker. Ideal Cookers are made of fourteen ounce cold rolled polished copper, tin, or copper nickel-plated, and tinned on the inside. They may be had in eight different sizes at prices ranging from $2.50 upwards.

WRITE FOR BOOKLET

Sole Manufacturers

The Toledo Cooker Co., (Inc.)

Box 400, Toledo, Ohio

J. A. Ross, Sole Canadian Representative, Winnipeg, Man.

MAPLE LEAF

STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

WIRE ROPE

GREENING

"ACME" Brand

Highest grade of hoisting rope made.
Extra tensile strength for heavy work.
One strand painted green—look for it.

USE GREENING'S ROPE GREASE FOR LUBRICATION.

THE B. GREENING WIRE CO.
LIMITED
HAMILTON, ONT. MONTREAL, QUE.

Dillon Hinge-Stay —Fence—

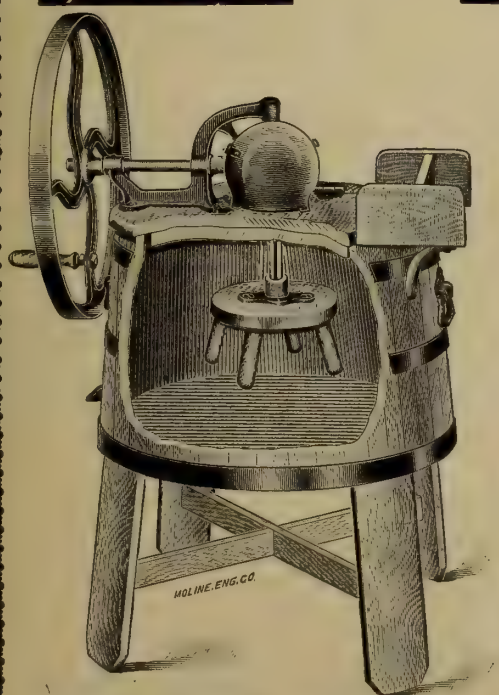


Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

OWEN SOUND WIRE FENCE CO., LIMITED,
Owen Sound, Ont.
MESSRS. CAVERHILL, LEARMONT & CO.,
(Eastern and Western Agents.) Montreal and Winnipeg

1905 Ocean Wave Washer



Accident Proof! Dust Proof!

SPECIAL FEATURES:

1st. Covered Gearing
which can be opened instantly to expose working mechanism.

2nd. Improved Dasher
We do not use **wooden** Dasher Pole.

3rd. Mechanical Movement Most Simple ever Constructed.

4th. The Best Seller
because it is more attractive than others.

Sold to only one dealer in each town.
Trial Order will convince.
Write us.

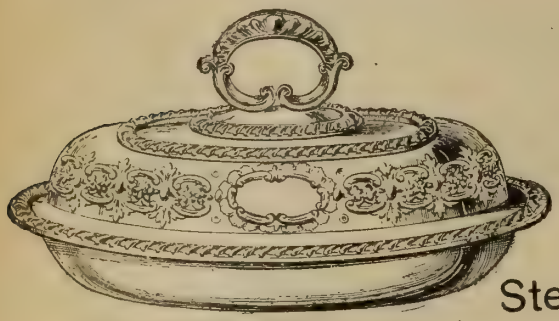
VOSS BROS. MFG. CO.——DAVENPORT, IOWA, U.S.A.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
ALL THE WORLD ROUND
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



31520.—ENTREE DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts



31197.—E.P.N.S. CAKE BASKET

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and **SHIP'S OUTFITS**, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

SOME ARE BORN GREAT—

SOME ACHIEVE GREATNESS—

SOME HAVE FAIRBANKS VALVES SUPPLIED TO THEM

TURNED
13 1905
Montreal
Book 37
page 71.



Having Fairbanks Valves supplied to anyone on an order for valves is equivalent to having "Greatness thrust upon them." If your customer has experienced trouble with his valves, and you supply him with "Fairbanks," he will be grateful to you, as all his valve troubles will then end. Hardware Dealers who handle Fairbanks Valves become as it were partners in our business, as we advertise our valves extensively, and help the dealer to work up a trade in his vicinity.

"Fairbanks Valves and Satisfaction"
"The Same Thing."

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THE CANADIAN FAIRBANKS CO. LIMITED

MONTREAL TORONTO VANCOUVER WINNIPEG

CLOCK PUMPS.—These are not new pumps—they were invented nearly 100 years ago.

They are double-acting **FORCE AND LIFT** pumps. They will lift 15 to 25 feet and force 75 to 100 feet.

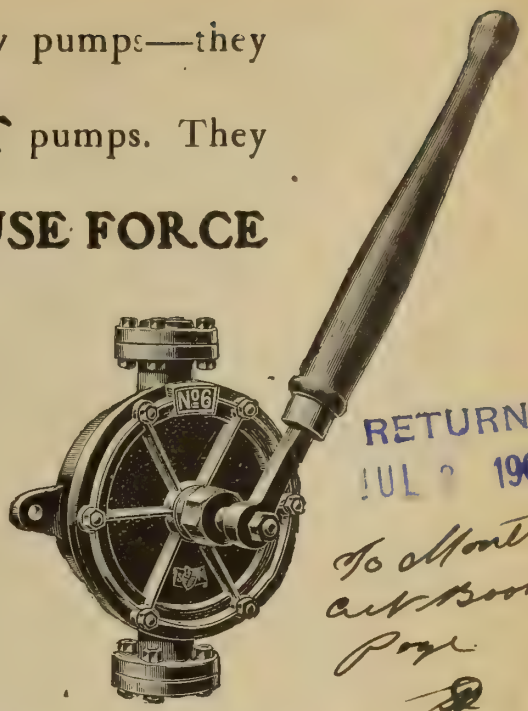
They are particularly adapted for use as **HOUSE FORCE PUMPS.** The No. 4 size is 6¼ x 3 in. and delivers 17 gals. per minute.

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Working parts are brass; no leather or rubber used in the valves.

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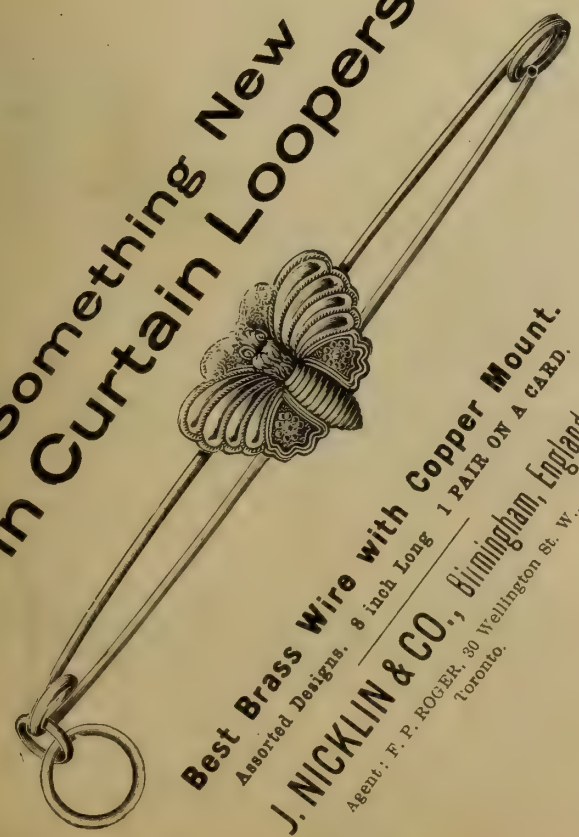
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Frothingham & Workman, Limited

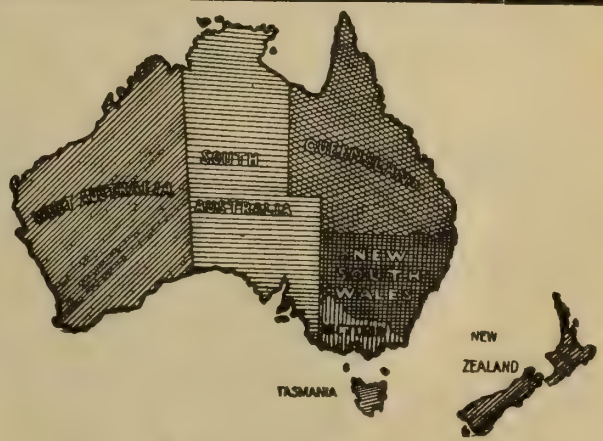
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Best Brass Wire with Copper Mount.
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Consumers Cordage Co., Limited

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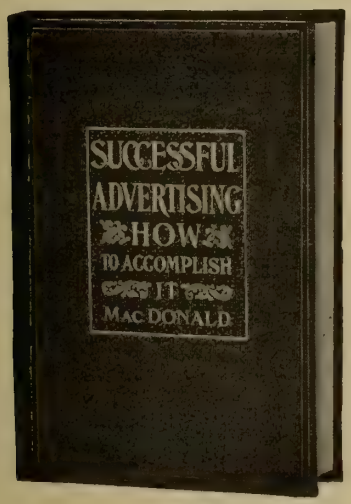
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DAVID MAXWELL & SONS

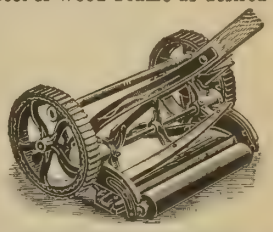
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"Maxwell Favorite Churn." PATENTED FEATURES: Improved Stee Stand, Roller Bearings, and Foot and Hand Lever Drive, and Detachable Driving Link. Improved for season of 1904. Steel or Wood Frame as desired

Lawn Mowers. High and Low Wheels, from 12 in. to 20 in. widths. Cold Rolled Steel Shafting, Crucible Steel Knives and Cutting Plate.

If your Wholesale House does not offer you these articles

SEND DIRECT TO US.



MAXWELL MOWER

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Wheelbarrows. In Four Different Sizes.

Ask for the J.C.M. Brand of Canadas

Galvanized—
3 Crown, Black
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1 Crown.

APPLY TO First-class makes at low prices.

RD. JOHNSON, CLAPHAM & MORRIS, Limited

MANCHESTER, ENGLAND



Make Your Own Sales

If there is a woman who has never used

The Tarbox Mop Cloth

she certainly would not long be a non-user if she knew how much energy would be saved in mopping.

Awaken to your opportunity for sales.

Your Jobber Sells Them.

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OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

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We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

IRONSIDE, SON & CO., 16 Water Lane Gt. Tower St., E C **LONDON, ENG.**

Sole Agent for Canada: MR. SYDNEY T. HACKETT, 233 St. James St., Montreal

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

Sales Branches and Warehouses:

172 Granville St., Halifax, N.S.	Imperial Bank Building, Montreal, Que.	Front and Yonge Sts., Toronto, Ont.	89 Princess St., Winnipeg, Man.	403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.
LIMITED



Enameled Preserving Kettles WILL BE IN DEMAND NOW

Our brands, "ONYX," "DIAMOND" and "PEARL" Wares will satisfy the most critical patrons. Our stock is complete and we can ship promptly. Send us your orders.

KEMP MANUFACTURING CO., TORONTO, ONT.

THE KEMP MFG. AND METAL CO., LIMITED,
McDermot Ave. East, Winnipeg, Man.

THE KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

DIFFICULTIES OF MERCHANDISING

THERE are as many different grades of merchandising as there are different brands of whiskies, and observation has shown conclusively that the quality varies proportionately in both. In fact, if the number of failures be taken as a criterion, it would seem that a very large proportion of the merchants are sadly deficient in their ability to properly and successfully carry on a business enterprise.

Advice and suggestions to prospective merchants, and even to those already engaged in business, are seldom if ever followed. Experience is apparently the only teacher whose instructions are heeded, or at least it is only after one has made the trial which has demonstrated his inefficiency that he realizes the value of suggestions and advice.

The success of some business houses—viewed by employes who more frequently are unfamiliar with the inside workings and therefore ignorant as to whether the large volume of business bears a profit sufficient to cover the ever-increasing expense account in connection with the elements of loss and depreciation which forms a very decided addition to the expense account—has a tendency to cause employes to aspire to merchandising themselves, and in consequence they cut loose from their employers and with little if any experience, inadequate capital and credit, open up in busines and endeavor to compete with their former employers.

Competition Becoming Fiercer.

The old saying, "All is not gold that glitters," exactly covers the situation of merchandising as it should be viewed by the prospective merchant. Because some houses have established a reputation for a large and profitable business does not mean that all can be so successful. Then again it should not be accepted as a fact that all houses who may possibly be doing a large volume of business are realizing profitable returns. There was a time when any merchant could make money, but changed conditions have brought about circumstances which make it very difficult indeed for a merchant to receive satisfactory compensation for the large amount of money invested and for the time and care devoted to the business. Statistics show that business enterprises are constantly increasing, consequently competition is becoming fiercer—at least becoming more general every day. There was a time before railway facilities had been provided and before telegraphy in all its multiplied usefulness had been introduced that the local merchants absolutely controlled the local situation. At that time there were few if any trade papers, which now keep all classes fully posted as to prices and conditions; the local press made no effort at all to keep the trade familiar with such conditions, and in consequence the merchant could ask and obtain almost any price he asked. The customary profit in those times was the Dutchman's 1 per cent. In other words, an article costing $1 would be sold for $2. The expense of doing business many years ago was very small. The public did not awaken to a necessity for modern improvements and such other conveniences that necessitate at the present time such large outlays before a merchant is wholly equipped for business. Living expenses of employes was very much less than at the present time, and in consequence the labor situation did not assume such proportions as it does now.

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Hardware Store of Smith & Ferguson Co., Limited, Regina.
Courtesy Regina "Leader."

The effort which is being made by the up-to-date merchants at the present time to meet the changed conditions which modern invention and improvements have brought about calls for a constantly increasing expense account, and when one considers the declining profits which must in some way meet increased expenses, the merchant is asking himself the question, "Where am I at?" The question may arose in the minds of those who are anxious to enter into business, "Why do not the old merchants sell out if they are not obtaining commensurate returns from the time devoted to their business and the capital invested?" Many of them are endeavoring to get out of harness, but the difficulty lies in finding purchasers who will pay them for the amount invested. It is impossible for a merchant to keep his stocks clean and up-to-date without tying up money in unsalable stock. Goods will accumulate and become unsalable, especially at the present time. Styles are constantly changing, and frequently goods will remain on the shelf because of the fact that custom has changed and popular opinion demands some other article or some other style In consequence of this the merchant has on hand an ever-increasing stock of unsalable goods, and it is difficult to find a purchaser who will pay for such goods at anything like their cost.

Training of Employes.

One very serious drawback to the merchandise business is the necesisty of training employes to satisfactorily perform the duties assigned them. Young men who have been trained in the business have an attack of going into business for themselves, and when they leave their employers are compelled to obtain new material and train them for the work for which they are employed. It is quite natural for such training to result in unsatisfactory service, and frequently in actual loss to employers. Experience has shown that a very large part of the employes who enter into business for themselves frequently fail and often go back to their old employers wiser but poorer for the venture. If the loss of the business venture was confined to the parties themselves the damage would not be so great, but while in business they have endeavored to com-

pete with their old employers and with other merchants, frequently at ruinous low prices and at terms both unsatisfactory and unprofitable. The established merchants must of necessity meet the competition of new houses, and when such new concerns are operated by inexperienced and inefficient management the result to all interested can be very well considered.

The Elements of Success.

As has been stated above, there was a time when anyone could make money in merchandising, but changed conditions now bring the merchandise business down to a practically scientific undertaking. The merchant who can conduct his business at the least possible expense consistent with a satisfactory and presentable display, one who has the intruition of selecting the proper employes to assist him in operating his business and who can educate them to the proper character of salesmanship, the one who can command sufficient capital and all the credit necessary to carry a sufficient stock and to take advantage of market conditions in buying goods ahead or in contracting for the same, and who has the tact and the nerve to secure from the manufacturers their best possible terms and prices—is the one who will succeed. The up-to-date merchant should be a student of human nature, should know how to approach the people personally and in an advertising way through newspapers and other advertising mediums, must command the respect of his customers and at the same time have the respect of his employes. It is as necessary for a merchant to carefully select his employes as it is for a general to have able officers under him. A large mercantile business at the present time and epoch has a lifelong campaign to follow up. It is the survival of the fittest in business as in other professions. Many young merchants seem to consider a supply of cash and fair credit is all the equipment they need in entering business. While both these requirements are very valuable in their place, at the same time there are other attributes for the business man which are of even greater importance.

Prospective Merchants' Qualifications

The history of many great men, especially in the commercial world, presents each one's qualifications, and it would be well for prospective merchants to carefully review the experience of these men and profit from their advice and suggestions. It is quite true that it is human nature to aspire to business ventures. Many young men are anxious to become their own boss, and they imagine that this can only be done by their going into business for themselves, and in reality bossing the entire business. Observation will show conclusively that it is not necessary for a young man to enter business to command the respect of his superiors, equals and inferiors. The man who properly and satisfactorily handles a department of any of the great merchants commands not only the highest respect of his employers, but also those working under him. There is always advancement with these lieutenants, and if they are successful in their work their future is assured. A great trouble with the average employe is that he is afraid he will work too hard, that he will put in too many hours, or that he will injure his brain in the interest of his employers. Such labor—for such it is—can never succeed in any undertaking. They overestimate their ability and are constantly seeking the unattainable.

In conclusion, it would be well for all prospective merchants to very thoroughly consider the proposition before going into business. While it is practically impossible to convince such parties that the experience of others would assist them in reaching proper conclusions, yet some good may result by giving such suggestions and advice. There are some facts that can be truthfully substantiated by all successful merchants, that is, that the merchandise business is not a bed of roses, and many of these same merchants will urge young men to refrain from going in business for themselves, but instead to seek responsible positions with established merchants and thus demonstrate their usefulness.

Capital can always be placed to good advantage, and the young man who has a surplus had best invest the same with his employer or in some other enterprise where the security is good and prospects bright for good returns.

A NEW TOOL STEEL.

A CORRESPONDENT in Sheffield has sent Hardware and Metal the following article describing a new process of manufacturing steel invented by a Sheffield workman:

Since the early days of the eighteenth century, when Benjamin Huntsman, of this city, and prominent chemists of other places began to busy themselves with a view to the discovery of improved processes for the manufacture of steel, Sheffield has always been in the forefront of the steel industry. It would be too much even for a loyal Sheffielder to claim that everything good in the way of steel manufacture has originated from Sheffield, but it is impossible to review the history of Sheffield's industrial career and not discover abundance of evidence that the city has been preeminent in the production of chemists famed for their knowledge of the inner mysteries of steel manufacture, and of inventors who have given to the world improvement after improvement which have resulted in the simplification and perfection of the steel industries. Of late years the inventor has striven to produce a steel which would adapt itself to use on machines of much higher cutting speed than were formerly employed. There are in Sheffield at the present moment not a few manufacturers who have achieved very considerable success in this direction, and, without flattering Sheffield unduly, it is quite fair to say that the city has taken a very strong lead indeed in this department of steel manufacture. It is not necessary to deal at any length with the many and excellent descriptions of high-speed tool steel emanating from Sheffield which are at present upon the market, but it is exceedingly interesting to note that a new and important development has recently been made by a Sheffield firm, the Sheffield Steel Makers, Limited. This steel will undoubtedly have an important bearing upon the future of the tool-steel industry, and the firm referred to are to be congratulated upon their achievement.

Not enough attention has hitherto been given to the manufacture of an intermediate quality of rapid-cutting tool steel, which is necessary for the requirements of by far the greater proportion of machinery owners. It may be assumed that of all the tool machinery upon the world's market, not even 5 per cent. is designed for actual high-speed working. However, present-day necessities are more exacting than they were formerly, and the general body of manufacturers, from the smallest to the largest, have become fascinated with the idea held out to them by high-speed tool steel manufacturers of making more of their existing machinery than is possible under present circumstances. This has led to an increased use of the old type of self-hardening steel similar in nature to the original Mushet brand of steel, which has been found in a good many cases to meet nearly all the requirements of the maximum capacity of the machines of current types.

"Unor," as the new steel is called, does not resemble any steel which has been made so far by producers of tool steel, and its characteristics mark it as an entirely new class of material. If any comparisons were made, its cutting and wearing capacities would range between that of the good old type of original Mushet self-hardening steel and the best of the modern high-speed steel.

New Steel's Properties.

"Unor" steel has the property of air hardening, and possessing the capacities already mentioned it will serve equally well for the processes of finishing and of roughing. The treatment required to manufacture tools from steel of this description has established a record for simplicity. All that is necessary to harden it is to heat it to a bright red, and not beyond the "critical point," as is the case with current types of high-speed steel; and to allow it to cool naturally in the air without the use of an air blast. The obviation of the use of an air blast simplifies the process greatly. To anneal "Unor" steel for easy machining all that is required is to heat it to a cherry red, let the heat sink over the fire to a very dark red, and

WIRE NAILS
TACKS
WIRE
Prompt Shipment
The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

then to plunge it in the water. Experiments have proved that it can be rehardened or softened any number of times, and that the wearing quality of this new tool material does not deteriorate in any way in the course of these processes.

The makers of "Unor" steel are determined to put the material quickly before the engineering world, and arrangements have been made for its manufacture in large quantities. In tests made with twist drills of "Unor" steel at the Sheffield Testing Works, on a railroad tyre made of Cammell's steel of 0.49 per cent. carbon, 49 holes, each 15-32 inch in diameter and 17-18 inch deep, were drilled at an average speed of 25 seconds each. A 13-16 inch drill, made from this steel, drilled 20 holes, 2 inch deep, in 16 1-2 minutes. In both cases the tool used was left in good condition. "Unor" steel does not alone commend itself on account of its extraordinary characteristics, but it will undoubtedly be popular on account of the moderate figure at which it is placed upon the market.

Another Invention.

The Sheffield Steel Makers, Limited, will shortly place upon the market another remarkable invention, which is likely to arouse as much curiosity as has already been manifested in the case of "Unor." The material in question is a water-hardening tool steel, capable of maintaining a keen cutting edge longer than anything of the kind hitherto produced. Some pocket knives were shown, the blades of which were made of this material, were whetted up to carry a razor edge, which was tested by shaving the hair from the arm of the gentleman who was kind enough to make the experiment. A large piece of red wood was then brought, and an unmerciful slashing was entered upon with the small blade. Large knots were encountered in the course of the experiment, and everything that could be thought of to test the blade been composed of ordinary steel, a few cuts upon the wood that was used would have brought it to the semblance of a saw, the durability of the blade was done. But on retesting the knife the edge was exactly as at the outset of the experiment, and would have served for the process of shaving.

The steel to all appearance is in itself a paradox. Notwithstanding the fact that it is hard enough to cut glass, it will bend easily. The blade was laid over the edge of an office table, and when hammered with a steel bar, it was bent to an angle of sixty degrees, without breaking. After this the blade was broken in half, and I was shown that the steel would cut glass with the greatest of ease. Every user of steel knows quite well that glass hardness in steel invariably means also brittleness, but this quality has been quite avoided in the case of this new tool steel.

It will be particularly intended for the manufacture of razors, pocket cutlery, circular saws, and tools in general where it is essential that a keen cutting edge should be maintained for the longest possible time. A great number of tests have been made, revealing the astonishing cutting and staying power of this material. Files which have been made from it have been found to wear four times as long as tools made from other kinds of steel.

Put Sherwin-Williams Varnish Stain on Your Shelves

and you'll add a quick-selling and profitable specialty to your paint stock.

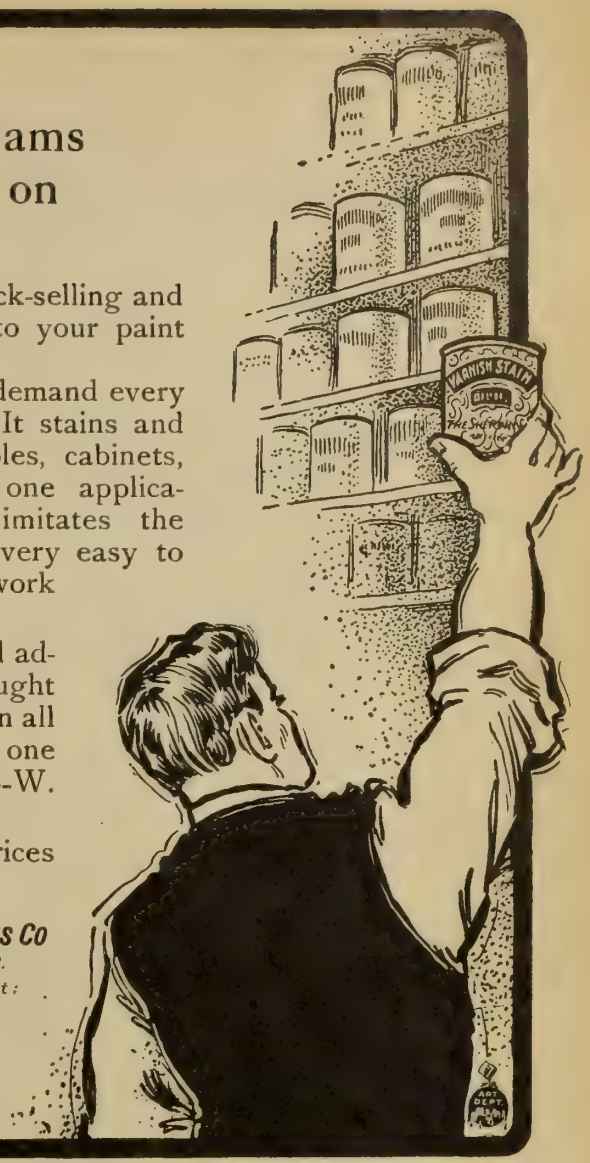
Varnish Stain is in demand every month in the year. It stains and varnishes chairs, tables, cabinets, woodwork, etc., by one application. It correctly imitates the natural woods. It's very easy to put on—does good work always.

Varnish Stain is well advertised. It is brought before the consumer in all our advertising. It is one of the leaders in The S-W. Full Line.

Write us today for prices and full particulars.

THE SHERWIN-WILLIAMS CO
PAINT AND VARNISH MAKERS.
Canadian Headquarters and Plant:
639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg, Man.

1489



TREATY WITH JAPAN.

CANADIAN exporters will read with interest the official announcement that Japan has given informal assurances of her willingness to admit Canadian products to the advantage of her minimum customs duties. Steps have already been taken by the Dominion Government to have this carried out.

In 1894 Japan concluded commercial treaties with Great Britain, Germany, Austria-Hungary and France, which entitled specified products of these nations to tariff concessions within the Mikado's domains. The self-governing colonies of Great Britain were privileged to adhere to the treaty if they saw fit within two years. For various reaosns Canada allowed the time to go by, the result being that since the Japanese market opened up Canadian exporters have had to compete at a disadvantage with no less than seventeen foreign countries enjoying tariff preferences extended by Japan under "the most favored nation clause."

The list of articles in which Canadians will be able to compete more favorably directly Canada comes into closer commercial touch with Japan includes condensed and sterilized milk, hops, leather and leather goods, horses, sugar, cottons, woolens, paper, enamelled kitchen-ware, rubber goods, wire and hats and caps. Speaking generally, the minimum tariff rates on these lines will be about two-thirds of what our exporters would have to face in any shipments they attempted to make to the Japanese markets at the present time.

Metallic roofing and siding is a good line to push while building is active. It is naturally a hardware line too, although some neglect it.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Store Windows.

AN 80-page book about 6x8 inches has been issued by the Sherwin-Williams Paint Co., each page containing valuable suggestions and illustrations indicating easy methods of dressing attractive windows. Below each picture a paragraph explaining the system of dressing is given, the whole making a valuable book for any hardware or paint dealer to have on hand and refer to when it is desired to turn stock into ready money. Mention Hardware and Metal when sending for a copy of the book.

Chain Pipe Wrenches.

Printed matter descriptive of the Champion chain pipe wrench, the Kewanee brass and iron ball joint unions, and of high-pressure boilers, has been sent us by the Lombard Iron Works and Supply Co., Augusta, Georgia. Any steamfitter interested in the latest apparatus in their line should write this company for information, mentioning Hardware and Metal in their letter.

Baker Gun Quarterly.

A 12-page, 11x15 inches, magazine has been sent out by the Baker Gun and Forging Co., Batavia, N.Y., its columns being filled full of useful information regarding Baker guns and general matter of interest to shooters. The paper is issued quarterly and will be sent regularly to hardwaremen who handle sporting goods, providing they mention this paper when writing.

Water Heating Catalogue.

"Modern Methods of Heating water" is the title of a new catalogue received from the J. L. Mott Iron Works, 84 to 90 Beekman street, New York. A transcript from the introduction reads as follows: "An abundant supply of hot water is a modern necessity, of which every building that is occupied requires more or less. This pamphlet is published for the purpose of explaining or suggesting the best and most economical means of obtaining a good supply for any purpose." The pamphlet addresses itself to the illustration and description of the Tobey automatic heaters for live steam, the Efficient for low-pressure steam, Security and Economic for heating water by the injection of steam, and Sunray hot water boiler, and tank heaters. The text is plain and contains many suggestions and much technical matter of interest. The cuts, worthy examples of the engraver's art, show, besides the devices illustrated, several plans of installation. Fine calendered paper and good printing also attract attention. Mention Hardware and Metal when sending for the catalogue.

Gas and Gasoline Engines.

The Duluth Gas Engine Works, Duluth, Minnesota, have issued a neatly gotten up folder illustrating and describing the machinery manufactured by them, comprising belt power, pump jacks, feed mills, stationary motors, portable sawing outfits, marine motors, gasoline launches, etc. Hardware merchants who handle any of these lines will find the folder of interest. Mention Hardware and Metal when writing.

There are ***HAMMERS*** *that "Knock," and there are* ***HAMMERS*** *that convince. We employ the convincing kind; for instance, we say contact with the Hammer will not discharge an*

IVER JOHNSON REVOLVER

And then we use our ***HAMMER*** *just to demonstrate the truth of our assertion. We call this a convincing argument, not "Knocking."*

Hammer the Hammer



Send for literature.

IVER JOHNSON'S ARMS & CYCLE WORKS,
FITCHBURG, MASS.
New York Office: No. 99 Chambers Street.

SYDNEY BOARD OF TRADE.

LAST week the annual meeting of the Sydney (N.S.) Board of Trade was held, the attendance being large and the business done chiefly pertaining to local matters. The following extract from the address of President H. H. McCurdy will be of interest, as indicating the progress of the eastern city.

"The turn in the lane has been met and passed. Subsidiary industries to the basic iron and steel are now established. The Dominion Tar & Chemical Co. is already established and doing a large volume of business. The Sydney Cement Co. is ready to begin operations, and a Sydney nail company is organized, and, I hear, is soon to begin construction. The Dominion Iron & Steel Co. is now manufacturing their iron and steel product into finished material. The making of wire rods is an already well established branch of the company's work, and within the past few days the rail mill has been put in operation and is turning out a 25,000-ton contract for the Grand Trunk Pacific Railway. This makes a further step in the industrial advancement of Cape Breton. From this time forward Sydney's progress will be substantial and regular.

"Among the matters which require immediate attention are: The railway freight service to Cape Breton, deepening of St. Peter's Canal, improved postal arrangements, location of industries at the north of the peninsula, development of the oyster fishery, extention of the Cape Breton Railway, conecting the Cape Breton Coal, Iron & Railway Co., Broughton, with Sydney, further reorganization of the Board of Trade, a public landing at the water front, half-hour train service to the colliery towns, local changes for electric light."

A NEW FIRM.

In another column appears the announcement of Messrs. Monteith, Nixon & Co., who have just established a fully-equipped factory at the head of Macdonnell avenue, Toronto, for the manufacture of office, warehouse and factory trucks.

In addition to the ordinary lines of trucks they are prepared to furnish a line of goods not hitherto obtainable in this country, namely, steel-frame trucks, for the use of the heavy hardware trade, and made suitable for handling bar iron and iron pipe. There is a decided opening for these goods in Canada, and our readers will be interested in knowing where their requirements in this line can be supplied.

Both members of the firm have an extensive acquaintance among the hardware trade, and will undoubtedly make a decided success of this new undertaking.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

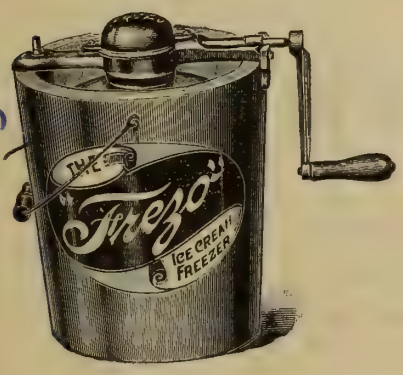
Wholesale Only

138-140 WEST FRONT STREET, TORONTO

Only Wholesale

ICE CREAM FREEZERS

RETURNED JUL 8 1905

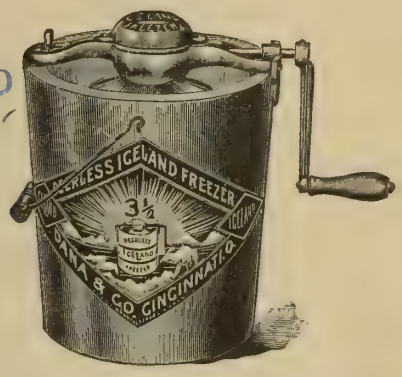


"Frezo" Freezers

Sizes, 1, 2, 3, 4, 6 Quarts.

Makes ice cream in four minutes Full size tubs and cans. Tubs are made of the best quality of lumber and cans of the strongest and best coated tinplate. Dasher is of an improved type, double scrapers fastened in the same manner as in Peerless Iceland. Gear frame heavy and strong. Turned by gears fastened on can top. The best constructed freezer of this type.

RETURNED JUL 8 1905
To Owner
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Page



"Peerless Iceland" Freezer

Sizes, 2, 3, 4, 6, 8, 10, 12, 16, 20 Quarts.

Fly wheels for 16 and 20 quarts.

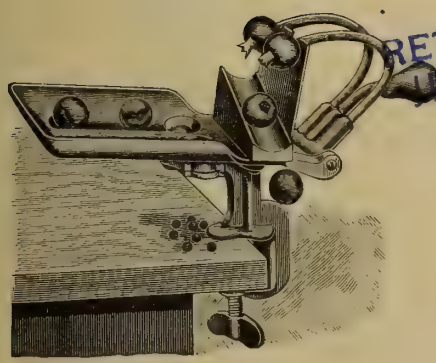
Has the fewest parts and only one motion—all that is necessary for the freezing of smooth, delicious cream in three minutes. The can revolves around stationary dasher. The quick freezing is accounted for by the peculiar construction of the dasher and the way it handles the cream set in motion by revolving can.



RETURNED JUL 8 190

Ice Chipper

"Peerless." Made of a Solid Piece of Steel, Coated.

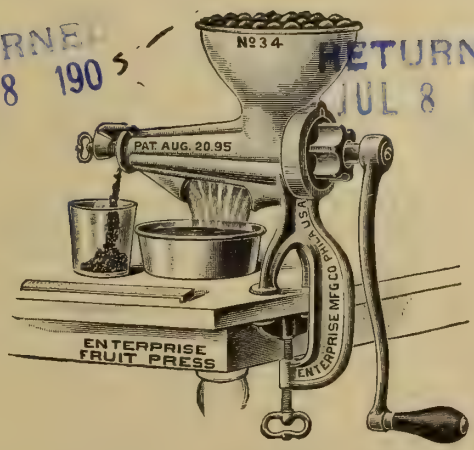


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Cherry Stoner

No. 20. Bronzed.

The fruit is left plump and round. Two cherries to each stroke. No spring to rust or break. Nothing to get out of order.



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Fruit, Wine and Jelly Presses

No. 34. Capacity, 1 Quart.



RETURNE JUL 8 190

Cherry Stoner

No. 1. "Enterprise," Japanned.
" 17. " "

No. 17 is constructed with a new patent regulating device, the simplicity of which makes it easy to adjust for the different sizes of cherries, and absolutely ensures the jaws retaining their position when set..

H. S. HOWLAND, SONS & CO., LIMITED, Toronto.

We Ship Promptly.

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto, Ont.

Our prices are right

REGISTERED SUPERIORITY PURITY TRADE MARK DURABLE AS THE PYRAMIDS

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory: *Port Hope, Ont.*

Sales Office: *50 Colborne St., Toronto.*

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Plain Lubricator



J. M. T. Injector

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Oil Pump

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Guage Cock

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The J. M. T. Valve with Jenkins or Copper Renewable Disc

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To Owner
Cut Book
Page 63

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Sight Feed Oil Cup with Quick-Stop

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Water Gauge Mounting

Manufacturers of and dealers in

ENGINEERS' BRASS AND IRON GOODS AND STEAM SPECIALTIES

If you want reliable valves and injectors use **J. M. T.** goods. Made to give that lasting satisfaction desirable in a steam plant, symmetrical in design, best steam metal.

We are now making our **J. M. T.** Valve double extra heavy where a valve for very high pressure is required.

Iron and Brass Pipe and Fittings **Steam Fitters' Tools**

The James Morrison Brass Mfg. Co., Limited, Toronto

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

ARTICLE VIII.

LIME IN HOT-WATER PIPES.

A FRUITFUL source of trouble to both plumber and customers in many parts of this country is the presence in the water used for domestic purposes of large proportions of limestone, which constantly fill up hot-water connections, mainly between the range and kitchen boiler, including the water front.

In some districts the water is so "hard," or, in other words, has such a large percentage of limestone that circulation pipes and water fronts require to be changed every four to six weeks, and, aside from the great expense which these constant renewals entail, there is the ever-present danger of explosion, due to the expansion of any water which may be imprisoned inside the surface, upon which the heat acts directly.

Many plumbers are at a loss to account for the formation of limestone in heating pipes, and are often surprised at the "hardness" of it, and yet the explanation of this peculiar phenomenon is a simple one, the fact being that water in constant contact with limestone wears away millions of small atoms, which, while extremely minute, are nevertheless insoluble, and when raised to a high temperature unite again in their original form, are precipitated and adhere to the sides of the vessel in which the water is contained.

Now, the problem is how to treat the water in such a manner as to either remove from it altogether or render soluble the contained limestone, and the solution of it is so simple that the wonder is that it is not more generally known

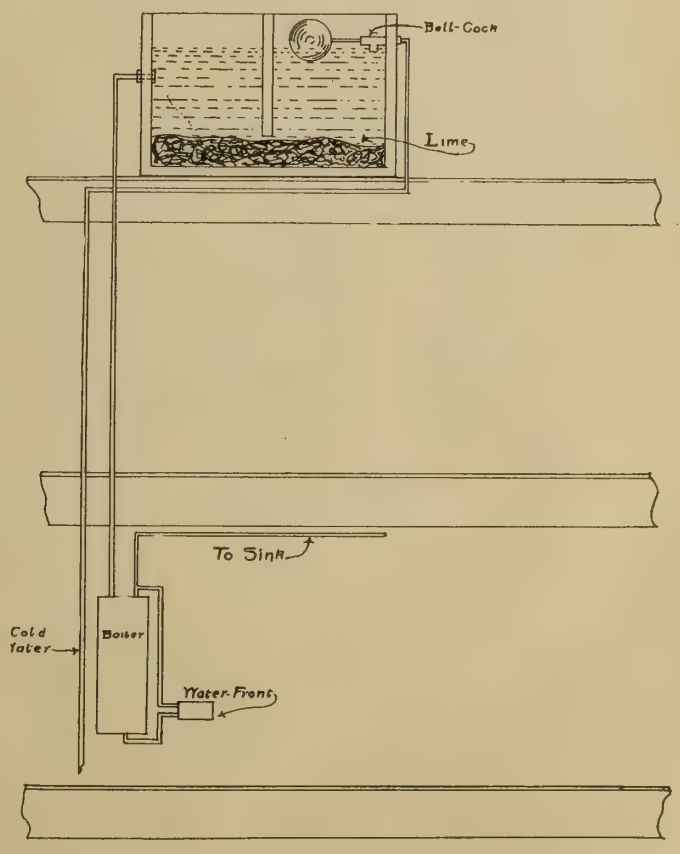
In order to overcome the tendency of the limetsone to assume its original condition in hot-water fixtures, it is only necessary that the water be permitted to come into contact with ordinary grey lime, the effect of this being that the atoms of grey lime will unite with those of limestone and make the latter soluble, and, of course, while in that condition they cannot form into a hard mass.

Where a comparatively low pressure on the hot-water fixtures will suffice, the operation of placing the necessary amount of lime in the water is not only very simple, but also cheap, and is very well illustrated in the accompanying sketch.

On reference to the sketch it will be seen that instead of connecting the "cold water" pipe directly to the boiler, it is run to a tank in the attic (which, if desired, may be a large sand barrel), in which, when water works pressure is used is placed a ball cock. In the centre of the tank is placed a partition, extending from the top down to, say, eight or nine inches from the bottom.

The "feed" to the boiler is taken from the opposite side of the tank, at a point a few inches below the water line.

Now, it will be plain that any water passing from the tank to the boiler must move downward, under the centre partition in the tank, and that if grey lime is put all over the bottom of the tank, seven or eight inches deep, that it will have plenty of opportunity of coming in contact with it, and thus taking up the amount necessary to accomplish the object in view.



It will be necessary, of course, to replenish the supply of lime from time to time, and this will depend altogether on the amount of water being consumed.

There will be more or less of the combination of limestone and grey lime deposited in the circulation pipes between the boiler and water front, in the form of mud or sludge, and to remove this three or four pails of water should be drawn off through the cock at the bottom of the boiler say every two weeks, and, indeed, this should be done in the case of every boiler, whether connected as described or otherwise.

It may be objected that the presence of lime in the water would be in some way injurious, but it is well known that lime water, far from being injurious, is quite the reverse, and, indeed, one of the most successful systems of this kind that has come under the notice of the writer was installed in the suburban residence of a physician.

Where it is necessary to have a pressure greater than would be due to "head" obtained by placing the tank in the highest point of the building, it would be necessary to have an iron tank, preferably circular in form, with an

opening in the end or side, of fair size, through which the lime might be introduced.

The opening should be surrounded with a strong reinforcing ring, to which would be fitted a heavy cover, which would be bolted on, the joint between the tank and cover to be made with a gasket.

If a tank of the latter kind is required it would be wise to have the size, weight and strength of material, etc., figured out by a competent boiler maker, because any information of a general character regarding these points, given in an article like this, might, while fitting one case exactly, be far from correct in another, and as in the case of all pressure work, where the materials used are of insufficient strength, disastrous results might follow.

Before concluding it may be well to say a word regarding the easiest method of removing the lime already formed in circulation pipes, water fronts, etc.

Where such a case is to be dealt with, it is simply necessary to immerse the fittings so affected in a bath composed of eight ounces of sulphuric acid to ten quarts of water, when the lime will at once begin to disappear in the form of foam, and the fittings should be left in the bath until they are perfectly clear, then removed and well washed with clear water to remove all traces of the acid.

Respecting the method of treating "hard" water, referred to in this article, it may be stated that there is at least one city in Canada where all of the water used is so treated, and then filtered before being pumped to the reservoir.

THE DISPLAY OF FIXTURES.

MANY dealers who have taken up the sale of bathroom fixtures have been somewhat undecided as to what would make the most effective display. It is not every store that has the room to set apart for an extensive wall display. If a corner can be arranged with the proper imitation tiled background, and over this the fixtures fastened, the result will be very desirable. The customer then has an opportunity of judging of the appearance of certain fixtures if put in the bathroom at home.

Mirrors, towel racks, shower sprays, soap trays, glass holders, etc., can be attached to the wall, while shelves can be utilized to display other fixtures. Bath seats, etc., can be arranged on the floor or in the bath tubs. A little effort along this line will bring ample results, and well repay the plumber for the time spent. A cleanly and neat appearance attracts customers to any shop.

OTTAWA PLUMBING STRIKE.

The Ottawa plumbers' strike is still on. It was caused by a tactical error on the part of the Master Plumbers' Association in not recognizing the collective capacity of the journeymen. The master plumbers are not a unit in their ideas. The original demand was for 32c. per hour, but a compromise of 30c. was effected by two shops making an agreement. As the carpenters get 30c., and the bricklayers secured an advance without friction, there is considerable reason for conciliating the journeymen.

PLUMBING GOSSIP.

Taylor-Forbes Co., Limited, are to open showrooms in Toronto. Announcement will be made next week.

N. Blumbergh, 353 College street, Toronto, has put in a new store front and improved his premises greatly.

G. C. Caldwell, Buffalo, representing the Mueller Mfg. Co., Decatur, Ill., is calling on the trade throughout Ontario.

John Gunn & Son, ironmongers, of Edinburgh, Scotland, have retired from business, the principals having emigrated to Canada.

The James Robertson Co. are altering their plumbing showrooms in Toronto and have secured a permit to erect a marble cutting house to cost $3,000.

Active preparations are being made by the Winnipeg Association to entertain the visiting plumbers who attend the convention in the Prairie City next month.

Toronto Master Plumbers are preparing to entertain their Buffalo confreres at Hanlan's Point some Thursday or Friday in August. A seven-foot porcelain bath will be utilized as a punch bowl.

The Ontario Lead & Wire Co., Limited, are rushing to completion their new offices and plumbing showrooms on Richmond and Church streets, Toronto. They expect to occupy the new offices in about three weeks.

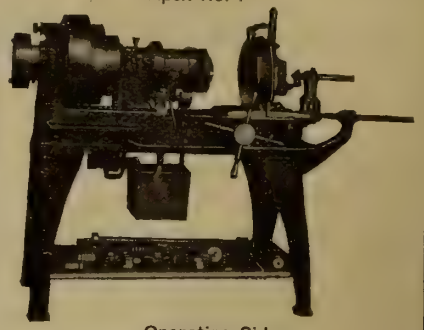
Journeymen and Master Plumbers in Toronto will discuss the "strike" problem on Saturday when a baseball match will be played at the Woodbine. The two factions are expected to be at "lager" heads after the game.

The convention of plumbing manufacturers and supply men at Detroit last week was largely attended by delegates from all parts of America. Besides the Toronto representatives, manufacturers in London, Goderich and Guelph were present to look after Canadian interests.

A picnic without a basket! That's something unheard of, but it's going to happen on Friday, July 21, when the Toronto Master Plumbers' Association entertain their wives, lady friends and children at Lorne Park. When plumbers set out to do a thing it can be taken for granted that it will be done well, and the committee appointed to arrange the details, Messrs. G. Clapperton, D. J. Morgan, J. E. Fullerton, K. J. Allison, W. J. Mason and W. Benson, are a guarantee of a first-class time. Besides a ball match between the association men and a team representing the manufacturers, there will be bowling on the green between the association team and the Lorne Park Club. Races and other sports will also be provided. A special train will leave the Union Station at 9.45 a.m. for Lorne Park, and the association is specially inviting the ladies and children. That the day will be enjoyed by them without the labor attending the ordinary picnic, the committee will provide dinner and supper themselves. Baskets are barred, as this is the ladies' special day. The return trip will be made at 8 p.m. by train.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

The head has our standard adjustable quick-opening and closing dies, actuated by a cam movement, controlled by a segment of a gear, and is arranged so that it can be fed up to the vise for handling short pieces of pipe. This machine is especially adapted for making nipples.

Get our Catalogue

THE CANADIAN FAIRBANKS CO.
Sole Agents for Canada Limited
MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Extra Standard
GLOBE VALVES

are of the best quality. They give the best of service and are moderate in price.

Every valve is TESTED, and PACKED, and GUARANTEED.

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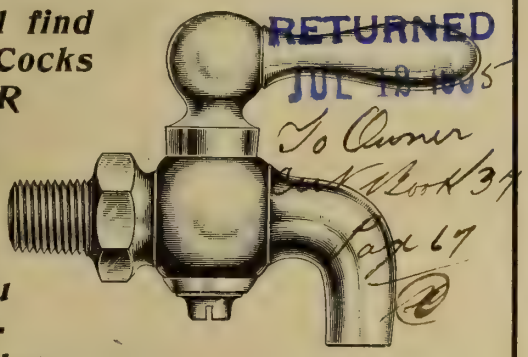
The KERR ENGINE CO.,
MANUFACTURERS Limited
WALKERVILLE, ONT., CANADA

TRADE
PENBERTHY
MARK.

NEVER  FAILS

AUTOMATIC INJECTOR

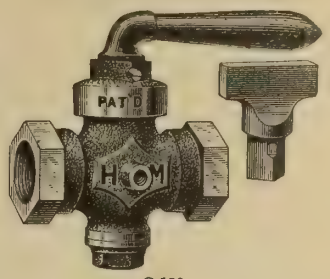
You will find our Air Cocks BETTER VALUE at LESS MONEY than you can purchase elsewhere.



REMEMBER THE TRADE MARK

MUELLER GROUND KEY WORK

No. 49 STOP WASTE COCK.



C-139.

The strength of brass depends upon its composition—the more copper the more strength for a given weight.

Mueller Stop Cocks are made of red brass which has the largest amount of copper of any brass alloy. They are strong without being excessively heavy.

All Mueller Stop Cocks are given a 200-pound hydraulic pressure test, bear the Mueller trade mark and are *unconditionally guaranteed.*

We also make compression work and fuller work for plumbers' use. Catalogues on application.

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

Plumbing Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 7, 1905.

BUSINESS is going along well. In fact one of the largest Montreal houses stated that their midsummer decline had not even hinted at arrival. They had not seen business so good for the time of year for a long time. Even the strike of the carpenters had not hindered the plumbing trade, and supplies were being ordered freely from all parts. Far from getting practical sympathy from the plumbers' union, there seems to be a lack of sympathy, inasmuch as nearly all the plumbers are masters themselves and are more likely to be responsive to the wishes of the contractors.

In addition to the building activity, there is a marked liveliness among the repairing houses, such as large buildings having their whole heating apparatus changed and private houses doing similar acts while the family are at the seaside, etc. Thus the plumbers have their hands full. As far as contracts go, there is work enough ahead for a year. Hence the supply houses are jubilant and anticipate now that there may be no let up during the Summer months, as was expected.

Range Boilers — Good demand and prices are steady. We quote as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net: copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—There has been no change in price, but the demand is excellent, and prices are firm. We quote as follows: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—All piping is firm, and the demand continues first rate. We quote as follows: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Manufacturers are working hard to keep up with orders, and it is current news that many orders are booked ahead. A fine business is likely to continue. Our quotations are as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe. 1-4 inch, 62 1-2 per cent.; 3-8 inch, 62 1-2 per cent.; 1-2 inch, 72 1-2 per cent.; 3-4 inch, and upwards, 74 1-2 per cent. Discounts on galvanized pipe: 1-4 inch. 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—Slight fluctuations have taken place owing to the heavy demand, but the old rates remain. We quote as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, July 7, 1905.

IN saying that business is active we do not describe the conditions existing at all thoroughly. Things are very active, and every branch of the trade is participating in the rush. Very satisfactory bookings from city and rural customers are backed by carload orders from jobbers in Western Canada. Indications are, also, that there will be a steady increase, and some of the supply houses are wondering how they will handle the Fall trade.

New lists have been delayed, and may not be in the hands of buyers for another week or ten days. We have already intimated that lower prices are probable on brass and copper goods, as well as one or two other lines. It will pay our readers to follow these market reports closely.

Lead Pipe—Large quantities are being purchased to fill the needs of new building work. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Requirements for contract work are heavy, and sales are, therefore, large. Prices are unchanged. We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Call for goods is strong. Prices have not been shaded as yet. We quote: Malleable fittings 20 to 25 per cent. for American and 35 per cent. for Canadian; cast iron (standard), bushings, 65 per cent.; headers, 60 per cent.; flanged, unions, 60 per cent.; lipped unions, 60 and 5 per cent.; malleable bushings, 60 per cent.; nipples up to 6 inch inclusive, 75 per cent.

Copper Range Boilers—No change is noted, demand continuing active. The discount of 15 per cent. continues.

Galvanized Iron Range Boilers—Volume of business being done is reported to be large, with prices the same. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Steady buying at unchanged prices is reported by the supply houses. We still quote: Black, 1-4 inch, $2.03; 3-8 inch, $2.06; 1-2 inch, $2.29; 3-4 inch, $2.87; 1 inch, $4.12; 1 1-4 inch, $5.62; 1 1-2 inch, $6.75; 2 inch, $9. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.14; 3-4 inch, $4.02; 1 inch, $5.77; 1 1-4 inch, $7.87; 1 1-2 inch, $9.45; 2 inch, $12.60.

Solder—Large quantities are being used on contract work, and buying is active. We quote: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware—Buying is reported active, the call for goods being very strong. Prices are the same. We quote as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

NEW VULCAN CHAIN PIPE VISE.

THE new Vulcan Chain Pipe Vise, which has just been put on the market, is being handled in Canada by the Canadian Fairbanks Co., Limited. This vise offers many advantages over the ordinary pipe vise in use at the present day. There are few parts about it, and is practically unbreakable. It is convenient to be carried in the hand or tool bag, and requires very little space on the bench or post. Its weight is 10 lbs., and when folded measures 6 x 8 x 8. The action is infinitely more rapid than any other vise on the market. A quick pitch screw on one side and chain-pockets on the other are novel speedy adjustments. A quarter inch of chain-drop, or a quarter turn of screw, and the strength of a child will do the work. The grip is positive and non-crushing, and is always renewable by simply filing the teeth. The chain hugs the pipe half way round. The material used in this pipe vise is all wrought steel, drop forged saw-tempered jaws, hand-made vulcan pipe wrench chains, and all parts are interchangeable.

Interested readers can obtain any further information or pamphlets describing this from the Canadian Fairbanks Co., Montreal.

NOW, THE SHINGLES



Every Paint man should get acquainted with

RAMSAY'S SHINGLE STAINS

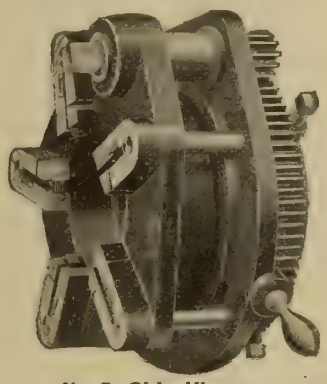
They are becoming popular. You will be asked for them sooner or later. We will send you a sample set with prices and directions if you ask for it. Do it Now.

A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Paint Makers

The "Toledo" Adjustable Threading Device

Threads pipe from 4½ inch to 8 inch inclusive. A new principle in hand power pipe threading. One man can easily thread any size the tool cuts. The tool weighs 200 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.



No. 3, Side View

Ask your jobber about them. If he don't know write us for catalogue and discounts.

THE TOLEDO PIPE THREADING MACHINE CO.
Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

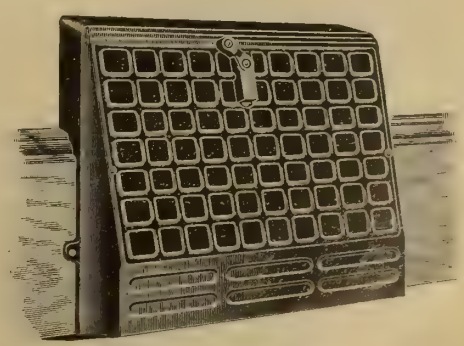
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Your customer, the farmer, wants a fence that can be put up quickly and easily just when he wants it. Hand made fences cost too much when you figure the time it takes to build them, to say nothing of the hard work.

Why not sell "The Ideal," the best woven wire fence made? You can build up a permanent trade that will pay you as much as any line you are handling. Other hardware merchants are doing it. Why not you? The Ideal will give satisfaction to your customer and make him your friend.

Have you seen the Ideal? Let us send you a sample and catalogue showing why Ideal fence made from No. 9 hard steel wire throughout is the strongest and the best value.

Ask us about the Ideal all metal farm gate.

The McGregor-Banwell Fence Co., Limited,
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BROKEN GUN BARRELS.

MANUFACTURERS and jobbers of firearms frequently have guns and rifles returned with broken barrels. In nine cases out of ten, the fault is not the makers,' but carelessness on the part of the user.

A frequent cause of barrels bursting is an obstruction of some kind being in the barrel at the time the gun is fired. This obstruction might only consist of clay or sand, a wad, or even water would be sufficient to cause the barrel to break.

Where barrels burst through being fired with obstruction in them, a smooth round ring will be found at the bursting point, running entirely around the barrel. Sometimes the swelling shows a crack on one side, or the barrel may be torn off either above or below the swelled point.

The improper use of smokeless powder will often break a barrel. When the charge detonates the barrel opens at the chamber where the cartridge lies. It might be said here that smokeless powder should only be loaded by those who thoroughly understand the work.

The moment an expert sees a broken barrel he can tell whether it has had proper use or not, and the cause of the break.

All the standard makers give the guns and rifles such a rigid inspection, that the man who keeps his gun well oiled and cleaned, (if it is a reliable make) will have little or no trouble with broken barrels.

THE B.C. RAILWAY WAR.

VERY keen interest is being displayed in the Province of British Columbia in the fight being made by the V. V. & E. Ry. Co., which is practically the Great Northern, to secure amendments to the charter in the Dominion House. Importance attaches to the progress of the negotiations because on the result in large measure depends the immediate opening of the Similkameen district and its being placed in direct touch with the coast section of the province by means of the line which will be built. The fact that at first the connection will not be direct, but by means of connections with the Hill system in Washington State, has had some adverse influence, but the desire to see rapid development of this rich and favorably located portion of the province has predominated.

The opening of the Nicola Lake section, the northern portion of the Similkameen district, by the building of the line of railway from Spence's Bridge on the main line of the C.P.R. to the head of Nicola Lake, has doubled the impetus the district has received from the prospect of transportation being supplied. Many people are making their way into the district, and the rapidity of its development promises to equal that which opened the Kootenays in the early days of Rossland. Like the Rossland district the Similkameen is being taken stock of by the progressive western American cousins. They are to be met with in large numbers, and as none know a good thing better than they, there is every assurance that Brother Jonathan is going to be a lively competitor with Jack Canuck for the riches that are part of the Canadian cousin's birthright, but which he may lose to the smart Yankee cousin, as he did in the Kootenay and in the Yukon. Pessimism has no place in western philosophy. The above remark is plain statement of hard fact. See how much the future will bear out the statement.

MANUFACTURERS' EXCURSION.

In the list of names given on another page of hardwaremen taking in the Canadian Manufacturers' Excursion to England there are several inaccuracies. Messrs. E. C. Boeckh, H. T. Bush, B. A. C. Craig, T. S. Depwe, E. W. Fleury, J. O. Galligan, J. A. Halstead, R. Harmer, Jas. Maxwell, A. S. Rogers, J. T. Sheridan, and W. P. Thomson intended to go but did not, while Messrs. B. F. Ackerman, Peterboro; Geo. Caverhill, Montreal; R. B. Emerson, St. John; E. B. Fletcher, Toronto; W. K. George, Toronto; Geo. Gillies, Toronto; Walter Grose, Montreal; F. W. Lamplough, Montreal; Thos. McFarlane, Smith's Falls; J. K. Osborne and N. Shenstone, Toronto, and J. Wildman, Winnipeg, all connected with industries allied to the hardware trade, are members of the excursion party.

MORE BENEDICTS.

There seems to be an epidemic of benedicts in Lewis Bros., Limited, as this week two more members of the staff were married.

Mr. W. O. Labelle, one of their Ontario men residing at Bowmanville was married to Miss Florence M. Burton, of Toronto. The wedding took place at Toronto, and Mr. and Mrs. Labelle will reside at Bowmanville.

Mr. Arthur Halford, of the shipping room of the same company, was married during the week.

Both were recipients of presents from the company and staff.

A REGINA HEATING CONTRACT.

The "Leader," Walter Scott's paper in Regina, is building a new block in which it will soon be established. The contract for heating the building was awarded to the Smith & Fergusson Hardware Co., Limited, by the architect in charge, W. H. Wilton. The Pease-Waldon Co., Limited, of Winnipeg, are supplying the materials; the contract calls for one of their "Florence" steam boilers.

MACHINE COMPANY MOVES.

The Jenckes Machine Co., of Sherbrooke, Que., will move their plant to St. Catharines and employ at least 100 hands to start with. The city gives them a free site and agree to pay a portion of the power they use for a term of years. In Sherbrooke, the Jenckes company had no room to extend their growing business, and railway facilities were poor. In St. Catharines they will be more central.

AN IMPORTANT CASE.

The Magnolia Metal Co., Limited, Montreal, have brought suit through Messrs. Foster, Martin, Mann & McKinnon, against the Syracuse Smelting Works. The plaintiff claims $10,000 damages, on the ground that the defendant is selling an inferior compound under a trade mark that is an infringement of plaintiff's patent.

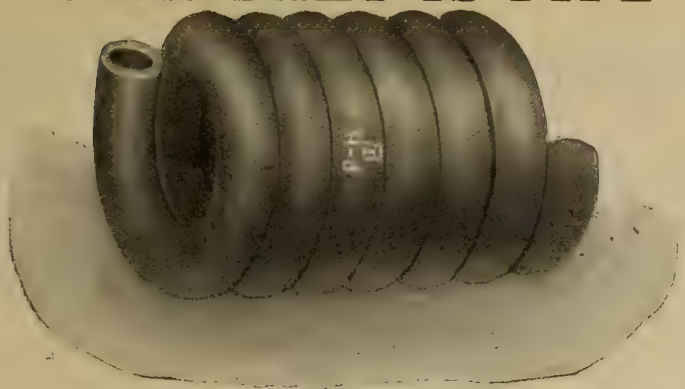
PIPE THAT IS PIPE

THIS IS OUR BRAND

P-H

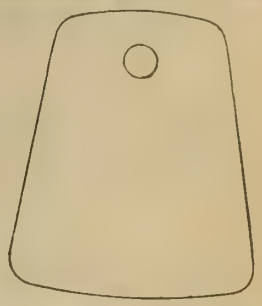
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See that You Get It.



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Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

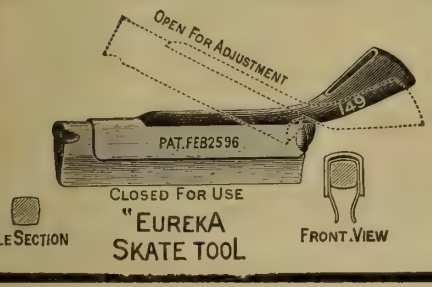
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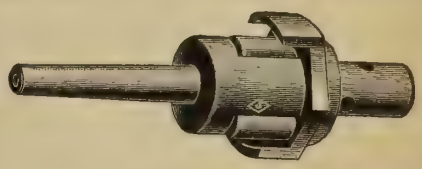
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You will have something entirely new that will interest everybody in your town and is sure to bring trade to your store.

These facts alone will appeal forcibly to your customers :

The NATURO Closet is built low from the ground, the front being slightly elevated, making it more convenient to children and necessitating a position more healthy to the user.

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We advertise extensively and refer all inquiries from his locality to the plumber handling the NATURO Combination. Thus, the business of every such plumber gets advertised considerably without cost to himself.

Put a sample in your showroom and prove this for yourself.

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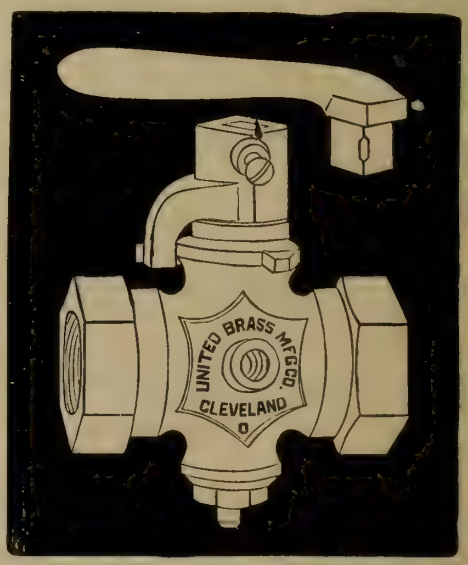
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are unequalled for General Appearance, Style and Construction

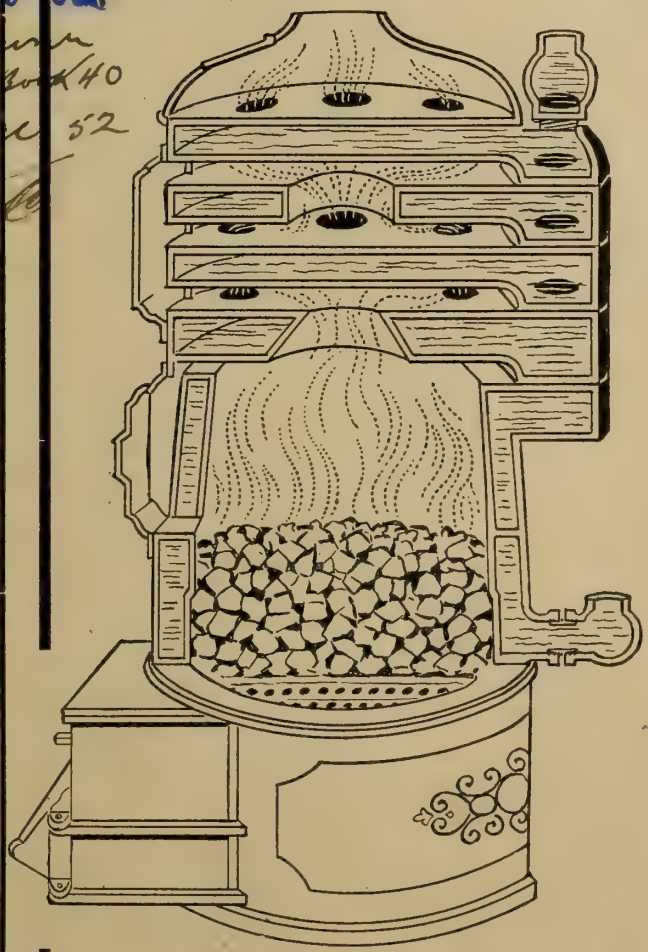
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Manufacturers of
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DON'T HEAT THE CHIMNEY

There is a certain amount of heat in a given amount of coal. The problem is to use the heat instead of wasting it, instead of sending it up the chimney.



The Oxford Boiler

lets very little heat escape. Walls of fire-pot slant inward over the fire, flues of the large lower water section are bell shaped and throughout its entire upward course the heat is forced to impinge itself on surfaces that absorb and use it through the medium of hot water.

Oxford Boilers never leak. Steel Push Nipples join the sections, metal to metal, and obviate the necessity of rubber gaskets.

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REGARDING COMPLAINTS.

WE are anxious that our subscribers as far as possible should receive copies of Hardware and Metal on Saturday. The paper is mailed every Friday and all subscribers between Windsor, Ont., and Quebec City, and as far north as North Bay, should receive their paper on Saturday.

We would like any of our subscribers in this district who do not receive their paper till Monday to enter a formal complaint with the postal authorities. We do this ourselves when we find the paper has not been received, but our case would be much stronger if our subscribers would take the trouble to write the deputy postmaster-general at Ottawa.

A SUCCESSFUL CONVENTION.

IN view of the full account which appears elsewhere in this issue of the convention held in Regina last week by the Associated Boards of Trade of the Northwest Territories, it is unnecessary to make extended editorial reference to it. Our readers can form their own conclusions from the report. Its length is justified by the importance of the gathering, the personnel of the convention, which was composed of the best business men of the west, and the nature of the topics discussed. The functions of such a convention are purely advisory, but they are rash politicians and legislators who think they can afford to ignore the soberly-expressed opinions of representative business men who feel the responsibility of all their utterances. The Legislatures of the new provinces will, if they are wise, pay serious heed to the various pronouncements of the convention.

One suggestion we desire to make to the Executive. The bill of fare this year was too long and the delegates were not given sufficient notice of the subjects which were to come up for discussion. This should be remedied next year by insisting strictly that the various boards should submit their resolutions at least a month in advance, in order that copies may be distributed before the convention.

A noticeable feature of the convention was the popularity of the principle of Government ownership of public utilities. Opinions may well be divided as to the wisdom of the policy, but if these business men who were delegates to the convention represent the sentiment of the business men of their communities—and there is no reason to doubt that they do—the west is strongly in favor of public ownership. It is a significant sign of the times.

At one time it seemed likely that the convention would decide to separate into two distinct provincial bodies, but what we feel was the wiser policy ultimately prevailed, and a strong united association was formed to be known as the "Associated Boards of Trade of Western Canada." A bright future seems to be in store for this organization and we do not doubt but that it will have a powerful influence in moulding the legislation of the Provinces of Alberta and Saskatchewan.

PULL DOWN THE FENCES.

IN these days when benevolence and philanthropy are talked about so much and when thousands of dollars are being spent to provide fresh air and amusements for the poor, it is surprising to find how many simple means of attaining these ends are being overlooked. It would appear that nothing is worth doing unless it costs money.

In passing through any city or town, one is always sure to notice a great deal of vacant property. In a few cases this property stands bare and open to the public and forms a splendid playground for the children. But in most cases it will be found that the vacant property is fenced in and guarded from intrusion by such familiar notices as "Trespassing strictly prohibited." Why should this be so? Will the value of the property be diminished if the fences are pulled down, the signs burned and free access given to the public?

We would urge the philanthropically-inclined aldermen of our cities and towns to turn their attention in this direction. It is all well enough for them to appropriate thousands of dollars for purchasing and maintaining parks. But the same object could be secured in some measure in a much cheaper way by compelling the owners of vacant property lying useless to tear down their fences and allow the public to enter. The same restrictions which prevent rowdyism and abuses in the public parks could as easily be enforced in these vacant lots and proprietors be safeguarded from the destruction of their property.

No one can minimize the importance of fresh air and breathing space in the lives of our children, and the children of the poor should receive as much consideration as the children of the rich from the authorities. In their interest we advocate this measure.

PRICE-CUTTING WAR ON.

IF peace is not arranged during the next few days, the price cutting in plumbing supplies, which is now the feature of the market in Toronto, is almost certain to result in a war between the jobbers in the Central Supply Association and those on the outside.

The story leading up to this situation is an interesting one. A west-end plumber, who has been fighting the Master Plumbers' Association for a long time, has been doing a jobbing business on a small scale. He recently secured the backing of a wealthy hotel man and, it is said, of a large wholesale hardware firm, the combination taking over the brass works at Port Colborne and reorganizing it under the name of the Monarch Brass Co. Then the plumber transferred his plumbing business to his brother and made application for membership in the Supply Association, but, owing to his past record, his application was refused. The Master Plumbers' Association, however, accepted the brother as a member and added the new jobber to its list of supply houses with whom the members could do business. This, it is understood, was done under the belief that the Supply Association had taken the new jobber into its membership.

Taking advantage of the stragetic position in which he found himself, the west-ender commenced to slash prices and is now said to be selling brass goods, etc., below the price which the supply houses can buy at. Goods which cost them $1.80 wholesale he is selling at $1.75 retail, although it is said the goods are not up to standard. The situation is naturally demoralizing to trade, and the older supply houses in order to live must protect themselves

from the unfair competition of the new man. If the latter is determined to fight and those backing him are willing to risk their money, there will be war to the knife and prices will be cut down to a figure where there will be no money in it for any one but the buying public, and so far as the jobbers are concerned the contest will resolve itself into a mere test of financial endurance.

Anything which tends to disturb the peaceful trend of trade and to encourage bitter strife is regrettable, but circumstances often arise which compel business men, as well as nations, to resort to extreme measures. Before carrying the warfare too far, it would be good policy for the new supply men to make terms with their competitors, as the results of a price-cutting war are likely to be more severely felt by them than by the older-established houses.

QUEBEC'S COMMERCIAL TAX.

MUCH misunderstanding and unfavorable comment is resulting from the recently adopted law assessing travelers of foreign houses doing business in the Province of Quebec the sum of $300 annually. A large number of Canadian manufacturers and wholesalers are, according to Mr. J. F. Stewart, of the Manufacturers' Association, still under the impression that the tax applies to them. As has been pointed out in these columns, a strict reading of the wording of the Act would consider residents of other provinces in Canada to be foreigners in Quebec, but the Quebec law-makers are not interpretating the Act so closely, and Canadians are, therefore, not liable to the tax as it is being at present enforced. In this respect, Quebec is more friendly to her sister provinces than British Columbia, whose tax of $50 semi-annually is imposed on Canadians as well as "foreigners."

In the United States the impression also seems to be held by many that the new law is a piece of Dominion legislation. An item emanating from the Boston News Bureau, headed "Canada's New Business Tax," is being copied extensively throughout the east. It reads as follows:

"Boston commercial travelers en route from Toronto to Montreal were surprised to learn that if they went farther east they would be subject to a new tax of $300 as representatives of commercial houses having no place of business in Canada.

"The law became effective Wednesday last and the penalty is very severe; ranging from $500 to $1,000. The Boston men immediately returned home after notifying their customers in the Province of Quebec that they must send their orders direct to the home office or arrange a meeting at Toronto or elsewhere in Ontario."

The feeling of American commercial men on the subject can be judged by an extract from a letter sent by a large association of manufacturers in the United States to the Canadian Manufacturers' Association, as follows:

"This would appear to be a matter for Dominion legislation, and not for that of a province, seeing that it is to some extent an interference with international trade. It is conceivable that if it is constitutionally correct for one province to pass legislation of this kind others could do the same, and might perhaps place the license at so high a figure as to absolutely prevent any traveler from Europe or the States soliciting business in Canada, if that should be the object."

Little has been heard from Great Britain as yet, but it is certain that the commercial press there will strongly condemn Quebec's action as tending to destroy imperialistic sentiment and as being altogether out of harmony with the friendly commercial feeling between Canada and the Mother Country, which has been developed during the past few years.

As stated last week, it seems likely that the Quebec legislators will find the Act to be a boomerang, and on account of the loss of trade will find it necessary to reduce the amount of the tax or abolish it altogether.

AMBITIOUS SASKATOON.

THE rivalry of Calgary and Edmonton and the dispute as to the capital of the new Province of Alberta have been given considerable prominence in all parts of Canada, but it is not so well known that Saskatoon has ambitions to be capital of Saskatchewan, an honor which Regina considers rightly hers as the old Territorial capital. Saskatoon is ambitious, and in the language of the sporting fraternity, is determined to give Regina "a run for her money." When it was found that the celebration in Regina, which had been set for Dominion Day in honor of the creation of the twin provinces, had to be postponed because of the delay in passing the Autonomy Bills, Saskatoon citizens decided upon an enterprising step. The delegates and press representatives at the Board of Trade convention at Regina were invited to visit Saskatoon on Dominion Day, attend a banquet that night and remain over until Monday for the Dominion Day celebration. A special train was provided for the accommodation of the guests and everything possible was done to provide for their comfort, the object being to show the business men of the west what manner of place is the enterprising town which aspires to be capital of Saskatchewan. Without expressing any opinion as to the respective merits of Regina and Saskatoon, we must at least pay our tribute to the enterprise of the ambitious new aspirant for capital honors.

PNEUMATIC TOOL DEAL.

TARIFF duties have again influenced a large business deal of great interest to Canada. This time it has caused the Canadian Pneumatic Tool Co. to be purchased outright by the Chicago Pneumatic Tool Co., Limited. The Canadian Pneumatic Tool Co. has been carried on for some time in Montreal under the direction of N. J. Holden & Co., and they were carrying on a large business which had steadily grown since its inception. On the other hand, the Chicago concern has been hampered in its work in Canada by the onerous customs duty which was levied upon its goods. The purchase of the Canadian company's capital stock was consummated some days ago, and the full possession will be made in the course of this month. The amount of money involved has been exaggerated in the papers owing to the dispatches from New York, which quoted $600,000 as the sum. The correct sum as stated by Mr. Holden, the president and general manager here, should read $60,000. He also stated that there would merely be an enlargement of the business formerly carried on inasmuch as all tools sold would be manufactured here, and that the same management would be retained as was formerly embraced in the Canadian company.

The news was first given out at the annual meeting of the Chicago company, which was held at New York last week. The Chicago Pneumatic Tool Co. has recently been branching out in their own country, for it is only a short time ago that they purchased control of the Philadelphia Pneumatic Tool Co. and the Chicago Storage Battery Co.

This only tends to indicate the way business interests are concentrating upon the Canadian market, and further that if the large American manufacturers intend to compete they must establish factories within the domain of the Dominion. Only a short time ago the American Axe & Tool Co., which had an office and wareroom in Montreal, was compelled to close because of the customs duty on their goods. Recently the Canadian Fairbanks Co., Limited, was organized, all of which goes to show that Canada is forging ahead and that the prosperity of the country and the energy of the people is inviting capital from the land of the dollar. There is no disparagement in saying that Uncle Sam's manufacturers are watching the Canadian market carefully and the dumping clause in the tariff of Mr. Fielding has had a frustrate effect upon the local manufacturing and the watchword "Made in Canada."

Second Convention of the Associated Boards of Trade of the Northwest Territories

Held at Regina, June 29th and 30th

IN attendance and enthusiasm, in the amount of trained intelligence brought to bear upon public questions, in the quality of its members and their serious determination to deal with business questions in a serious, business-like way, the convention of the Associated Boards of Trade of the Northwest Territories, held in Regina during the last two days in June, was a pronounced success. The delegates were serious business men and, for the most part, they settled down to the work of the convention in a business-like way. It is true that two or three men had

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Regina from Lands Office.
(A Section of the City that was Open Prairie 18 Months Ago.)
Courtesy of Regina "Leader."

their hobbies to ride and their fads to exploit, but, upon the whole, the discussion was intensely practical. These men are the leaders in their respective communities and one cannot help feeling that the future of Western Canada is assured while its affairs are under the control and guidance of the shrewd, capable, practical, and withal high-minded men who were delegates to this convention. Canada is a young man's country, and that this is particularly true of the west was evidenced by the personnel of this representative gathering of business men. The average delegate was in his thirties, if one may judge from appearances, and there were a few still in their twenties. Clean-shaven, aggressive, well-built, athletic-looking men, these residents of the western towns show themselves men well able to grapple with any problem, no matter how difficult. It is not hard to understand the secret of the rapid growth of the western towns when one has seen their business men.

History of the Convention.

The Associated Boards of Trade of the Northwest Territories are a young organization, this being only their second convention. Early in January of 1904 the Calgary Board of Trade, through their secretary, sent out a circular letter to the various Boards of Trade of the Northwest Territories suggesting a general convention. The suggestion met with favor and a convention was held in Calgary on June 15 and 16, which was attended by 68 delegates representing 29 Boards of Trade. It was then decided to hold another convention in Regina in 1905, but the question of permanent organization was left over for decision this year. The following resolution was also passed at the same convention:

"That at future conventions, Manitoba and British Columbia be represented by invited delegates who shall have the privilege of making motions and amendments and of taking part in debate, but not of exercising voting powers."

Accordingly, President A. L. Johnson, of the Winnipeg Board of Trade, was present the first day and took an active part in the discussions.

At one time there was a danger that the convention would split up into two bodies, one for each of the two new Provinces of Alberta and Saskatchewan. Division found a number of ardent champions who argued that the distances were too great in the new provinces to allow delegates from all boards to attend conventions. It was also urged that the main function of the convention was to influence legislation and that accordingly the political division of the Territories into two provinces rendered necessary a similar division of the convention. In the end, the champions of a united convention for the two provinces carried the day, the speech of Premier Haultain at the Thursday night banquet, in which he strongly counselled unity in spite of imaginary lines dividing the

west, probably having a great deal to do with the result. A permanent organization was decided upon the name chosen being "The Associated Boards of Trade of Western Canada." The Executive hope to have large representation at the next convention from the Provinces of Manitoba and British Columbia.

The citizens of Regina made every effort to entertain the delegates, and the two days of the convention were one continual round of business and pleasure. On the afternoon of the first day the ladies of the city entertained the delegates at a garden party in the city park, and that same night, after a long session of the convention, the delegates were the guests of the Regina Board of Trade at a highly successful dinner held in the Windsor Hotel. Friday evening his Honor the Lieutenant-Governor and Madame Forget entertained at a garden party in the Government House grounds.

The List of Delegates.

The following is the list of registered and duly accredited delegates:

C. B. Murphy, Moosomin.

G. R. Tinning, E. P. McNeil and H. M. Stewart, Macleod.

Hon. Mr. Justice McGuire, Prince Albert.

George W. Green, A. E. Moore and Jesse W. Knight, Raymond.

E. Michener and G. A. Love, Red Deer.

H. F. Mytton, H. W. Laird, J. F. Bole, L. T. McDonald and Ald. McAra, Regina.

Dr. Willoughby, Frank R. Oliver, Thomas Copeland, A. E. St. Laurent and J. Clinskill, M.L.A., Saskatoon.

Mayor A. Davies and Dr. McIntyre, Strathcona.

H. G. Dawson and John Kidd, Wapella.

T. H. Blacklock, Jos. Mergeus and Oliver S. Black, Weykum.

R. A. Magee and G. H. Hurlburt, Wolseley.

A. L. Johnson and C. N. Bell, Winnipeg.

OPENING SESSION.

The convention opened on Thursday morning, June 29th, in the Court House, President Thomas Tweed, of Medicine Hat, presiding. The court room was handsomely decorated with flags, bunting and flowers.

President's Address.

President Tweed gave expression to the pleasure which it afforded him to welcome the delegates to the annual convention. The large attendance was the best evidence of the interest taken in the convention by the various Boards of Trade throughout the west, and proved conclusively the wisdom of the City of Calgary in starting the movement last year. One result of last year's meeting had been an immediate increase in the number of Boards of Trade throughout the Territories, and in the interest and activity of existing boards. It was true that Boards of Trade are merely advisory and in no sense legislative bodies, but no Parliament or Legislature could afford to ignore the formally expressed opinions of such a body, and it would be difficult to over-estimate their influence. The present convention was the last which would be held as a Territorial body; it was for the convention to decide whether or not separation along the lines of the two new provinces was advisable. His closing words were a strong plea for the dropping of all sectional differences and for united work for the good of a united west.

Division or Union.

As the first order of business was the election of officers, the question of division or union at once presented itself for discussion. Judge McGuire, of Prince Albert, and Wm. Short, of Edmonton, strongly advocated the maintenance of the status quo for at least another year. R. J. Hutchings, of Calgary, argued that division must come some time, as the principal function of the convention was to advise the legislatures. Finally the question was shelved for discussion later, and it was decided to proceed with the election of officers, the understanding being that the officers would hold their positions for a full year, unless it was decided before the adjournment of the convention to divide on provincial lines.



A General View of Regina.

J. A. Boyle, R. N. Weir and C. C. Rigby, Balgonie.

W. C. Thorburn and B. Paul, Broadview.

R. J. Hutchings, C. W. Rowley, Wm. Pearce and W. H. Cushing, Calgary.

E. J. Suchring, H. P. Humphrey and R. H. Catherwood, Craick.

F. C. Whitelock, Reuben Lloyd, Geo. A. Scott and J. E. Miller, Davidson.

William Short, T. W. Lines, A. C. Fraser, G. R. F. Kirkpatrick and Mayor K. W. McKenzie, Edmonton.

Arthur Kelly, D. R. Davies and H. F. Jordan, Estevan.

B. P. Richardson and John Walker, Grenfell.

J. A. McCaul, H. H. Campkin and Jas. Conn, Indian Head.

W. C. Ives, Lethbridge.

W. Binning, Lumsden.

W. T. Finlev F. L. Crawford, W. Cousins and Thomas Tweed, Medicine Hat.

W. Loree, H. McKellar, G. K. Smith J. R. Green and W. B. Willoughby, Moose Jaw.

W. R. Abbott, G. W. Quick and J. M. Lang, Maple Creek.

Officers Elected.

Officers were then elected as follows:

President—Thomas Tweed, of Medicine Hat.

First Vice-President—R. J. Hutchings, of Calgary.

Second Vice-President — Justice McGuire, Prince Albert.

Secretary-Treasurer—Wm. Trant, Regina.

Mayor Welcomes Delegates.

Mayor H. W. Laird then welcomed the delegates to Regina and tendered them the freedom of the city. Regina's mayor is an energetic young business man, a clear incisive speaker, and an excellent type of the enterprising, progressive young men who are building up the west.

He said it had come within the scope of his duties many times in the last 18 months to welcome to Regina visiting conventions, but not while he had been mayor, and probably never before in the history of Regina, had such a large and influential body of business men gathered in the city. There was plenty of scope for the convention, and he had no doubt they would take full advantage of their opportunity.

"Our plans for your entertainment

have been upset by Jupiter Pluvius. The heavens have been shedding tears of joy in anticipation of a bountiful harvest, and the water and Regina soil make a combination of which you are likely to carry away very many mementoes. Time was when we were touchy about our mud. We were told that a man might travel

'From Greenland's icy mountains
To India's coral strand,'

and nowhere find anything to compare with Regina mud. But we are wiser now and we are proud of Regina mud and the harvests which it produces. In the west we are all enthusiasts about our own localities, so you can not find fault with me for sounding the praises of Regina. Our population and assessment have increased three-fold in the last four years. Our assessment is now $4,000,000, and our population is in excess of 7,000. We have just completed a gravitation system of water works and an electric light plant (owned by the municipality) at a cost of $300,000."

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Courtesy Regina "Leader." Court House, Regina. Where Convention was held.

His worship then outlined the programme of entertainment provided by the city Board of Trade, the ladies of the city, and by the Lieut.-Governor and Madame Forget. He concluded with the hope that the time might soon come when Regina could again welcome the convention, and drew a roseate picture of what the city will be in another three or four years.

Committees Appointed.

Two committees were then appointed. The committee on resolutions and procedure was composed of the following gentlemen: Justice McGuire, Prince Albert, (convenor); T. H. Blacklock, Weyburn; J. A. MacCaul, Indian Head; W. B. Willoughby, Moose Jaw; Wm. Short, Edmonton; H. F. Mytton, Regina; R. J. Hutchings, Calgary, and Jas. Clinskill, M.P.A., Saskatoon.

The committee on credentials was composed of T. W. Lines, Edmonton; W. T. Finley, Medicine Hat, and Wm. Trant, the secretary, Regina.

The convention then adjourned.

SECOND SESSION.

At the afternoon session the committee on credentials reported that a number of boards had not complied with all the regulations, but recommended that their delegates be received. Report adopted.

The committee on resolutions and procedure also presented a report which, after some discussion, was adopted.

Salaries of Provincial Ministers.

R. J. Hutchings, of Calgary, then introduced the following resolution:

"That it is expedient and in the public interest that the salaries of Cabinet Ministers in the new Provinces of Saskatchewan and Alberts should be on the same scale as is paid by the Province of Ontario."

Speaking to the resolution, Mr. Hutchings pointed out that the salaries of Ministers in the Northwest Territories have been ridiculously inadequate. An ordinary country merchant could easily make a larger income than a Territorial Cabinet Minister. The Calgary Board of Trade were of opinion that the matter of an increase of their salaries is a delicate question for Ministers to touch, and they believed that a pronouncement on the subject by the convention would help solve the difficulty. It was eminently a fit subject to be dealt with by a Board of Trade convention, and it should not be allowed to become a party football.

The reso,ution was seconded by C. W. Rowley, of Calgary, who said he was a strong believer in the principle that if you want good men you must be prepared to pay them well. Money making opportunities in the west were very great, and it was ridiculous to ask men of sufficient ability to be Cabinet Ministers to serve for salaries which were only a small part of what they could earn in business pursuits.

H. F. Mytton, of Regina, supported the motion strongly. "We need Cabinet Ministers in the west who are every bit as able as the Ontario Ministers, for we are just as good as Ontario, but if we want them we must pay them well."

Thos. Copeland, of Saskatoon, opposed the resolution. He was in favor of increased salaries, but did not see that they should necessarily be on the Ontario basis. Finally, after a discussion which threatened to become acrimonious, Mr. Hutchings amended his resolution and it was passed unanimously. The resolution as amended was as follows:

"That it is expedient and in the public interest that the salaries of Cabinet Ministers in the new Provinces of Saskatchewan and Alberta should be on a liberal scale and commensurate with the responsibility and dignity of the position."

Transient Traders.

W. Loree, of Moose Jaw, then introduced a resolution, which was seconded by P. McAra, of Regina, to the effect that the law relating to transient traders should be amended. Speaking to the motion, Mr. Loree pointed out that there were no restrictions on transient trades (hawkers and pedlars) in the country districts, and they were taking away money and trade which should belong to legitimate resident merchants who pay their taxes. After some discussion the motion was referred back to Mr. Loree for amendment as it was not sufficiently explicit. At a subsequent session, in the absence of Mr. Loree, a resolution dealing with the subject was introduced by G. K. Smith, of Moose Jaw, and seconded by P. McAra, of Regina. This resolution, which was passed unanimously, was as follows:

"That in the opinion of this convention the Ordinance relating to transient traders should be amended to make the fee for such traders $25 in each electoral district of the Northwest Territories, the license to be good for three months only, and that such fee shall not be deemed to cover or include fees imposed by towns, cities or municipalities."

Freight Rates.

A resolution referring to freight rates was introduced by the Davidson delegation; it called upon the Governments of the new provinces to take up the question of excessive freight rates in the N.W.T. with a view to having them reduced to a reasonable basis.

Wm. Pearce, of Calgary, pointed out that the matter should be brought to the attention of the Railway Commission, not of the new provinces. Mayor Laird also objected that the resolution was out of order, and after some discussion it was withdrawn and it was not heard of again.

Government Telephones.

Government ownership is popular in the west, as was shown in the action taken by the convention in regard to the Government ownership and operation of telephone systems. The following resolution was introduced by G. A. Love, of Red Deer and seconded by Wm. Abbott, of Maple Creek:

"That the time has arrived when the Government ownership and operation of all telephones forming a complete national system would be in the public interest."

Speaking to his resolution, Mr. Love emphasized the absolute necessity of telephone communication in modern business and pointed out that from its very nature the telephone business should be a monopoly. It was a nuisance in any town to have two systems. There

must be monopoly; the only question is whether there should be a Government monopoly or a corporation monopoly.

"The Government at Ottawa have undertaken to consider the question in a practical business-like way, and as a result we have a commission now sitting and taking evidence at Ottawa. I am not sure that the scheme outlined by the Postmaster-General is as broad as that proposed in this resolution, but that does not matter. We want to establish the principle that the telephone system should be a national system corresponding to the post office.

"The Government need not run the system to make money. They can borrow the capital outlay at a low rate, and they require profits only to pay the interest. They could lower rates, as they would have no dividends to pay. The telephone system should be extended wherever the post office goes, and it should not be run to make a surplus."

Mayor McKenzie, of Edmonton, explained that that town has its own municipal telephone system. He would not want to see the Government take it over. He favored the Government ownership and operation of trunk lines with connections with municipal lines.

"My name is Ives, from Lethbridge," announced the next speaker, "also from Missouri, for I 'want to be shown.' This is a serious matter, a serious expression of opinion is expected from us, and we want some facts and figures as to cost, etc."

H. F. Mytton, president of the Regina Board of Trade, was the next speaker. "I am opposed to Government ownership for I want to stimulate private enterprise. Private ownership and individuality are the secrets of success. Very soon, if this kind of thing goes on, we shall all be working for a government and there will be no individuality in a new country. When that day comes, God help this new country!"

Justice McGuire, of Prince Albert, did not agree with Mr. Mytton. Since the telephone business is necessarily a monopoly, there can be no expression of individual effort in making it a Government monopoly. To give a monopoly to any individual or corporation is dangerous. If we are to be governed by a corporation let the corporation be a government which we can control.

G. A. Love, of Red Deer, then rose to present some facts and figures for the consideration of the "gentleman from Missouri." He gave the experience of the English and German Government-owned telephone systems. English rates are half the Canadian rates and the German rates are still less.

Frank R. Oliver, of Saskatoon, objected that comparisons with England and Germany are unfair. Canada is a country of greater distances and less population. He thought the subject should be shelved until after the report of the commission is at hand. He favored the abstract principle in case the lines could be made to pay, but not otherwise. "We want no telephone deficits; the Intercolonial deficits are enough."

C. W. Rowley, of Calgary, was also opposed. His experience in trying to get improved postal service south of Calgary was that the Bell Telephone Co. were more amenable to reason than the Post Office Department.

T. W. Lines, of Edmonton, urged that comparison with the Intercolonial Railway was unfair. "At all events we don't want to run the system to make a surplus. We can't get at the figures of the Bell Telephone Co., and it is not up to us to show that the proposition will pay. Suppose there is a deficit in the telephone system and in the Post Office Department, what of it? The important thing is cheap communication."

After some further discussion, the resolution was carried, not more than ten votes being cast against it.

Insolvency Legislation.

After a committee on permanent organization had been named, with Mayor H. W. Laird as its chairman, President A. L. Johnson, of the Winnipeg Board of Trade, who occupied a chair beside President Tweed, introduced the following resolution regarding insolvency debtors:

"That a committee be named by the president, consisting of a representative from each of the Provinces of Alberta and Saskatchewan, to act jointly with a representative of the Winnipeg Board of Trade to consider the question of insolvency legislation, the said committee to report to the president, and, together with him, to take the necessary steps towards securing the required legislation from the Legislatures of the new provinces to have the proposed Act made law.

In speaking to his resolution, Mr. Johnson pointed out that the subject had been raised in Calgary last year by William Georgeson, of Winnipeg, and that it had been left over for a year. Perhaps the term Insolvency Act was an unfortunate one, as the Dominion Parliament only could pass an "Insolvency Act," but since the Dominion Parliament would not take up the matter they wanted a substitute such as the Manitoba Act relating to the subject. In the N.W.T. there was no Act such as the Manitoba Act. The only requirement was an Ordinance to the effect that a debtor making an assignment must do so to a resident of the N.W.T. The Ordinance was inadequate for the assets of an insolvent debtor are by right and justice the property of the creditors and should be disposed of by them. The assignee in the N.W.T. was not necessarily bound by the wishes of the creditors; they could act only in an advisory capacity.

Mr. Johnson pointed out the advantages of a uniform Act in the new provinces and Manitoba. He hoped to see the new provinces adopt the Manitoba law, which was copied lrom the Ontario Act.

"The necessity is obvious to business men," continued Mr. Johnson. "In Manitoba a debtor is required to assign to an official assignee, who must call a meeting of the creditors. At that meeting an inspector is appointed whose duty it is to see what is the best way to dispose of the assets. We usually wind up estates in Manitoba in 30 days or less."

R. J. Hutchings, of Calgary, seconded the resolution. The Manitoba Act was, in his opinion, the simplest and most inexpensive in the country. Calgary was vitally interested in the matter, as more than fifty houses there are doing a wholesale business.

After some further discussion by Justice McGuire, A. L. Johnson and Wm. Pearce, the resolution was amended to include the Vancouver Board of Trade, to whom an invitation will be sent, and the resolution as thus amended was carried unanimously.

Notice of Sale.

On Motion of President A. L. Johnson, of Winnipeg Board of Trade, and of T. W. Lines, of Edmonton, the following resolution was then submitted to the convention:

"That a committee be appointed by the president, together with a representative from the Board of Trade of Winnipeg, to prepare special legislation which it is desirable should be enacted by the Legislatures of the proposed new provinces, providing that in the event of any trader making a sale of his business he should give due notice of same to each of his creditors, allowing a fixed time to elapse for notice to be filed on the purchaser by parties interested before a good title to the goods so purchased can be made by the purchaser."

Mr. Johnson explained that the wholesale men of Winnipeg had had much bitter and costly experience with merchants who sell out their whole business and then go to Winnipeg offering so many cents on the dollar, which the wholesaler must accept or get nothing. This resolution could do no harm to any honest man, but it would put a stop to this dishonest practice.

Wm. Short, of Edmonton, opposed the resolution vigorously.

"No free people would submit to such a law," he declared. "There is no distinction made between the insolvent and the man who can pay his debts. Why should not a man be allowed to sell when and where he will without restriction? Why restrict 90 per cent. of the merchants because of a fraudulent 10 per cent.? Besides, the law deals with this now. A sale made within 60 days of insolvency may be set aside upon evidence of fraud."

Frank Oliver, of Saskatoon, opposed the resolution and Justice McGuire, of Prince Albert, supported it. J. A. MacCaul, of Indian Head, spoke vigorously in opposition.

"No legislation can make a man honest, and this law would cast an unwarranted reflection upon the merchants of the west. The motion should not be passed without further consideration."

Mayor McKenzie, of Edmonton, thought the proposed legislation would interfere too much with the honest man who had

WHERE THE CONVENTION WAS HELD.

Regina the capital city of the Northwest Territories and the provisional capital of the new province of Saskatchewan, is a thriving city of over 7,000 inhabitants. There is an evident air of prosperity about the place, and a visitor cannot be long in the city before he is made acquainted with the fact that Regina has ambitions to be a distributing centre equal in importance to Winnipeg. Two years ago Regina was made a distributing railway centre with all the freight rate advantages the status implies. The result was soon seen. The big implement firms of Canada and the United States have erected there large warehouses that are well stocked. Wholesale houses are locating sites, while two foundries two planing mills, a furniture and fitting factory, a pork packing establishment, two brick yards and some minor undertakings form the nucleus of a manufacturing community. As a distributing centre, Regina has the advantage of being the only railway centre between Winnipeg and Calgary, a distance of 840 miles, being 360 miles from the former and 480 from the latter. The city is disected by the main line of the C.P.R., and is the southern terminus of the Regina and Prince Albert Railway and the western terminus of the Arcola Extension. In addition to these the C N.R. will soon pass through the city and the G.T.P. will tap the district.

Regina is the headquarters of the Royal Northwest Mounted Police. It is, too, the usual place for the sessions of the Supreme Court. There are five schools in the city as well as a high school and normal school. There are four weekly newspapers and one daily newspaper, an active Board of Trade and five banks.

The convention was held in the court house.

good reasons for wanting to sell out at once. Opportunities in business must be seized at once and delays would often hinder the sale entirely.

R. N. Weir, Balgonie, spoke as a retailer. He recognized that an evil does exist, but the protection proposed to be given the wholesaler against the retailer should also be extended to the retailer as against his customers.

H. W. Mytton spoke vigorously in opposition to what he thought a ridiculous proposal and an unwarranted interference with individual liberty, and after further speeches from Wm. Short and A. L. Johnson, the motion was lost by a very large majority.

Grain Shipments.

Hugh McKellar, of Moose Jaw, then introduced the following resolution regarding grain shipments westward bound:

"That the attention of the Dominion Government be again directed to the question of the inauguration of a system of inspection and weights for grain shipments to western markets."

Speaking to his resolution, Mr. McKellar said that the actual figures supplied by the grain men show that 1,000 cars of wheat are sent west every year. The output of Fall wheat in Alberts this year will be about 1,500,000 bushels and the natural market is in British Columbia and the Orient. The quantity was sufficient to warrant the Government appointing a man to grade this wheat and weigh it.

The motion carried and the convention then adjourned to attend the garden party tendered by the ladies of Regina.

THIRD SESSION.

The Thursday evening meeting was called to order at eight o'clock sharp, as the Board of Trade banquet was to follow, and there was much on the order paper. The first resolution referred to the surplus lands in

Indian Reserves,

the matter being brought to the attention of the gathering by Wm. Pearce, of Calgary, and W. T. Finley, of Medicine Hat, who moved and seconded the following resolution:

"Whereas large areas of land contiguous to prosperous towns and settlements throughout the Territories are at present unproductive on account of being occupied as Indian Reserves; and

"Whereas such Indian Reserves are generally unnecessarily large, frequently many times as extensive as demanded by actual requirements and larger than was ceded them when under treaty, and

"Whereas such surplus lands, if sold, would in many cases realize a large amount of money, which, if invested for the benefit of the Indians, would yield a considerable revenue;

"Therefore, be it resolved that this convention petitions the Dominion Government to exert the strongest influence possible with the Indians to have the said surplus lands disposed of to actual settlers and thus materially aid the development of the districts in the Territories at present contiguous to Indian Reserves."

Speaking to his resolution, Mr. Pearce said that the first clause might be passed over without comment, as no one would dispute the fact that the Indian Reserves are quite unproductive. In regard to the second clause, he would confine his remarks to Alberta, with the conditions of which he was familiar. The Indians are guaranteed one square mile of land for each family of five persons, but the census returns show that they have much more than the treaty guarantees them. The average population is about 1.5 persons to the square mile. The speaker quoted figures to show the conditions in the various reserves. In one reserve the land allowed is 30 per cent. in excess of that guaranteed by treaty; in another 93 per cent.; in another 105 per cent.; in another 135 per cent., and in another 104 per cent. The four reserves south of the main line have 127 per cent. more land than the treaty requires. The speaker urged that the Indians are shiftless and make no use of their lands. If they could be induced to sell a portion, and the money were invested for them by the Government, they would have a fixed and steady income more than ample for their requirements.

After some discussion the motion was carried.

Distribution of Government Institutions.

W. B. Willoughby, of Moose Jaw, then moved the adoption of the following resolution, seconded by J. R. Green, Moose Jaw:

"That in the establishment and locating of public buildings and institutions, and in the appointments to public office, by the Governments of the two new Provinces of Alberta and Saskatchewan, the principle of decentralization be adopted as far as possible."

Mr. Willoughby prefaced his remarks on the resolution by the statement that the convention would appreciate his altruistic motives, as no doubt they all knew that Moose Jaw is to be the capital of Saskatchewan—a statement received with groans and laughter by the Regina and Saskatoon delegation.

In Ontario, he said, the public institutions and offices had been centralized to a very great extent, and the people of that banner province were now convinced of the mistake that had been made. A great number of institutions must soon be established in Alberta and Saskatchewan, and this was the opportune time to insist that they be distributed throughout the provinces and not centralized in the capitals. Registry offices should be distributed. There should be a dozen or more in the Province of Saskatchewan instead of one large central institution in the City of Regina. Appointments to office should be guided by the same principle.

"I would take away from the Provincial Government the power to appoint sheriffs and clerks of the court. Let these officials be appointed by judges."

J. R. Green seconded the resolution He said the United States gives us a good object lesson in the benefits of decentralization, which had proved to be a safeguard to liberties. In very many respects the United States is ahead of Great Britain, and this is one of them.

H. F. Mytton, Regina, opposed the resolution.

"The principle is all right; I find no fault with it; but every government must do what is expedient under particular circumstances. I don't believe in hard and fast resolutions on such matters—they don't come within the scope of this convention's work. Policy must always be secondary to expediency in such cases. It is all very well to say that these good things should be distributed throughout the province, but the Government must settle each case on its own special merits, and it is the height of folly to say that Government patronage must be distributed in one, two, three order.

Thos. Copeland, Saskatoon, also opposed the resolution.

"It is none of our business," said he. "It is the duty of the Government to put an institution where it is most convenient for the purposes for which it is intended, and where it can be most economically managed. If these principles could not be followed in placing a Government institution in Saskatoon I would not want it there—not if it increased the value of my property 100 per cent." (Loud applause.)

Wm. Pearce, Calgary, here suggested that the resolution might be made acceptable to the convention by the addition of the words "having due regard to efficiency and economy." The suggestion was accepted by Messrs. Willoughby and Green, and the resolution was then declared carried.

Commercial Agency Reports.

Mayor Laird of Regina then moved, seconded by C. W. Rowley of Calgary, the adoption of the following resolution:

"Whereas the present system of daily commercial reports, as issued by the commercial agencies, contains no information as to whether the writs therein noted are for disputed accounts or involve counter claims;

"And, whereas, the credit of the defendant is thereby unjustly impaired,

"Therefore be it resolved, that in the opinion of this convention of the Associated Board of Trade of the Northwest Territories the commercial agencies should be prevailed upon to note in their daily reports the fact that such writs are for disputed accounts or involve counter claims, on being notified by the defendant to that effect."

Speaking to his resolution, Mayor Laird said that he introduced it because personal observation had convinced him that the matter is one of pressing necessity. The resolution had been carried in the Regina Board of Trade after a long discussion.

"When writs are issued," he explained, "the clerk sends a report to the mercantile agencies, which distribute them among business men in all parts of the country by means of their daily commercial reports. When a business man sees that John Jones, of Calgary, is being sued for $1,500 he presumes that John Jones is not financially sound, that he is being pushed into a hole, and that the only safe course is to press John Jones for payment. The business man does not know that there is a counter claim for $1,400, and that the liability of John Jones is only $100. He doesn't know this, and he and others press for payment of their accounts. John Jones may be perfectly solvent, and yet this sudden pressure upon him is very inconvenient, and the commercial

EDMONTON NEXT YEAR.

There was keen rivalry among Edmonton, Saskatoon, Prince Albert and Lethbridge for the honor of being the next place of meeting. Edmonton was finally chosen.

agency report does him a great, although unintentional, injustice.

"This is not idle talk. I have personal knowledge of just such a case in which a perfectly solvent man was forced to make an assignment, and as his property was sold at a sacrifice he lost all that he had.

"I do not discourage the use of commercial agency reports, for they are absolutely essential to modern business; all that I do is point out one important respect in which they can be improved, thereby remedying a great injustice."

Frank Oliver, Saskatoon, objected that very few retailers take these reports, and they would not know that the agencies had published the news that they were being sued.

H. F. Mytten, Regina: Every intelligent man who has a writ served upon him knows that the fact will be published in the commercial agency reports, and he can write to the agency at once or he can enter a counter claim at once, and it will be reported. If he isn't intelligent enough to know that, I don't think it matters much whether he stays in business or not."

H. G. Dawson, Wakella: "There is just one objection to this resolution. Every defendant will be able to invent some plausible excuse, and the benefit of the report will be entirely nullified."

After some further discussion, in which Thos. Copeland, Saskatoon, took a prominent part, the resolution was carried without amendment.

Government Fire Insurance.

W. H. Cushing and R. J. Hutchings, of Calgary, then moved and seconded the adoption of the following resolution:

"Whereas, the fire insurance rates in towns and cities throughout the Northwest Territories are being increased from time to time to an alarming extent, principally in order to cover losses sustained in populous cities in the east; and

"Whereas systems of fire insurance under Government auspices have been successfully carried out elsewhere, notably in New Zealand; and

"Whereas the principle of Government Insurance has been adopted in the Northwest Territories in connection with losses in grain crops due to hail storms;

"Therefore, be it resolved that this convention most respectfully begs to submit for the consideration of the Governments of Saskatchewan and Alberta the desirability of causing enquiries to be made into the subject with a view of providing a system of Government fire insurance."

Mr. Cushing urged that there was nothing revolutionary in the motion presented. He thought there could be no difference of opinion that rates in the west are too high, mainly because they must help in the west to pay the big losses in the more populous centres in the east. He believed that Government fire insurance was working well in the Australasian sister colonies and all that the resolution asks is that the Government investigate.

Wm. Short, of Edmonton, made a determined effort to include the subject of life insurance in the resolution, moving an amendment to that effect. The amendment was lost and the original motion carried unanimously.

Fire Marshals.

President A. L. Johnson, of Winnipeg, then moved the following resolution, which was carried without opposition or discussion:

"That a committee of two be appointed by the president to consider the question of the appointing of a fire marshal in each of the new provinces and prepare the necessary legislation to be submitted to the Governments of the new provinces to be enacted."

Mr. Johnson explained that the object was to have the cause of every fire officially investigated, as he believed this would prevent a great deal of incendiarism and carelessness. The convention then adjourned to meet on Friday morning.

FOURTH SESSION.

In spite of the dissipation of the night before at the banquet, several committees were at work during the one o'clock in the morning and the convention resumed its discussion shortly after ten o'clock. C. N. Bell, secretary of the Winnipeg Board of Trade, was present at this meeting and occupied a seat beside President Tweed.

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J. A. MacCaul
A Prominent Delegate from Indian Head.
Courtesy Regina "Leader.

Timber Limits.

A. C. Fraser, of Edmonton, moved, seconded by W. H. Cushing, of Calgary, the adoption of the following resolution regarding timber limits:

"That it is considered highly undesirable that any timber limits in Western Canada should be sold, except under conditions requiring reasonable use to be made of such berths within not more than two years of the date of sale, and in the event of the purchaser failing to make use of such timber berth within two years from the date of the purchase, such berth revert to the Government to be available for sale to any parties desirous of utilizing the timber thereon. And that the Minister of the Interior be respectfully asked to give this matter his most careful attention."

Mr. Cushing explained that large areas of timber limits have been purchased by eastern speculators during the last five years and nothing has been done with them, the owners simply holding them in expectation of a rise in values. The Minister of the Interior has discretionary power enabling him to compel the erection of saw mills on pain of loss of the limits, but nothing had been done. Legitimate millers are being kept out of the country by speculators who hold their lands idle.

Mr. Cushing, of Calgary, seconded the resolution, covering much the same arguments as the mover.

Wm. Pearce, Calgary, said that he was surprised to find no reference in the resolution to the importance of preserving the forests from loss by fire. The loss by fire was greater than that from speculators.

"In this matter, the Government can go only so far as it is supported by public opinion, and it is our duty to educate public sentiment along the proper lines. Some of the regulations offer a big temptation to incendiarism. When a quarter section contains a certain amount of timber it is not open for homesteading. Consequently if the quarter section is desirable there is a strong temptation to start a fire in it."

Moreover there is a regulation that dead timber can be obtained without fees. Hence settlers often start fires in order that they may get the burnt timber for nothing.

T. W. Lines, Edmonton, brought the discussion back to the question of the speculators and finally it was decided to refer the whole question to a committee, instructing them to draft a resolution which would cover all phases.

The committee was composed of A. C. Fraser, Edmonton; Wm. Pearce, Calgary; G. A. Love, Red Deer, and B. P. Richardson, Grenfell. At the afternoon session they submitted the following resolution, which was unanimously adopted:

"That owing to the scarcity of growing timber in Alberta and Saskatchewan, it is highly desirable that the same should be reserved for the use of the actual settler, made available for immediate use and preserved from falling into the hands of speculators.

"To this end it is recommended that the present timber regulations requiring actual operation by timber holders be rigorously enforced, that the timber not already disposed of be retained by the Government for the use of actual millers or settlers, that vigorous steps be taken looking towards the preservation of the timber from fire and towards reforestration."

Hospitals.

Hugh McKellar, of Moose Jaw, then moved the adoption of the following resolution:

"That the best interests of the new provinces would be served by having our hospitals built and maintained by the provincial authorities."

A long discussion followed, in which a great number of delegates took part. H. F. Mytton, Regina, and W. H. Cushing, of Calgary, opposed the idea of Government control quite vigorously.

"There is far too little "noblesse oblige" in this country," said Mr. Mytton. "If you throw the responsibility holus bolus on the shoulders of the Government you do away entirely with voluntary contributions. No one will contribute to the support of an institution for which a Government is responsible."

Finally the following amendment was adopted by the convention, on motion of Wm. Pearce, of Calgary, and A. E. Moore, of Raymond:

"That the Governments be requested

to assist to a greater extent than at present the hospitals in the new provinces of Alberta and Saskatchewan."

The convention then adjourned until 2 p.m.

FIFTH SESSION.

The fifth and concluding session of the convention commenced shortly after two o'clock, Friday afternoon. The first topic for discussion related to

Education.

and was introduced by Mayor K. W. McKenzie, of Edmonton, who moved the adoption of the following resolution :

"That in the opinion of this convention of the Associated Boards of Trade of the Northwest Territories it is highly desirable, from the standpoint of economy as well as convenience, that the Governments of the proposed Provinces of Alberta and Saskatchewan endeavor, as far as possible, to adopt common text books for Public Schools and a common curriculum for High Schools, looking to the free interchange of teachers' certificates and other certificates of standing between the provinces, and that such a policy will best serve the highest educational interests of the said provinces."

Mayor McKenzie said that the uniformity which now existed in the Territories might well continue in spite of the imaginary line which was being drawn to divide the country into two provinces. He pointed out that there is a sparse population in the new provinces and much better terms could be obtained from the publishers if the same text books were used in both Alberta and Saskatchewan. It was also desirable to have "unrestricted reciprocity in teachers." He urged the adoption of the resolution because it was practicable and embodies business principles.

The resolution was seconded by R. J. Hutchings, of Calgary, and adopted unanimously.

Permanent Organization. — 1 c — —

Mayor Laird of Regina then presented the report of the committee on Permanent Organization, Constitution and By-laws. The report recommended that the association remain one united body and organize permanently as the "Associated Boards of Trade of Alberta and Saskatchewan." The committee also submitted a draft constitution and by-laws.

Mayor Laird moved that the report be adopted, and that the convention resolve itself into committee of the whole to consider the constitution and by-laws clause by clause. The motion carried without discussion.

A Misunderstanding.

That there had been no opposition was due entirely to a misunderstanding, and this was soon made clear, for there was a strong minority in favor of separation on provincial lines.

When the first clause of the constitution referring to the name of the association came up it was quite clear that very many members had not understoon that the principle of permanency had been adopted. In spite of interruptions Mayor Laird, who was in the chair while the convention was in committee, proceeded to put the vote on clause 1 of the constitution.

Then up rose Frank Oliver (not Hon. Frank! the doughty scrapper from Saskatoon. Young, aggressive, clean shaven, with a determined, firm-looking jaw, he looked the part of one who "scents the battle from afar." He protested vigorously against the "railroading" of such a resolution through in such a manner, and moved that the question of permanent organization be reconsidered. He was promptly ruled out of order, as the convention was in committee of the whole, and he subsided for the moment.

H. F. Mytton moved in amendment to clause one of the constitution that the name of the association be "The Associated Boards of Trade of Western Canada." This would allow the inclusion later of Manitoba and British Columbia if that were thought advisable. The amendment carried.

The constitution, as adopted in committee, provides that the association shall include all Boards of Trade in the Provinces of Alberta and Saskatchewan which shall comply with the regulations. A Board of Trade with 60 members and upwards shall be entitled to 4 delegates; a board with less than 60 members, and at least 40 members, shall be entitled

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H. F. Mytton
President Regina Board of Trade.
Courtesy Regina "Leader."

to 4 delegates; a board with less than 40 and at least 30 members, shall be entitled to 3 delegates; a board with less than 30 and at least 20 members, shall be entitled to 2 delegates, and boards with less than 20 members shall be entitled to 1 delegate.

Union or Division?

When the committee rose and Mayor Laird had move the adoption of its report, Frank Oliver's chance had come. He moved in amendment that the question of permanent organization be reconsidered. His motion was defeated, but there was a strong minority in favor of division.

Immigration.

A harmless and meaningless resolution referring to immigration, introduced by the Moose Jaw delegation, was carried without discussion. It was as follows :

"That it would be to the best interests of the new provinces for the Legislatures to adopt a progressive immigration policy."

Law Amendments.

Justice McGuire, Prince Albert, then presented the report of the Law Amendment Committee. Perhaps the most important recommendations referred to exemptions, and these were as follows :

"That the Exemption Ordinances should be amended as follows :

(a) "To provide a classification for different classes of persons, e.g., one for a farmer and another for an artisan, etc.; the total exemption in no case to exceed $1,500, including the homestead.

(b) "That a time limit should be put on exemptions.

(c) "That voluntary transfers of exempted property (particularly from husband to wife) or like transfers, should be declared fraudulent as against creditors."

(d) "That protection should be given a debtor in the discretion of a judge against a clear sacrifice of property liable under seizure, e.g., the sale of immature or unready stock."

A committee consisting of Justice McGuire, Prince Albert; Wm. Short, Edmonton; H. F. Mytton, Regina, and R. J. Hutchings, Calgary, was appointed to present the report of the Law Reform Committee to the Legislatures.

Hudson's Bay Railway.

The following resolution, moved by H. F. Mytton, Regina, and seconded by Wm. Pearce, Calgary, was carried unanimously :

"That the president appoint a committee of five to formulate a resolution expressing the interest of the people of the Territories in the matter of the proposed Hudson's Bay route from Western Canada to the markets of Europe, and urging that every possible means be taken to determine the conditions of navigation in the Hudson's Bay and Straits;

"And, further, that the committee endeavor to arrange that the various business centres of the west express their desires regarding the Hudson's Bay route to the Dominion Government."

Accordingly the following committee was named by the president : Wm. Pearce, Calgary; Mayor K. W. McKenzie, Edmonton; W. B. Willoughby, Moose Jaw; P. McAra, Regina; Justice McGuire, Prince Albert.

Edmonton Next Year.

The claims of Edmonton, Prince Albert, Saskatoon and Lethbridge, as suitable places for the next convention, were urged by delegates from these towns, and finally it was decided by a large vote to meet next year at Edmonton.

Votes of thanks were passed to the officers and committees, etc., and the convention was closed with the National Anthem.

THE BANQUET.

The banquet tendered the visiting delegates by the Regina Board of Trade was in every sense of the word a striking success. It was held in the Windsor Hotel on Thursday night, and as it followed a night session of the convention, it was almost 11 o'clock when it commenced and after midnight before the toast list was reached. H. F. Mytton, president of the Regina Board of Trade, presided, and was ably assisted by the vice-chairman, H. W. Laird, the clever and popular young mayor of the city. To the chairman's right sat Thomas Tweed, president of the Associated

Boards of Trade, A. L. Johnson, President of the Winnipeg Board of Trade, and Hon. G. H. V. Bulyea; to his left were Premier Haultain, F. W. Peters, general traffic manager of the C.P.R., and Hon. W. Elliott.

When justice had been done to a sumptuous menu, the following toast list was reached:

Toasts.

"There St. John mingles with my friendly bowl,
The feast of reason and the flow of soul."—Pope.

1. The King

"God save the King."

2. The Governer-General and Lieut.-Governor.

3. Transportation Interests.

4. The Parliament of Canada and Provincial Legislatures.

"For Forms of Government let fools contest,
Whate'er is best administered is best."—Pope.

5. Our Guests.

"For whom he means to make an often guest,
One dish shall serve; and welcome make the rest."—
Hall.

6. Trade, Commerce and Agriculture.

"Ill fares the land to hastening ills a prey,
Where wealth accumulates and men decay."—
Goldsmith.

God save the King.

The toast to the King was honored in loyal fashion and all joined in singing the national anthem. The chairman announced that he had a letter of regret from Lieut.-Governor Forget who was unavoidably absent and the second toast was honored without any speeches.

Transportation Interests.

F. W. Peters, general traffic manager of the C.P.R., responded to the toast to "Our Transportation Interests." Mr. Peters regretted that no representative of any other railway was present, for the time was past when the C.P.R. were the "whole thing" in the west. Other railways were extending in the west and would divide the traffic with the C.P.R.

In this connection, Mr. Peters told an amusing story of an Irishman who arrived in Canada a short time ago. Landing at Quebec from a steamer, which he had been told belonged to the C.P.R., his eye was caught by the graceful outlines of the Chateau Frontenac. "Who owns that house?" he asked.

"The C.P.R.," was the reply.

He traveled to Montreal on a railway line, which he was told was C.P.R., and he put up at the Place Viger Hotel, which, to his amazement, he found also belonged to the C.P.R. He traveled to Owen Sound by C.P.R. and boarded a C.P.R. boat which brought him to Fort William. Another C.P.R. hotel was there for his accommodation. Now Fort William is a divisional point; the time changes there. Meeting a man on the street Pat asked the time.

"C.P.R. time?" was the query.

"By Jabers, do they own time, too?" was the Irishman's exclamation.

Passing to the serious portion of his address, Mr. Peters referred to the great interest displayed in the United States and Canada in recent years in the question of the control of railway rates. "Two years ago the Canadian Government put on the statute books a law relating to the control of rates, a law framed with the very best object in view, viz., the prevention of discrimination in rates. They appointed a Railway Commission, in whom both the railways and the public have confidence, its chairman being a man of acknowledged legal ability.

"The railways and the general public should unite in an effort to give this commission a fair chance to solve the problems which come before it. So far it has done good work, and I am very hopeful as to the future. Of course not all of its decisions have been pleasing to the railways, and the public have not always been satisfied, but that is only to be expected.

"Let me make it plain that the railways do not object to this Act; we are willing and anxious to give the system a fair trial. We welcome every measure designed to protect the railways against the demands of selfish shippers who want discrimination in their favor. We need assistance for it is a hard matter to persuade the big shipper that he should not be given a better rate than the small shipper.

"All prospects point to a larger harvest than we have ever had before, and for that reason the people of the west are more than ordinarily interested in the transportation question. I may tell you that the C.P.R. are doing everything possible to handle the big crop quickly. Mr. Whyte has given the matter special attention and he has made some interesting calculations. You know he is a careful man, and what he says is usually correct. Provided the opening price is such that the crop will begin to move at once, Mr. Whyte estimates that 28,000,000 bushels can be moved before the close of navigation. We have put on 4,000 additional cars and 68 extra locomotives for the western lines. At Kenora a locomotive will pass every 22 minutes during the whole 24 hours in the busy season. The C.P.R. are doing everything possible to handle the big crop with the least possible delay." (Applause.)

Premier Haultain.

Chairman Mytton then proposed the toast of the Parliament of Canada and Provincial Legislatures, coupling with it the name of Premier Haultain. The storm of applause which greeted the name of the Territorial Premier caused the chairman to remark: "I never made such a popular speech before in my life."

Premier Haultain was greeted with prolonged cheers and "He's a jolly good fellow" renewed again and again, showing conclusively the strong hold which this gifted young statesman has upon the affections of his own western countrymen. After thanking the audience for their kind reception of his name, he proceeded to express his pleasure as a citizen of Regina in welcoming the delegates of the Board of Trade Convention. There was no need to waste time in dilating upon the advantages of such a convention as they are quite obvious.

"I am glad that if this is to be the last gathering of a Territorial convention, there is still to be a western convention. Somewhat unnecessarily in my

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Premier Haultain.
Principal Speaker at the Banquet.

Courtesy Regina "Leader."

opinion we are to be divided politically, but our interests are the same on both sides of the imaginary line, by means of which the Dominion Parliament intend to separate us, and I hope there will be no division of this association.

"Strangely enough my name is associated with the only toast with which I have nothing whatever to do. I am not a member of Parliament and I don't know very much about Parliament. Moreover, my recent acquaintance with it does not cause me to think very highly of it. (Laughter.) I am not a member of any Provincial Legislature, but as some one has said, 'I 'as 'opes.'

"It is in the Northwest Territories Legislature that my political experience has been gained, and of it I desire to speak a few words. We are told we should speak nothing but good of the dead, and perhaps the same rule should apply to the dying and practically dead. I may be pardoned for being proud of the record of that Legislature. Of course we made mistakes; we were human representatives of very human constituencies. But I believe that no body of men have ever met with a greater sense of their responsibilities or a more single-minded idea that there was important work to be done. This may sound like bombast, but you must allow the dying swan to sing his song.

"The growth of the Territories has been gradual and steady, and so has been the legislative and constitutional growth. A great change is coming and I only hope that the new Legislature will grapple with public questions as ably and honestly, as sincerely and as resolutely as the old.

"It was the glory of the old Legislature that we tried to do business with regard to that business alone; we did not draw the party lines. From 1888 until 1905, in a country where politicians are numerous and party feeling often is very strong, a body of men have been elected who set aside party traditions and worked together for the common good of the west. That was the glory of the old Legislature, and I hope it will be the praise of the new. We have no time here for party politics, for we have too much to do. In a material sense the transportation problem is the greatest question in this country. In my opinion the great project which is coming up for the consideration of the two new provinces and the old Province of Manitoba is that of a Hudson's Bay railway. I firmly believe that this road is coming and that when built it will revolutionize conditions here. It will not interfere with the railways we have already; they will still be necessary. This is the great question that is coming, but this is not the time or place to speak of it."

Our Guests.

Vice-chairman Laird now took charge of the toast list and proposed the toast to "Our Guests," coupling with it the names of President Tweed, of Medicine Hat, Mayor MacKenzie, of Edmonton, W. H. Cushing, of Calgary and A. MacCaul, of Indian Head.

Mr. Tweed, in a humorous address, begged to be excused as he had been sitting close to the chairman and was "under the influence of Mytton." The guests had all been delighted with their visit to Regina and could not say enough to express their gratitude for their kindly reception. Like Premier Haultain, he hoped they would meet again as a united body, and if, as was suggested, they meet next time in Edmonton, he did not doubt they would have a "capital time" no matter what Calgary might say to the contrary.

Mayor MacKenzie, of Edmonton, also claimed to be in a jaded condition, but made a "capital" speech. He was glad to hear Premier Haultain suggest that the Boards of Trade stay together in one association in spite of the imaginary line which was to divide the Territories into two provinces. Personally he hoped the association would extend its scope to include Manitoba, for the whole of the country between the lakes and the mountains has similar interests, and its Boards of Trade may well be united.

Messrs. Cushing, of Calgary, and MacCaul, of Indian Head, both spoke briefly along the same lines.

Trade, Commerce and Agriculture.

With the toast to "Trade, Commerce and Agriculture," Vice-chairman Laird coupled the names of Messrs. A. L. Johnson, president of the Winnipeg Board of Trade, Clinkskill, of Saskatoon, W. B. Willoughby, of Moose Jaw, and T. H. Blaicklock, of Weyburn.

Mr. Johnson spoke briefly and to the point. He was glad to see so little sectionalism in the proceedings of the convention. The Winnipeg Board of Trade was free from the spirit of sectionalism and in its deliberations he thought it considered only the general interests of the entire west.

"Our interests are mutual in the west," said the speaker, "and what builds up the Territories helps to build up Winnipeg."

In humorous vein Mr. Johnson disclaimed all knowledge of agriculture. The farmer, he knew, was the backbone of the country, for he wears the shoes which his (Mr. Johnson's) firm sell, and he rides on Mr. Peter's C.P. Railway.

Mr. Clinkskill dilated at considerable length upon the glories and advantages of his own town Saskatoon, which he hoped many of the delegates would visit. He also dealt very effectively with the immigration problem and the unoccupied homesteads which are held by speculators, thus hindering the development of the country, its trade, its commerce, and its agriculture.

Messrs. Willoughby and Blaicklock also spoke briefly to the same toast.

City of Regina.

R. J. Hutchings, of Calgary, then proposed a toast to the City of Regina, and took occasion to thank the mayor and the officers of the Board of Trade for their kindness and courtesy. The mayor replied briefly on behalf of the city.

The Ladies.

A toast to the ladies of Regina brought the gallant Premier to his feet to respond, and his rising was the signal for another ovation.

The gathering dispersed about 3 a.m. after singing "Auld Lang Syne."

CONVENTION NOTES.

Regina is a hospitable city.

Saskatoon has ambitions to be capital of Saskatchewan.

"Abbott from Maple Creek" was the wit of the convention.

Hon. Frank Oliver has a namesake at Saskatoon who was a delegate to the convention.

On Thursday afternoon the ladies of Regina entertained the delegates at an informal garden party in the park.

Delegates carried away many souvenirs of that fertile Regina mud, whose wheat growing properties are so well known.

Local jealousies cropped up occasionally, but upon the whole the convention was remarkable for the harmony displayed.

H. E. Mytton was a capable chairman at Thursday night's banquet. Those "under the influence of Mytton" seemed to enjoy themselves.

Saskatoon provided a special train and invited the delegates to visit the ambitious northern town and attend a banquet on Saturday night.

President A. L. Johnson, of the Winnipeg Board of Trade, was present at the convention on Thursday and Secretary C. N. Bell attended on Friday.

The delegates and the press were extended the privileges of the Assiniboia Club during their stay in the city, a courtesy which was much appreciated.

The noticeable feature at Thursday night's banquet was the wonderful popularity of Premier Haultain. Those who know him best apparently appreciate him most.

Secretary Trant was untiring in his efforts to provide for the wants and comfort of the delegates and very much of the credit of a successful convention is due to him.

On Friday morning there was on exhibition on the press table a sample of Spring wheat from the farm of Wm. Reddick, of Maple Creek. It measured 41½ inches in length.

William Pearce, of Calgary, is an old-timer who had probably the most intimate acquaintance of any man at the convention with conditions in all parts of the west. His opinions were always listened to with respect.

A strong sentiment in favor of government ownership of public utilities was a notable feature of the gathering. Messrs. Mytton and Cushing were the principal opponents of such ideas, but the majority of the convention were opposed.

The fire brigade gave a good exhibition on Friday night, throwing streams of water which Winnipeg would find it hard to equal. Regina has accomplished the seemingly impossible for a prairie city—she has an excellent waterworks system in which the pressure is supplied by the force of gravitation.

His Honor the Lieut.-Governor and Madame Forget entertained the delegates at a garden party on Friday evening at Government House grounds. The reception committee assisting Madame Forget consisted of Mrs. McCullough, Mrs. Peverett, Mrs. Ford Jones and Mrs. Bulyea.

During the convention the chairman wisely suggested that all speakers should give their name and Board of Trade on rising to address the meeting. This was a sensible request, but it was not always followed. "Coupland from Saskatoon" and "Mytton from Regina" created some merriment by always announcing their name and town.

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MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 71.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street.
Montreal, July 7, 1905.

NO sign of dullness has yet set in. A glance at the big shipping rooms in the wholesale houses will see piles of all kinds of hardware going to all parts of the Dominion. Immense quantities of sporting paraphernalia and shooting accessories also will be noted, fishing tackle, too, and no end of apple parers and garden as well as harvesting tools.

Despite the continuation of the carpenters' strike in Montreal things have not been marred. The contractors have not been deterred in finishing the mass of their work, and building hardware is selling freely. The advance on shovels of all kinds has been maintained, and, notwithstanding, trade is good. Barb wire, staple screws and rivets are firm and in good demand.

Axes—A steady business continues, and prices are firm. We quote: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—The demand keeps up, and prices are firm. Our quotations are as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—Trade is first rate, and a number of high-grade machines seem to be in popular demand. We quote as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—A good demand is in evidence, and prices are firm. We quote: Cold blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—Plenty of stock being sold at good prices. We quote: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Activity in all grades is the order, and business is good at firm prices. We quote: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—No change has taken place in prices, and business continues alive and steady. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Firmness rules, with trade inclined to be quiet. We quote: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent.; brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—The reduction of last week in sleigh shoe bolts has been maintained with the following discounts: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5. Activity rules.

Wire Nails — Demand has eased slightly, and a quieter tone has been noticed this week. We quote: $2.25 a keg f.o.b. Montreal.

Horseshoes—Business is light and trade is fair. Prices are firm. We quote as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4. $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—Prices remain unchanged with good trade.

Sporting Goods—A good demand is in vogue with firm prices holding much the same as last week. We quote: Canadian-made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—No glaring interference has set in owing to the strike among the carpenters, and trade continues to be pursued with due aggression. Prices are unchanged.

Cordage—Prices remain the same, and demand is brisk with firm holdings.

Cement and Firebrick—The decline in prices still holds. Trade is fair, but inclined to be quiet. Our quotations are, as follows: English cement, $1.80 to $1.90: Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $1.90 to $2.00. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coin Chain—Prices remain firm with steady business. Our quotations are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth—The price is $1.50 per hundred square feet, but little business is doing.

Poultry Netting—The goods are still scarce, and the demand increases. We quote: Discounts for two inch nineteen gauge standard, and sixteen gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges — Good business is everywhere to be noted, and higher grades are in excellent demand. No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Business is unprecedented and is continually increasing. We quote: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east.
Toronto, July 7, 1905.

CHANGES have taken place in coiled spring wire and cement during the week, the former being ten cents less than formerly, and the latter about ten cents higher. Other prices remain stationary.

Business was interrupted slightly by the holiday, but still holds remarkably active, and no complaints are heard from any source. Sorting-up orders are coming in more liberally than ever, and jobbers are having their difficulties in keeping up with their shipments.

The demand for lawn mowers and Summer lines keeps up exceptionally well. Farmers are buying lawn mowers in large numbers, and country merchants are forced to carry larger stocks. Everything that sells in the Summer time is in brisk demand.

Lawn Mowers—Farmers are buying more mowers, and the demand keeps up very well.

Sporting Goods—Fishing tackle and camping outfits are having a good sale, while shooting materials are improving.

Washing Machines—Trade is reported very good for wringers and machines.

Chain—Trade is in its normal state. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Step Ladders—Business is considered very satisfactory. We quote at 10c. per foot for 3 to 6 feet, and 11c. per foot for 7 to 10 feet ladders.

Extension Ladders—Sales are reported

to be fairly large. Waggoner, 40 per cent. off list.

Galvanized Wire—Large orders are reported by the jobbers. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire — Prices have fallen 10c. Demand is active. Poultry netting is also in strong demand.

Barb Wire—Sales continue very large, and farmers are buying large quantities.

Wire Nails—Stocks are being called upon heavily. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—Activity in building is causing a strong demand for goods. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is falling off owing to the Summer season. We quote as follows: "P. B." base. $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horsenails—Demand during the Summer season is less active. Prices are the same.

Screws—Manufacturers are keeping up with the demand fairly well and no shortage is looked for.

Rivets and Burrs—Demand is reported good at unchanged prices.

Bolts and Nuts—Stocks are being called upon largely, but the supply is plentiful. Prices are unchanged.

Cordage—Sorting-up orders are the rule, with some orders for binder twine still coming in. We quote as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—The recent advance in the United States has been duplicated here, and better prices are now the rule. The active demand makes the market very firm. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—An increased business is noted. Prices are firm. We quote as follows: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—The general activity in the building trades keeps the demand for goods steady.

Hides, Skins, Tallow and Wool — The trade report receipts light owing to the high prices being paid in the country. The London wool sales show 10 p.c. advance in coarse crossbreds, but this advance has been fully anticipated for the last three of four weeks. We quote the following:

Hides, No. 1 green steers, per lb	0 10
" " 2 " " "	0 09
" No. 1 green, per lb	0 09½
" " 2 " "	0 08½
Country hides, flats, per lb	0 08½ 0 08¾
Calf skins, No. 1, selected	0 10
" " No. 2	0 08
Deacons (dairies), each	0 80
Sheep skins	1 25
Lamb skins, each	0 35
Shorn pelts "	0 45
Rendered tallow, per lb	0 04 0 04½
Unwashed wool, new clip, per lb	0 15
Wool-washed fleece	0 23
Pulled wools, super, per lb	0 21 0 23
" " extra "	0 22 0 24

For Manitoba, British Columbia and Maritime Provinces markets see following pages.

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Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, July 7, 1905.

MARKED activity rules still. No sign of a Summer decline can be traced by knowing ones, and this is declared to be unusual. Large firms are busier than the time of year warrants, and this is attributed to the building activity and the general manufacturing stimulation. There has been no change in the price of piping of all kinds, but the demand is unprecedented. Copper remains high. Antimony is soaring still, and no indication of a decline. Tin plates are firmer, and the tin market generally has held up remarkably well. Ingot copper has a firmer tone, and there are no signs of it weakening. Ingot zinc is still easier, and the shading on large quantities continues to hold. Pig lead has advanced to $3.60, making it considerably higher than it was for many months. This is attributed to the shot makers and other makers of lead goods having excellent business.

Pig Iron—The tone of the market is decidedly stronger, and the prophesied advance may be said to have occurred, although it is hardly safe to change the current quotations. A fine business is being done. We quote:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	"	"
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—Slightly easier is the report, and the decline of two weeks ago has been well maintained. We quote: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—The awakening in tool steel is decided, and one only needs to look at the papers to see large firms like Drummond McCall advertising special tool steel to note the demand and the competition. The purchase in Canada of the Pneumatic Tool Steel Co. by an American company geos to testify the demand. Our quotations are as follows: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—Quietness is ruling just now, but still the demand is fair, and prices remain unchanged. We quote as follows: Sleigh shoes, $1.97 1-2; tire, $2.07 1-2: spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold-Rolled Shafting—Many forces are at work to increase the demand all the time, and certainly building and machinery plant equipment, as well as the electrical contract work, have had their effect. Trade is good, and prices are firm. We quote: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—While no change is to be recorded, these goods are firm and in excellent demand, with a tendency to advance in the near future. We quote as follows: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—Solid business is the order, and a never ceasing demand controls the trade. We quote as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra.

Black Sheets—Incident to the impetus to manufacturing, the black sheets are selling freely and everywhere in the trade good prices are maintained and activity rules. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—How long the advance in antimony may hold has now become a subject for conjecture. It is generally believed that it will hold for some time, and it is quite within the realm of possibility that higher prices may be quoted before lower ones. We quote 11 3-4 to 12 cents.

Sheet Zinc—Steadiness rules, and a good market is reported. Plenty of business is reported. We quote: Cask lots, $7; small lots, $7.25.

Tin Plates—Tin is holding up well. The market has surprised all the big dealers and it is notable that the actual and possible issue would suggest an advance. We quote: Cokes, $3.75; charcoal, $4.

Ingot Tin—A firmer market has been

recorded, and the Old Country markets are quite considerably stronger. Consumption is in no way curtailed, but it seems to have increased and trade is good. We quote: Present prices range from 33 to 33 1-2c.

Ingot Copper—Firmer in all grades is the order, and no sign of it weakening so that buyers who anticipated a decline may profit by the judgment of experts, who represent some of the largest handlers in the business. We quote: 16 to 16 1-4c.

Ingot Zinc—A somewhat easier market is in vogue, but the demand is good and prices remain unchanged. We quote: 6 to 6 1-4c.

Pig Lead—Once more an advance of five cents has taken place, and the demand has not even slackened. We quote: $3.50 to $3.60.

Boiler Tubes—The general firmness which permeates the metals has affected the boiler tubes and a firm market has held all the week. The demand has increased, and makers are pleased with the outlook. Our quotations are as follows: British and American tube, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—Quietness has overtaken this trade just now, as their best three months have just passed. Copper and brass continue to hold firm positions, but the volume of business done has slackened. We quote as follows: Heavy copper and wire, 12 3-4c.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 3-4c.; machinery cast scrap, $14; wrought scrap, $13; stove-plate scrap, $10; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-4 to 5 1-2c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
Front street east,
Toronto, July 7, 1905.

EVERYTHING is steady, and a fair business is reported by the trade. The holiday caused a slight falling off, but the expected falling off in July and August has not materialized yet. Tin is advancing, and antimony is still going upward It is reported from reliable sources that the Japanese Government is a buyer in Europe for 500 tons of antimony, and with Russia also a large buyer and with the output of metal decreasing, it is impossible to tell how high prices may go.

Pig Iron—Increasing strength is shown and prices are held very firm. We still quote:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 0
Midland, No. 1, "		18 50
" No. 2, "		18 00
Radnor, at furnace		30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Sales are being made in fair volume, and prices are being maintained. Our quotations are as follows: $1.85 f.o.b. Toronto, with discount of 2 per cent.; for extras as cut to length, while rolling, 2 feet and over, 10c. per 100 lbs., 1 foot and under 2 feet, 15c.; under 1 foot, 20c.; over 20 feet, by special agreement according to length and size.

Tin—An advance of 30c. per hundred is reported during the week. Buying is active and prices very firm. We quote: 34 to 35c. per lb.

Galvanized Sheets—Conditions are unchanged, the demand being heavy.

Tin Plates—Firmer prices are reported with the demand strong.

Canada Plates—Goods are being called for in fair quantity. Prices are the same.

Brass—Trade continues active and prices firm. Discounts are 10 per cent.

Lead — Higher prices are reported. Stocks are light and demand steady. We still quote: Pig lead, $3.80 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter — Conditions are unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—An active demand exists with the same quotations ruling. We quote as follows: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—Prices are still advancing, another cent being added to last week's figures. We now quote at 14c.

Old Material—A slight improvement is noted although no lines are very active. Prices are steady. Dealers buying prices are as follows: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Dealers are booking orders for Fall delivery, their stocks being fairly large. We quote: Anthracite in cars at bridges: Grate, $5.05 per gross ton; egg, stove and nut, $5.30 per gross ton; pea, $3.70 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35: 3-4 inch, $1.25; run of mine, $1.05: nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

LONDON METAL MARKETS.

From Metal Market Report, July 5, 1905.

Pig Iron—Middlesboro No. 3 foundry is quoted at 45s. 6d. and Scotch warrants at 49s. 4d, making prices as compared with last week unchanged for Middlesboro and unchanged for Scotch warrants.

Tin—Spot tin opened firm at £140 2s. 6d, futures at £139, and after sales of 170 tons of spot and 150 tons of futures closed firm at £140 2s. 6d or the spot and £139 2s. 6d for futures, making price as compared with last week 2s. 6d higher on spot and 5s. higher on futures.

Copper—Spot copper opened firm at £66, futures £66 1s. 3d, and after sales of 150 tons of spot and nil tons of futures closed firm at £66 or spot and £66 3s. 9d for futures, making price as compared with last week 2s. 6d lower on spot and 3s. 9d higher on futures.

Lead—The market closed at £13 8s. 9d, making price as compared with last week 2s. 6d higher.

Spelter—The market closed at £23 17s. 6d, making price as compared with last week 2s. 6d lower.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, July 6, 1905.

THE feeling in the iron trade generally is distinctly hopeful and yet there is little that is tangible to justify increased optimism. Those branches which saved the situation after the check of the late Spring are still the backbone of the good times. These are the structural and the plate trades, which are flourishing through the railroad buying of cars and engines and the heavy requirements for buildings, bridges and ships for the lakes. As an indication of the volume of business being done the fact may be mentioned that the American Bridge Co. alone booked orders for bridges, buildings and structures aggregating 71,000 tons during June. In New York contracts for buildings involving 15,000 tons of structural material were placed during the week. Chicago did a good business and has some large work in sight. In the plate trade, mills in the central west have been forced through sheer inability to make deliveries to transfer work to eastern mills.

Some good rail orders have been placed lately, including 15,000 tons with one mill in the central west and 30,000 tons with an eastern plant.

The event of the week in the lighter lines has been the adjustment between the American Sheet & Tin Plate Co. and the Amalgamated Association of both the sheet and the tin plate scales. The men receded completely from their demands for an advance in wages and accepted substantially the existing scales. One very important point was made, and that is that the clauses relating to restrictions of output were eliminated. This has been a very sore point with those manufacturers whose mills were under union rule.

The rebate of 1½ per cent. in wages on tin plates intended to supplant foreign plates imported under the drawback clauses continues to August 1. After that date it may be restored by the company to the original 3 per cent. rebate if conditions require it.

The settlement of the wages question in these two important branches removes practically the only cloud on the horizon. From a market point of view only a prolonged struggle could have affected values.

There are indications that at least one large consuming interest in the foundry trade has begun to feel the market for pig iron seriously, but that is the exception. The deadlock is really unbroken, and the drift of events seems to

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favor the buyers, since southern iron has weakened further and some smaller interests have accepted the basis of $11 for No. 2 foundry at Birmingham. The leading interests in all the principal producing sections, however, are abstaining from any attempt to force pig iron upon unwilling buyers. It will take some striking event to start the buying movement, some merchants believing that we may drag along in this manner for the whole of this month.

Bids are being opened to-day in this city for a round lot of cast iron pipe. Kansas City has just awarded 6,000 tons.

PITTSBURG METAL MARKETS.

Iron Trade Review, July 6, 1905.

IRON and steel trade conditions at the beginning of the second half are the reverse of those existing the first of the year. At that time there was heavy buying of all finished lines, and pig iron was advancing. There was also considerable buying of the heavier forms of material, but it was not generally believed that the tonnage of plates, shapes and rails would reach the present enormous total. Practically all forms of finished material and pig iron, on the other hand, instead of advancing in price, as was generally expected, have declined, and the second half of the year opens with a dull market for these commodities. The activity in the heavier lines, it is generally believed, is sufficiently great to instill confidence in the general situation and a revival of demand for finished products, and pig iron is anticipated before the end of the Summer.

Pig Iron—The market continues exceedingly quiet. Consumers are urging deliveries on existing contracts, indicating a heavy consumption, and there is little doubt but that they will be compelled to buy for future requirements shortly. Southern iron is now offered openly in this market on the basis of $11.25, Birmingham, for No. 2, and there is little doubt that $11 could be done on a large tonnage. Valley furnaces are quoting $14.25 to $14.50 on No. 2, while Bessemer and basic can be had at $14. We quote:

Bessemer, Valley	$14 00 to $14 25
Bessemer, Pittsburg	14 85 to 15 10
No. 1 Foundry	16 00 to 16 25
No. 2 Foundry	15 35 to 15 60
Gray forge, Pittsburg	14 60 to 14 75
Basic, Valley	14 00 to 14 25
Basic, Pittsburg	14 85 to 15 10

Steel—On Bessemer billets the leading steel mills are now quoting the official price of $21, but consumers are not anxious to close on this basis, despite the offers of the steel producers to cover their requirements for the next six months. Open-hearth billets still command a premium on account of the big demand for this grade of steel, and are quoted at $23. Bessemer and open-hearth sheet bars are quoted at $23.25 to $24, while Bessemer and open-hearth rods are in little demand at $32 to $33.

Ferro-Manganese—The market continues quiet, foreign ferro, 80 per cent, being held at $49.50 to $50, delivered at buyer's mill.

Muck Bar—Most of the iron mills

Bar Steel
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Reeled Machinery
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OPEN HEARTH STEEL

throughout this district have been closed for the week, and a few will remain idle throughout the month. We quote neutral bars for prompt delivery at $26.50, Youngstown, while for future delivery $26 can be done.

Skelp—The market continues quiet. Steel grooved skelp is quoted at 1.45c. to 1.50c., and sheared at 1.55c. Grooved iron is held at 1.60c. and sheared 1.65c.

Rails and Track Material—Rail tonnage continues heavy. The light rail market continues quiet, and prices are still low.

Plates—Steel car works' requirements still lead, although the demand from miscellaneous industries is improving considerably. Deliveries on open-hearth cannot be made in less than four months, although 60 days can be made on most Bessemer sizes.

Structural Material—While little new business has been placed, all of the mills are filled with orders and are unable to make deliveries on certain sizes in less than four months.

Bars—A few small contracts for steel bars covering requirements for the last half of the year have been closed by local mills on the basis of 1.50c., but the large consumers are not asking for prices and the indications are that they will not buy until later in the year. The demand for bar iron on the part of the railroads continues heavy and local mills report a good tonnage on their books.

Sheets—After practically all of the union sheet and tin plate mills closed at midnight Friday on account of the expiration of the scale year and the outlook for a prolonged strike was favorable on account of the failure of the wage committee of the Amalgamated Association and the officials of the American Sheet & Tin Plate Co. to reach an agreement, a settlement of the wage matter was effected on Monday. While a number of mills will remain idle for several weeks, there will be a pretty general resumption before August 1, and jobbers of both sheets and tin plate who were holding their stocks firmer in anticipation of a strike this week are again offering their material at the concessions existing before the wage scales came up for consideration.

Wire and Wire Nails—Most of the wire and nail mills in this district have been closed and the nail mills will not resume for a month. The wire mills, on the other hand, are scheduled to resume in about two weeks. Concessions of about $1 a ton continue to be reported, and current demand is light.

We quote: Wire nails, jobbers' carload lots, $1.80; retailers' carload lots, $1.85, and less than carloads, $1.95; painted barb wire, $1.95 for jobbers in carloads; retailers' carloads, $2, and less than carloads, $2.10, with 30c. for galvanizing. Annealed smooth fence wire is held at $1.65, with the usual differentials to retailers for carloads and less than carloads. Quotations are all f.o.b. Pittsburg, 60 days, with 2 per cent. discount for cash in ten days. Iron and steel cut nails, $1.70 to $1.75.

Merchant Steel—Demand for high-grade steel is fair for this season, while the shafting manufacturers report their product in good demand.
and trading is largely limited to the

Old Material—The market continues absolutely lifeless. Consumers will not buy until they see bottom on pig iron dealers. We quote gross tons as follows: Heavy melting stock, $14 to $14.50; No. 1 wrought, $14.50 to $15; re-rolling rails, $14; bundled sheet scrap, $12 to $12.50; busheling scrap, $12 to $12.25; turnings, $9 to $9.25, and cast scrap, $13 to $13.25.

Coke—Coke production continues to be curtailed. There is practically no buying of furnace coke, and prices are somewhat easier, good Connellsville product being offered as low as $2 for the last six months. Foundry coke is held at $2.25 to $2.35.

British Columbia Trade News

Vancouver, B.C., June 23, 1905.

THE rights, powers and privileges of telephone companies are under earnest discussion at the present time in the City of Vancouver, because the British Columbia Telephone Co., Limited, is undertaking to dig up streets and lanes without the permission of the city, for the purpose of putting down conduits in which to lay wires. The city authorities do not wish to object to the laying of the tefephone wires underground, but they do wish to have it distinctly understood that the work cannot be done without the city's permission. The matter is subject of court proceedings, an injunction having been applied for by the city, and in addition the employes of the company have been arrested for tampering with city streets without permission. This step will be repeated every time the employes make the attempt, because the telephone company would not consent to stop work till the argument re the injunction was disposed of.

As the powers claimed by the telephone company are sweeping, and along the lines which were so keenly opposed by the Union of Canadian Municipalities in the Dominion House a year ago, the case is likely to become interesting to all cities and towns. If the claims of the company are established it abrogates all power on the part of civic corporations respecting the giving of consent to poles being erected, or wires laid underground on the streets.

* * *

A new street car system, operated by electric power, is to be chartered in British Columbia, the municipality of North Vancouver, across Burrard Inlet (the harbor of Vancouver) having come to a tentative agreement with the British Columbia Electric Railway Co., granting a franchise for fifty years, five miles of track to be built at once. The company operate the lines in Victoria, Vancouver, New Westminster, and the interurban lines between the latter two cities.

* * *

The B.C.E.R. & L. Co. have announced, through Manager Buntzen, that organized efforts will be made to induce capital to invest in new industries in this part of the province, by showing the advantages of cheap electric power now available. The completion of the power canamm mm mm mm mmmmmm power tunnel of the Vancouver Power Co., a subsidiary company, renders available a total of 30,000 h.p. in electric energy. The tunnel has been an entire success, and, while bringing sufficient water from Lake Coquitlam into Lake Buntzen to generate the power mentioned, it has not materially affected the level of the former lake, which is very much larger.

* * *

At the present time a new saw mill of large dimensions, a tannery, a fruit cannery, and other enterprises, are being established in New Westminster.

* * *

Owing to the expansion of railway business the C.P.R. are extending their local yards in Vancouver, and two hardware firms, Messrs. McLennan, McFeely & Co., and the McClary Mfg. Co., have been served with notice to vacate premises they have on leased land owned by the C.P.R. next Pender street, to make room for new switches.

* * *

With power available for all demands upon it, the British Columbia Electric Railway and Light Co. are now in position to treat for the location of industries in the City of Vancouver, in the City of New Westminster, and in suitable locations near those cities. The first move has been to establish a new street car system in the thriving municipality across the Inlet from Vancouver. Another was the proposal to locate flour mills here, the promoters of that scheme having asked for terms on 500 h.p., and are prepared to go on with the mill if terms are suitable.

* * *

Industrial enterprise is assured of favorable consideration in the City of New Westminster for all time to come, and the city is also assured of its right to lease and tax property on the waterfront, by a recent ruling of the Provincial Government from which title first issued to the land, some of which has been in dispute. Owing to rapid industrial development the waterfront of the Fraser River in the City of New Westminster has become very valuable and will be a revenue-producing asset for the Royal City for all time.

Nova Scotia Trade News

Halifax, N.S., July 4, 1905.

BUSINESS is looking up and jobbers say that orders which should have been in six weeks ago are now only coming to hand. This, however, is having its good effect as the orders comprise more goods than hitherto would have been purchased, as the buyer is making the shipment. There is a great scarcity of money throughout the country. The farmers are short of ready cash, but the crops are all reported good, and the prospects are as bright as could be wished. In consequence of this the dealers have no hesitation in filling orders. Collection continues about fair.

Prices here show very little change. Turpentine is quoted at 98c. The jobbers do not care about quoting figures on turpentine. The price of this article continues to be well maintained here, notwithstanding the drop in prices elsewhere. Boiled oil is quoted at 60c., and raw oil at 55c. Cement is steady at $2.25 per barrel for White Bros. Nails remain about the same. Best Manila rope is quoted at 15c. base, and British at 11½c.

Bar iron continues in good demand at $2.10 base. Block sheet iron is a little easier, being quoted at $2.25. Sheet zinc and sheet lead are very firm and

both are reported to be very scarce here, the dealers having only small stocks on hand. Ingot tin is firm at 36 cents. The demand for pig lead is good, and the price firm, being quoted at $3.75 to $4. Considerable steel is being sold at $2.40 for tire, $3.20 for caulk, and $3 for machine, all base.

All lines of building materials are in good demand. Tarred felt is selling for $1.85 per hundred pounds, three-ply roofing at $1.15 per roll, and two-ply at 90c. per roll. Tarred sheathing 50c. There is a good buying demand for all kinds of haying tools, especially scythes.

The Eastern Trust Co., of Halifax, receiver for the Port Hood Coal Co., has been authorized by the court to raise $50,000 on the security of the coal company's property to carry on the business, and work at the mines will probably be resumed at once.

One of the new Allen shafts being sunk by the Acadia Coal Co., between Stellarton, N.S., and New Glasgow, recently attained a depth of 890 feet, and at that point a coal seam was cut which it is hoped is the famous Ford seam, for which the company had been seeking. The Ford seam ceased to be a producer years ago, owing to a disastrous fire, and since then all efforts to recover the seam by means of slopes were unsuccessful, as fire was met with.

It is understood that when the Dominion Iron & Steel Co. commence to roll plates later on, suitable for the purpose, that Messrs. Rhodes, Curry & Co. will undertake the manufacture of pressed steel cars at Sydney, C.B.

If prospective builders only knew the possibilites and advantages of "Metallic" building materials, they would use nothing else.

Wood is getting more and more expensive and it never was equal to good sheet metal.

Don't you think such facts would bring you new trade if brought to the attention of prospective builders in your town?

"Empire" Metallic Shingles are a good example of what we have done in the production of a rust, fire, rain, weather and lightning proof roofing that lasts a life time. It is an easy matter to get orders when their advantages are shown.

Many dealers are making money by showing our catalogue and pushing "Metallic" goods with prospective builders.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada 302

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (Stone, Brick, Etc.)
"Impervia" Fireproof Windows
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

New Brunswick Trade News

St. John, N.B., July 7, 1905.

THE prevailing tone in hardware circles of late has been one of comparative dullness. By that it is not meant that trade has been bad but rather that it has been quiet with no special features. That it should be so at this season of the year is not strange.

The outlook is that when Fall comes business will be considerably brisker, for the crop reports seem to foreshadow a successful season for the farmers. If the forecasts are correct there will be a good demand for agricultural implements in the late Summer and through the Fall, and the successful season for the farmers is bound in the nature of things to cause a brightening up in all branches of trade.

One phase of the industrial outlook in the province forms something of a cloud on the business horizon. That is the unsatislactory condition of the lumber outlook. At the present large quantities of logs are held up on the head waters of the St. John river, and even at some of the upper points of the main river. If these are not soon brought to the city some of the mills will be forced to shut down quite a bit earlier than usual. The loss such a step would cause the mill owners can readily be seen, and the closing of the mills would mean a tightening of the purse strings of the mill hands, the effect of which would soon be apparent in many circles of trade. However, some of the mill men profess to believe that the logs will come down all right shortly, so anxiety is perhaps as yet quite ill-advised.

The local authorities have recently put into force a regulation which is bound to affect the tinsmiths of the city. This regulation provides that "pegged" measures cannot be manufactured nor used any longer. These measures are those in which metal pegs are inserted in the sides to make it possible to measure less than the whole quantity which the measure is supposed to hold. Such measures have been made and used here to a considerable extent, but the objections to them will be seen at a glance. The penalty for their manufacture and use is quite severe, so they will probably disappear before long. The tinsmiths do not, of course, object to the new regulation, as under it their sales will be considerably increased. Milkmen and other users of liquid measures do not view the law with the same satisfaction for obvious reasons.

The demand for building materials is good at the present time. Prices are firm and the dealers have no reason to be dissatisfied, particularly as a number of building contracts are yet to be given.

The axe trade is a growing one in St. John. This year the local manufacturers are looking for an even more successful season than usual, as they are extending their operations. Present prices are a little higher than last year. Double bitt axes are selling at about $12; single bitt axes at $7.

MINES AND MINERALS.

The Dominion Copper Co. have acquired the Boundary Falls smelter, the Sunset, Morrison, Athelstan and Brooklin properties from the Montreal and Boston syndicate and it is said modern machinery and four blast furnaces and a converting plant to reduce matte to blister copper will be installed.

* * *

G. O. Buchanan, of Kaslo, Government inspector, estimates that the lead refined for the last fiscal year in British Columbia amounted to 17,000 tons, of which 11,000 tons were exported. Upon this quantity of refined the bounty, speaking roughly, would amount to $10,000.

* * *

Three weeks' work on M. J. O'Brien's mine at Cobalt is said to have produced 26 tons of metal averaging $2,000 to the ton. The district is being overrun with prospectors.

* * *

The C.P.R. are considering the establishment of a smelter for the smelting of the cobalt and silver ore from New Ontario, which now goes to New York, and is thence forwarded to Saxony.

* * *

The Canadian-American Coal and Coke Co. at Frank, Alberta, are mining and shipping 400 tons of coal per day. Part of the mine is still closed on account of the recent fire. They intend opening it up again about July 15.

* * *

The report that the Nova Scotia Steel & Coal Co. were to remove their plant to Sydney Mines was mixed up with the closing of the furnace at Ferrona and the removal of the Trenton plant. The ore has all gone to Sydney Mines since last Fall and the ingots all go to Trenton for manipulation. Trenton is considered a better point for distributing the finished product than Sydney Mines.

WHITE LEAD JUMPS UP.

The tariff changes announced in Hon. Mr. Fielding's Budget speech has sent the prices of ground white lead up to $100 per ton in Montreal, according to a telegram received Friday noon. In Toronto $110 per ton is quoted. Although some dealers are quoting $5.50 per hundred, others are a shade below this. It will take a few days for matters to settle themselves, and prices may go as low as $5.40 or as high as $5.60.

WALL
COVERINGS

We always have a large and well assorted stock of

BURLAPS

on hand, and are agents for the celebrated

FAB-RI-KO-NA

Dyed Tapestry Burlaps.

Write for samples and prices.

Orders filled same day as received.

G. F. STEPHENS & CO., Limited

PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, July 7, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

PREPARATIONS are being made for two important conventions in Winnipeg during the next few weeks. The first is that of the Western Retail Hardware and Store Dealers' Association, and the second is that of the Master Plumbers' Association. Both promise to be highly successful. The Hardware Association meet on July 26th and 27th, and the plumbers on August 8, 9 and 10.

* * *

Business is active in all lines, and prices are steady. There are no important changes to note.

* * *

Screen Wire Cloth—Price is steady at $1.55 per 100 square feet.

Poultry Netting — In brisk demand. For the 2-inch mesh in No. 19 gauge wire, prices are as follows:

24-inch roll, perroll	$1 20
30 " "	1 50
36 " "	1 80
48 " "	2 40
60 " "	3 00
72 " "	3 60

Wire—More fencing has been sold this season than in any previous season, and there is no slackening in the demand. Staple lines of wire are also in good demand at steady prices. We quote:

Barbed wire, 100 lb	$2 85
Plain galvanized, 6 to 8	3 39
" 9	2 50 2 90
Plain galvanized, 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	3 85
Staples	3 35
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
" 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—In normal demand for the season. Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Moving in very large quantities. Base price: $2.85 per keg.

Cut Nails—Base price $3 per keg. Very few selling.

Screws—In very brisk demand. Discounts continue as follows:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat "brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are quoted as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

"Arcade"	70 and 10 p.c.
"Black Diamond"	60 p.c.
"Nicholson's"	62½ p.c.

Building Paper—There is some competition in building paper. Prices are quoted as follows:

Anchor, plain	55c.
" tarred	70c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—Prices and discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—The price is 20 cents per lb. for ordinary quantities, with concessions for large orders.

Iron and Steel—The iron and steel market is quiet locally, and there are no changes to note. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	12 00

Black Sheets—Trade is active. Prices are steady. We quote:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Demand continues active. Prices are steady. We quote:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 55
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—Turpentine and oil are steady for the moment at last week's prices. There is a heavy movement of all painting materials. We quote:

White lead (pure)	$5 00 to $5 50
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

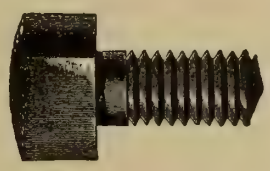
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The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

ASK FOR VEST POCKET MAP O MANITOBA

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

YOU, US AND THE OTHER FELLOW

No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

The Manufacturers List Co., - - - Toronto.

Turpentine, pure, in barrels	$ 1 00
Less than barrel lots	1 05
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—

16 to 25 united inches	$2.40
26 to 40 "	2.65

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00

21-oz. C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
6 to 100 "	

CONDENSED OR "WANT" ADVERTISEMENTS.

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

BUSINESS FOR SALE.

HARDWARE, stoves, tinware stock and good will of Rogers hardware store, Keele and Dundas streets, Toronto Junction, Ont., for sale on easy terms to suit purchaser; stock can be inspected and particulars obtained on premises or by writing to above address. [27)

HARDWARE and tinsmithing business on Main Line C.P.R. in Manitoba. Stock and fixtures $9,000. Solid stone store $3,500. Terms: Half cash, balance on easy payments. Purchaser can lease store if preferred. This is an old and well established business, paying handsome profits. Good reason for selling. For full particulars apply P.O. Box 32, Oak Lake, Man. (29)

SITUATION VACANT.

WANTED—Tinsmith for eavetroughing and furnace work; state wages. H. Andrews, Orillia, Ont.

TRAVELER WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

PITCH FOR SALE.

ONE carload hard carbon pitch now in our warehouse. Canadian General Electric Co., Limited, Peterboro'. (28)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Supplying Coal for the Dominion Buildihgs," will be received at this office until Tuesday, August 8, 1905, inclusively, for the supply of Coal for the Public Buildings throughout the Dominion.

Combined specification and form of tender can be obtained on application at this office.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, June 26, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (27)

PERSONAL MENTION.

Taylor Bros., New Liskeard, have opened a branch hardware store at Cobalt.

Mr. C. Richardson, of the Caverhill-Learmont Co., Limited, has gone for a short holiday.

Mr. James R. Wilson, of the Thos. Robertson Co., Limited, has returned from a pleasant fishing trip.

Mr. Fred Stadelman has been appointed assistant manager of the New York office of the Wellman-Seaver-Morgan Co.

J. A. Flett, Vancouver, has opened a fine new hardware store on Hastings street, next to Woodward's departmental store.

Captain Pritchard, of the Lewis Bros. Co., is away in the Eastern Provinces, where he has joined his regiment in their annual camp.

The Fletcher Mfg. Co. are putting in a new store front on their hardware store at College and Yonge streets, Toronto, the cost to be $1,500.

Mr. Harry V. Croll, M.E., for the past eight years with the E. P. Allis Co., and their successors, Allis-Chalmers Co., of Chicago, has resigned and accepted a position with the Wellman-Seaver-Morgan Co., of Cleveland, Ohio.

Mr. W. A. Stadelman, eastern agent of the Wellman-Seaver-Morgan Co., and who has been in charge of the eastern office at No. 42 Broadway, New York City, has been appointed general sales agent of the same company, with headquarters at Cleveland, Ohio, taking effect July 1st.

Hardware and Metal's representative in the Maritime Provinces had a nice chat with Mr. G. Stothart, the hardware merchant of Chatham, N.B. He is still doing business at the old stand, and reports trade very good. Mr. Stothart has been reading Hardware and Metal for the past seventeen years, and still looks for it every week.

Mr. M. J. Curtin, who for 14 years has been on the staff of Lewis Bros., Limited, Montreal, decided recently to leave the firm and go west. Before severing his connection the company and staff presented him with a gold watch and a suitable address as a memento of their appreciation of his personal worth. Mr. Curtin replied to the donors, and was then wished the heartiest of good things for his future.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Armoury at Guelph, Ont.," will be received at this office until Monday, July, 17, 1905, inclusively, for the construction of an Armoury at Guelph, Ont.

Plans and specification can be seen and forms of tender obtained at this Department or on application to the caretaker of Public Building, Guelph, Ont.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent (10 p. c) of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By Order,
FRED. GELINAS,
Department of Public Works. Secretary.

Ottawa, June 24, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (28)

Are you handling our



STEEL FEED TROUGHS?

If not we can make you an interesting proposition as our NEW TROUGH CATALOGUE and other literature are now ready to assist him trade. We supply you liberally with them and give exclusive agency. Let us hear from you.

STEEL TROUGH & MACHINE Co., Limited
TWEED, Ontario

REFRIGERATORS



Up-to-date dealers buy our lines because our refrigerators are unequalled for their finish, construction and general appearance. Write for Catalogue.

C. P. FABIEN
Refrigerator Manufacturer
MONTREAL, - - CANADA

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3893

TORONTO ISLAND BREAKWATER EXTENSION. Intending contractors will please take notice that the time for receipt of tenders for the above mentioned work is extended to Saturday, the fifteenth July, 1905, inclusively, and that in addition to the steel piling shown on the plans and described in the specifications now on exhibition for the Toronto Island Breakwater extension, the Department of Public Works will also receive separate tenders for the building of the work with the thirty-five pound per foot sheet piling manufactured by the United States Steel Piling Company, and also with the Friestedt interlocking steel piling thirty-three pound rolled channel. Only one cheque need accompany the three tenders.

By Order,
FRED GELINAS,
Dept. of Public Works, Secretary,

Ottawa, June, 29, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (27)

We make Electric Fixtures, Sockets, and Cut-Outs

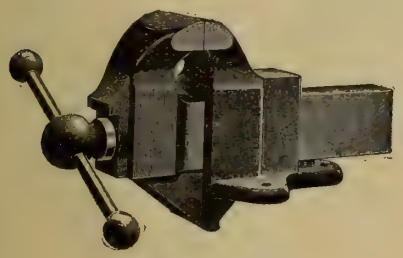
Munderloh & Co

Electrical Supplies of all kinds. MONTREAL.

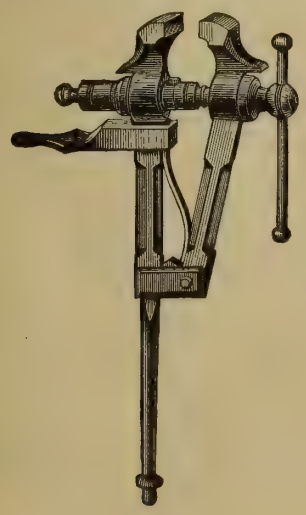
NOVELTIES FOR THE HARDWAREMEN

COLUMBIAN VISES.

Solid box and machinists' vises are shown in the two cuts reproduced herewith, the Columbian Hardware Co., Cleveland, Ohio, being the manufacturers. This company succeeded the Trenton Vise and Tool Works and the Van Wagoner & Williams Hardware Co., both of which concerns won an enviable record for honesty in the manufacture of tools.



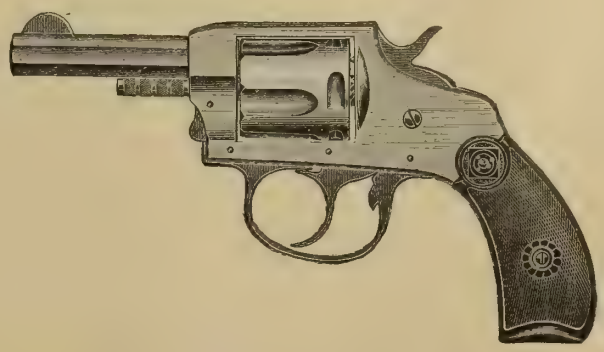
Solid Box Vise.



Machinists' Vise.

DOUBLE-ACTION REVOLVERS.

THE Harrington & Richardson Arms Co., Worcester, Mass., have lately put on the market solid frame double action revolvers, models 1904 and 1905. The latter model, shown herewith, is a small frame revolver following the lines of the company's Premier revolver, .32 caliber, and eventually will probably succeed the Young America revolver in .32 caliber only. This model with 2½-inch barrel weighs 11 ounces and handles the .32 S. & W. cartridge. The 1904 model follows closely the lines of the company's Automatic, and is intended to succeed the American double action in .32 and .38 calibers, which has been made for more than 20 years. This revolver in .32 caliber is six-shot and with 2½-inch barrel weighs 16 ounces. In addition to the .32 S. & W. it will handle the .32 S. & W. long and .32 Colt new police cartridges. In .38 caliber this model is five-shot, and with 2½-inch barrel weighs 15 ounces, handling only the .38 S. & W. cartridge. Both of the above models can be furnished with 4½ and 6-inch octagon barrels in either nickel or blue finish.



1905 Model Solid Frame Double-Action Revolver.

COAXER BAITS.

COAXER baits, manufactured by W. J. Jamison, Chicago, Ill., were placed on the market only about a year ago, and have already reached a very large sale, which speaks volumes for their efficiency and indicates that when cast among fish they are just what their name indicates. This bait has been prepared after a great deal of study and observation, and is said to be about as near nature as it is possible to get, and close enough to fool the most wary of fish. It is pronounced an ideal surface bait, and what is most important, is constructed so as to get through rushes and over floating weeds and drift without snagging. It is a



Coaxer Bait.

brilliant bait, as well as graceful in design and lively in action. It is easy to cast, and the manufacturer simply guarantees it to please the most critical fisherman. We show here the Coxer No. 2, in its exact size. It is a great favorite with expert fishermen for both bass and pickerel, while it can be used for casting, skittering or trolling. An attractive little catalogue telling all about these baits will be sent if you ask the manufacturer and mention this paper. A gang hook attachment is also made to hang from the eye of the hook in the bait. This is for those who like more hooks when fishing in clear water. When in weeds the hooks can be instantly removed, leaving one bait weedless.

PAINT, OIL AND BRUSH TRADES

PLUMBISM IN PAINT WORKS.

A SPECIAL report has just been issued by the British Government, prepared by Dr. T. M. Legge, H. M. Inspector of Factories, on the manufacture of paints and colors containing lead, as affecting the health of the operatives employed. Dr. Legge describes his communication as "a report upon the incidence of plumbism in paint and color works, and upon the working of the existing special rules for the processes in the manufacture of paint colors and the extraction of arsenic." These processes were certified by the Secretary of State as injurious to health on May 13, 1892, and in the same year special rules were established, and have remained in force until now. The medical inspector says the interpretation which it is possible to give to "processes in the manufacture of paints and colors" is very wide, and, since neither in the definition nor in the first paragraph is mention anywhere made of lead, the supplement to the annual report for 1900 shows that there were 370 paint and color works, employing 5,839 persons (5,420 males, 419 females). It is easy to understand how it comes that wide extension has been given to the application of the rules seeing that the requirements are very moderate, meaning little more than provision of washing accommodation and overalls for those employed in lead grinding. What would have caused difficulty, viz., exhaust ventilation at the grinding and mixing mills for white lead, was not required, no doubt because the greater effect of the inhalation of dust as a cause of plumbism as contrasted with the observance of personal cleanliness was not sufficiently recognized at the time the rules were promulgated.

The chief centres of the paint and color industry are East and South London, Liverpool, Glasgow, Hull, Manchester and Birmingham. There are 318 works now under the special rules. In 70 of these works lead poisoning has occurred, 252 males and 17 females are reported as having been attacked. The inspector gives an analysis of 225 cases of lead poisoning among male adults, from works under the special rules for paints and colors. Having eliminated all the doubtful cases, he shows how the poison entered the system in the others. He finds there were 164 cases caused by the absorption of dust (mainly of white lead) and 41 cases were the effects of wet processes in color houses and other causes, leaving 20 cases unaccounted for. He thus comes to the conclusion that the dust in the mixing and grinding of white lead is responsible for the great bulk of poisoning which takes place in paint and color works, and that the removal or diminution of this source of danger would at once reduce the incidence of poisoning in them.

He describes briefly how the processes are carried on. "In a small factory a cask of white lead is broken and the material scooped out and placed in a pail. Scales are at hand, and when the amount of lead removed weighs half a cwt. the contents of the pail are discharged either into a cylindrical pug mill or into the pan of an edge runner. Oil is then added. Dust is unavoidably created in the scooping out, and more especially in the discharge of the contents into the pan. The first few revolutions of the edge runner also create dust before the material has had time to mix with the oil." In larger works there is usually an upper platform in which the white lead is shoveled out of the cask into openings in the floor leading to shoots which convey the white lead into the pug mills or edge runners below. Dust here, in the absence of an exhaust draught, inevitably arises in the shoveling of the white lead when it enters the shoot, and also when it is discharged into the pug mill below. From an examination of the returns, furnished by the district inspectors, of 148 paint works in which one or other of these methods of grinding white lead is carried on, it appears that in 16 only has any attempt been made to control the dust at these points. In some of these the installation has followed on particular risks observed during the course of this inquiry, and in others the arrangement made has not been applied in the best way.

The medical inspector describes the various processes, and the character of the works in which he met with them, and then in an appendix he makes suggestions as to how the inhalation of dust—the prime source of the trouble—is to be prevented. Respirators and systems of ventilation have not prevented plumbism. He then submits a series of suggestions, summarized as follows:

Duties of Employers.

No dry compounds of lead shall be placed in any hopper without an efficient exhaust draught to draw the dust away from the worker.

No dry compounds of lead shall be manipulated except—

(a) in an apparatus so closed as to prevent the escape of gas; or

(b) with an efficient exhaust draught and air guide so arranged as to carry away the dust as near as possible to the point of origin.

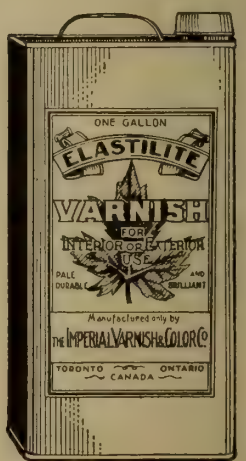
No woman, young person, or child shall be employed in manipulating dry colors containing compounds of lead.

Every person employed in a lead process shall be examined once in each calendar month by the certifying surgeon of the district, who shall have power to suspend from employment in any lead process.

Overalls shall be provided for all persons employed in lead processes; and a

STOP BAD HABITS,

buying varnish without a reputation. Stock Elastilite Varnish, with the highest reputation, established on quality, that has always pleased the people. Equally good for inside or outside.



The Imperial Varnish & Color Company, Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.

cloak-room and dining-room (unless the factory is closed during meal hours) shall be provided.

Duties of Persons Employed.

All persons employed in lead processes shall present themselves for examination.

No person after suspension shall work in a lead process without written sanction by the certifying surgeon.

Every person employed in a lead process shall wear the overalls provided.

No person shall introduce or partake of any food or tobacco in any room in which any person is employed in a lead process.

No person employed in a lead process shall leave the premises or partake of meals without previously and carefully cleaning and washing the hands.

TURPENTINE AT SAVANNAH.

THE futility of the effort to hold up artificially high prices for spirits of turpentine at Savannah is seen in the course of the market there since the collapse of the boom of a week or two ago, says the Paint, Oil & Drug Review. On June 1st there were in stock at Savannah 5,536 casks of spirits. It was then that the market was advancing to the high point of 79c., which was reached late that week. At once the producers of the south began to rush their spirits to Savannah as the highest market. On June 10 the stock at Savannah had increased nearly three-fold and stood at 15,752 casks. Then the market began to decline. The load was too heavy; and in a few days quotations fell to 20c. below the highest point of June. There was a reaction to 1 to 2c. higher, but the market is not strong.

Meantime, the stocks continue to increase. On June 17 they were 19,910 casks; on June 24, 25,569 casks. Savannah has attained the reputation of being the highest spirits turpentine market, and the results are seen in the increased shipments to that port. That they will be relatively any smaller this season is unlikely. So long as Savannah makes the price of spirits she will get the bulk of the shipments, and it will not be possible to maintain more than moderately high prices.

DAMP PROOF ADHESIVE.

It is not generally known that a fair knotting varnish free from surplus oil is by far the best adhesive for fixing labels, especially on metal surfaces. It dries instantly, ensuring a speedy job and immediate packing, if needful, without fear of derangement. It has great tenacity, and is not only absolutely damp-proof itself, but is actually repellent of moisture to which all water pastes are subject. It costs more, but the additional expense is often infinitesimal compared with the pleasure of a satisfactory result.

SMOKE TURNED INTO GAS.

A novel method of getting rid of black smoke, and at the same time turning it to use, is adopted at some Belgian factories. The smoke is driven by fans into a porous receptacle, over which flows a stream of petroleum or similar liquid. The smoke is thus caught and turned into gas that gives great heat, and can be used for running gas engines.

GERMAN VIEW OF U.S. MARKETS.

A LARGE firm of importers of rosin in Hamburg wrote as follows to a German trade paper last month:

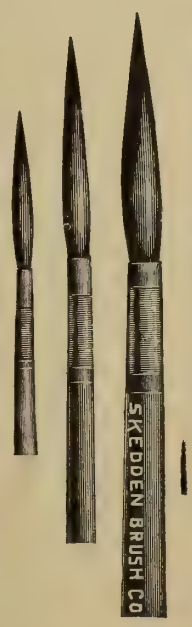
"It appears to us to be desirable to throw some light on the American rosin market and the abnormally high prices and ridiculous unsteadiness in the quotations. Probably not everyone interested in this article is aware of the circumstance that the larger portion of the rosin produced in America must, according to contract, be taken over by an American trust at Savannah market prices. The consequences of this obligation to the trust are that it must buy at Savannah prices a large amount of rosin without being able to find a ready outlet at profitable prices for the daily receipts. The rosin is therefore stored in the ports until a very large amount of the various grades is accumulated, then favorable market conditions are provided, and the accumulated stock is disposed of. From the moment when the trust has succeeded in cleaning up its holdings, or at least the greater portion of them, at the artificially raised prices, the market at Savannah drops, for the next point is to buy cheaply again until a repetition of the same manipulation yields the highest profit attainable. The same game is performed about a dozen times a year. An attentive observer of the rosin market may often have looked in vain for the reasons of these frequent fluctuations, for as a matter of fact there are no reasons whatever. The only chance to oppose the rosin trust successfully lies in the association of consumers and others interested in a joint stand against it."



—FOR SALE BY—

The KENNEDY HARDWARE Co., Limited

49 Colborne St., TORONTO, Ont.



Once Used

always used is the record of

SKEDDEN

BRUSHES

Do you doubt this? Ask someone who has used them. Our Catalogue will interest you.

The Skedden Brush Co., Limited,

Hamilton, Ont.

Toronto Office—57 Queen Street East.

Phone Main 3431. F. W. KNIGHT, Agent.

The....

Real Test

OF A LIQUID PAINT IS

How it Wears

Those who have used

"ANCHOR"

and

"ENGLISH"

LIQUID PAINTS

during the last

30 YEARS

tell us they have given perfect satisfaction.

If you handle these goods your customers will stay with you.

They are the only liquid paints in which the White Lead used is

Brandram's B.B. Genuine

BRANDRAM BROS & CO BRANDRAM'S B. B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited

HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED

MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 7, 1905.

BUSINESS continues to flourish. Paints and oils are selling more freely than they were last year at this time, and the demand seems to be increasing. No Summer decline has taken place, and it is evident that this branch of the hardwareman's business is receiving great attention.

Turpentine is lower than it has been or some time, and the drop is most likely to hold. The boom in Paris green keeps steadily up and there is a probability of an advance in price. This was reported through the trade but it is by no means a positive announcement. White lead is firm and in increased demand all over.

Canadian Paris Green — Barrels, 15 1-4c.; arsenic kegs, 15c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound packages, 17c.; half-pound packages, 19c.; one pound tins, 18c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Pure English Paris green, petroleum barrels, 15 1-4c.; arsenic kegs, 15 1-2c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound paper boxes, 17c., one pound tins, 18c.; one-half pound paper boxes, 19c.; one-half pound tins, 20c. Terms, 2 per cent. off thirty days, or ninety days net from date of shipment.

Turpentine—Single barrels 93c. per gallon; two to four barrels, 92c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels, 52c.; five to nine barrels, 51c.; boiled, one to four barrels, 55c.; five to nine barrels, 54c. f.o.b. Montreal., Net 30 days.

Ground White Lead — Best brands Government standards, $4.70 to $4.85; No. 1, $4.45 to $4.60; No. 2, $4.20 to $4.35; No. 3, $3.87 1-2 to $3.97 1-2; No. 4, $3.50 to $3.60, all f.o.b. Montreal.

Dry White Zinc—Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure. 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil—8 3-4c. to 9 1-4c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—No change has occurred on this market. Prices are steady. Our quotations are: American prime white 14 1-2c., American water white 16c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East.
Toronto, July 7, 1905.

LINSEED oil and turpentine have both weakened somewhat, although the market is bare of both articles. Quotations are still the same, but the tendency is downwards. So far there has been no cheap turpentine received although a few carloads sold at present quotations have arrived. Some jobbers are quoting at 85c. the goods to be delivered as soon as cheap oil arrives, but present delivery prices run from 95c. to $1. Oil receipts have also been light, but new goods expected to arrive in a few days may bring a decline.

Sales of mixed paints continue very large, and Paris green is moving at a tremendous rate. The call for the latter from country merchants is exceeding expectations, and stocks are being heavily called upon. The heavy building is causing a demand for dry colors and paint materials, which is taxing the shipping facilities of the jobbing houses to their utmost. Re-orders are becoming more frequent.

Petroleum and glass conditions have not changed, and there is nothing of importance in these lines to report.

White Lead—Ex Toronto, pure white lead. $4.75; No. 1, $4.37 1-2; No. 2, $4; No. 3, $3.62 1-2; No. 4, $3.35 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 1-2 lb. packages; genuine dry white lead, in casks, $4.25.

Red Lead—Genuine in casks of 560 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75; No. 1, in casks of 500 lbs., $4 to $4.25; ditto in kegs of 100 lbs., $4.50.

White Zinc—Genuine French V. M., in casks, $6.50 to $7; Lehigh, in casks, $6 to $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in

Always in Demand

A Quick-drying, durable and thoroughly satisfactory paint.

Granite Floor Paint

Made specially for floors, piazzas, steps, etc. Unequalled for high quality and low price. Better get a supply. Eight Colors. All Quantities. Send for Catalogue.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.
617-621 Austin Ave., CHICAGO, ILL.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT VARNISHES.
HIGH-GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

BRITISH BUSINESS CHANCES.

Firms desirous of getting into communication with British manufacturers or merchants, or who wish to buy British goods on the best possible terms, or who are willing to become agents for British manufacturers, are invited to send particulars of their requirements for

FREE INSERTION

in "Commercial Intelligence," to the Editor

'SELL'S COMMERCIAL INTELLIGENCE,'

Temple House, Tallis St,. Temple Avenue, London, E.C.

"Commercial Intelligence" circulates all over the United Kingdom amongst the best firms. Firms communicating should give reference as to bona fides.

N.B.—A free specimen copy will be sent on receipt of a post card.

ABOUT GLUES

What kinds do you handle? Are you and your customers satisfied? Perhaps we can give you a better article at a fairer figure. Our SCOTCH GLUES will be found of exceptional strength, and equal to many glues for which much higher prices are charged. Let us send samples.

GROVE CHEMICAL CO. Ltd., Appley Bridge, Lancashire, Eng.

OUR PATENT DOUBLE LOCK FOLD

used on every wire in the bottom of

THE METALLIC ASH-SIFTER

is the greatest contrivance yet discovered for securing permanency in sifter wires.

OUR PATENT WIRE BALE designed to hook over a fence and take the wait of the sifter off the operator is just as great a contrivance. AN ILLUSTRATED CIRCULAR WILL INFORM YOU.

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**



A LOOK OF CONTENT

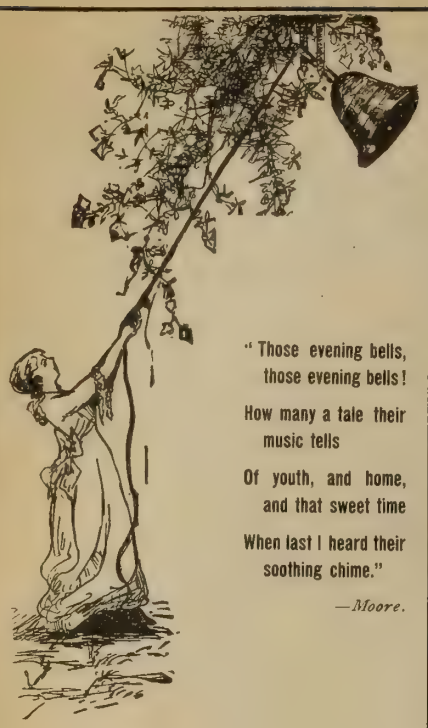
always rests upon the **face** of the merchant who sells over his counter the **ISLAND CITY** brand of ready mixed paints.

Comparison proves all we claim

If you cannot call, **write** and we will send you a booklet which tells you **everything.**

P. D. DODS & CO.,

MONTREAL, VANCOUVER
WINNIPEG, TORONTO



"AS CLEAR AS A BELL"

The Varnishes made by the CANADA PAINT COMPANY are "AS CLEAR AS A BELL," and free from sediment.

They are fully matured and tested before being "put up" for shipment, and their uniformity may be relied upon for all classes of work.

THE CANADA PAINT COMPANY Limited

Varnish Makers

MONTREAL
TORONTO
WINNIPEG

barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 56 to 57c.; boiled, 59 to 60c.; 5 to 9 barrels, raw, 55 to 56c.; boiled, 57 to 58c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrels, 95c. to $1; 2 to 4 barrels, open; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c. extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—A normal business is being done. We quote: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Crude Petroleum—Conditions are unchanged. We quote: Pennsylvania, $1.29; Ohio, 84c.; Somerset, 81c.; Indiana. 88c.; Canadian, $1.27.

Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

No marked improvement has taken place in the window glass situation, and the probabilities are that there may be no change for some time. Little glass is coming in by steamer, and the trade is poorly supplied in certain sizes. The cutting of glass to supply the trade is still going on, and the demand has not slackened. The building trade may be affected later if the imports do not improve. News from Belgium is not encouraging, and advice to buyers is to go ahead and stock as much as possible at once. Our quotations are as follows: First break, 50 feet, $2.00; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do.. $20; eleventh do., $24, and twelfth do., $28.50.

HOW TO TEST TURPENTINE.

To test the purity of turpentine drop a small quantity on a piece of white paper and expose to the air. No trace will be left if the turpentine is pure, but if it contains oil or other foreign matter the paper will be greasy.

A WHITEWASH REMOVER.

To remove whitewash from walls so as to leave them in good condition for papering they should be thoroughly washed with a solution of vinegar or sulphuric acid and water before sizing. After the walls have been allowed to dry, the size may be applied thin and hot, after which they will be ready for papering.

LEWIS BROTHERS MOVE.

The Lewis Bros. Co. will begin moving to their new building on Bleury street on Monday, 10th inst. The operation of moving, trying and all as it will be for so large a concern, will in no way interfere with the maintenance of their motto, "Prompt shipment," and customers will not know that there is a change going on—a change, too, that means one step in the evolution of one of the largest and most progressive houses in the Dominion.

Up-to-date methods rule at this establishment, as was remarked recently in one of their ads., where the head of an axe appeared. Right on the side of the axe blade is emblazoned a very attractive reproduction of the Lewis Bros., Limited, new building. Everywhere on their stationery and in most unique places, pictures have appeared, and no pains have been spared to let the public know of the change.

BARGAINS NEEDED.

Special bargains are an absolute necessity. Ten years ago this was not true in many sections. Almost anything went, but if you have not special bargains with which to attract and hold your trade, you will find yourself getting behind the procession in these swift days.

Because you have done business without special bargains and succeeded partly is no reason why you can continue to do so. We are past the dividing of the ways. There is no second choice. The people want special bargains and you must furnish them.

That is why the wholesale bargain lists, which wholesalers and manufacturers are sending to the trade are valuable to you.

Watch closely for deals that will make good specials. Buy them judiciously. You can load up too much even on special bargain goods, but you need some of them. They are the magnetism of your advertising.

BUSINESS CHANGES

Ontario.

J. A. Lavinge, carriage-maker, Cornwall, has assigned to G. I. Gage.

The store of Jas. H. Orr, plumber, Stratford, is closed.

Taylor Bros., hardware merchants, New Liskeard, are opening a branch at Cobalt.

Woods Stove Co., tinsmiths, plumbers, etc., Lindsay, are offering to compromise.

F. A. Musgrove & Co., harness-makers, Picton, have assigned to Jas. Gillespie, sheriff.

E. R. Rogers, hardware merchant and stove dealer, Toronto Junction, has advertised his business for sale.

Quebec.

Sanfacon & Paradis have been registered as blacksmiths, Quebec.

Chapleau & Bastien have been registered as contractors, Montreal.

Brunet & Brunet, contractors, Montreal, have dissolved partnership.

Lasnier & Boucher, saddlers, St. John's, have been succeeded by L. Lasnier.

Lewis Bros., Limited, have been registered as wholesale hardware merchants, Montreal.

F. Tousignant & Co. have been registered as blacksmiths and carriage-makers, St. Hyacinthe.

Hector Charbonneau & Cie. have been registered as wholesale and retail hardware merchants, Montreal.

Manitoba and N.W.T.

J. E. Carroll, tinsmith, Lemberg, has sold out to W. Marshall.

John Watson, dealer in implements, MacGregor, has sold to M. F. Ward.

British Columbia.

British Columbia Wire & Nail Co., Limited, Vancouver, have suffered loss by fire to the extent of $1,000.

Nova Scotia.

The business of the estate of O. A. Rogers, hardware merchant, Middleton, is advertised for sale.

GERMAN DEPARTMENTAL STORES.

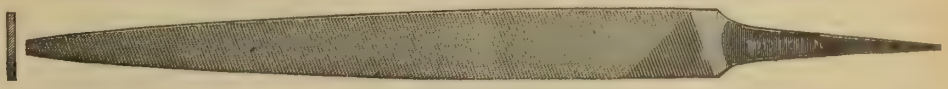
According to U.S. consular despatch Germany is contemplating the establishment of large departmental stores in the United States and other countries, the object being the exploitation of German goods.

The cry now raised by export and trade papers in Germany and Austria is, "Start department stores abroad." One of these journals says that the Belgian export houses have established department stores in foreign countries, and that the United States Export Organization is acting upon the propaganda started by United States consuls for the establishment of American department stores abroad. Dr. Salomonsohn, a partner of the Disconto Bank of Berlin, who made a tour of investigation through the United States, says in his book, giving his impressions of the journey, that "the most efficient means of defence against the 'American danger' is the adoption (by the Germans) of American methods, and, above all, the combination of German business firms."

Globe Brand Files and Rasps

WARRANTED

Possess all the merits of the Best Hand-Cut Files. For sale by all prominent Hardware Dealers.



Thirty years' experience has taught us how to produce a Perfect File, consequently we are justified in giving our customers an absolute warranty with our product.

NICHOLSON FILE COMPANY

FACTORIES:
Providence, R.I., Paterson, N.J., Beaver Falls, Pa., Anderson, Ind., Port Hope, Canada.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

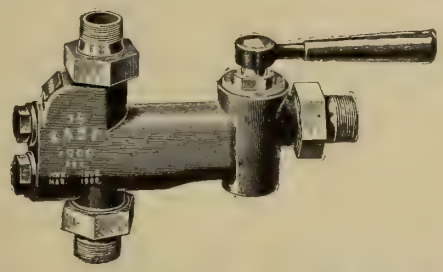
A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR
GILBERTSON'S
COMET

Brand Galvanized Sheets

Uncommonly good at an uncommonly low price. Every sheet guaranteed.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

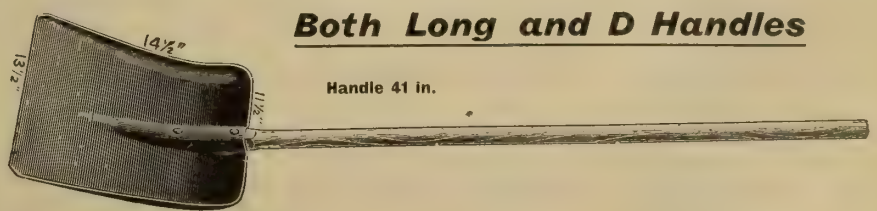
Sure Action. Few Parts

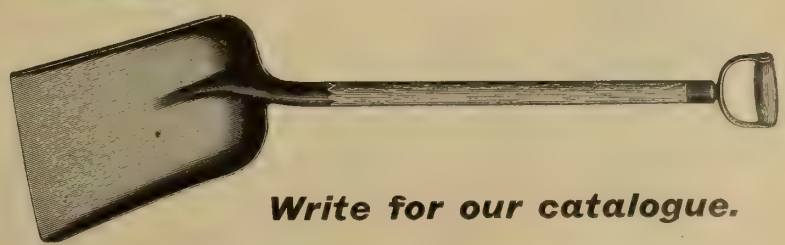
CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.
District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

SNOW SHOVELS - FURNACE SCOOPS

Both Long and D Handles





Write for our catalogue.

F. E. KOHLER & CO., Canton, Ohio., U.S.A.

SOL-A-RINE

The Great Polish

For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO



OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, LIMITED

MANUFACTURERS OF

Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

Agent:

JOHN FORMAN, 644 Craig Street
MONTREAL.

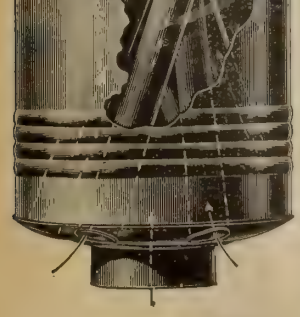
ATTENTION!

We will send you a sample of a perfect Metal Polish

YORK

if you will send us your name and address. If you get a sample, you'll want a supply.

ANGLO-CANADIAN SUPPLY CO.
3 Wellington St. E., TORONTO



Cole's Spiral Tubular Radiator

Can be used on any stove

Best radiator—at half the cost of inferior goods.

Only radiator made adapted for both hard or soft coal.

Size pipe collar 5, 6 and 7 inches.

These radiators give the best satisfaction, and have yet to receive a single complaint.

FOR SALE BY

E. T. Wright & Co., - Hamilton

STOVES AND TINWARE.

SELLING STOVES IN COUNTRY.

EZRY WOOD, who runs the hardware and stove store in the modest village of Kerr Centre, is not, strictly speaking, of a strenuous nature, and yet there occurs now and then a strenuous chapter in his otherwise tranquil career. Not long since, having sold a stove to a man who lives a few miles out in the country, he went next day to deliver it and set it up. The lady of the house did not see the stove until Ezry arrived with it and was proceeding to put it in place. It did not take her long to make up her mind that it was "no good," and that she would not have it. Her husband strove to convince her that it was just what she wanted; but she was not open to conviction and soon silenced him, as no doubt she had done many times before.

Then Ezry took a hand in the discussion by indiscreetly remarking that if she did not keep the stove he would have to be paid for his trouble in bringing it so far and taking it back again. When the old lady heard this she seemed to feel that her vocabulary was inadequate to do the subject justice, so she grabbed up the poker with an intention so obvious that Ezry leaped out, not deliberately, as he usually does things, but as if he had a long journey to make and very little time to make it in. As he reached the front gate he gave a look behind, and seeing a nickel plated poker glistening in the sunshine very close in his rear he proceeded to hit it down the turnpike, tandem fashion, with the old woman for a team mate.

There is nothing in which Ezry takes so much pride as his luxuriant growth of whiskers, which, being of the "loose chewing" variety, are very sensitive to air currents. Consequently, as he tore down the highway they streamed back over either shoulder like pennants waving defiance to the oncoming poker. In one respect Ezry had a slight advantage as he was going toward home, while his pursuer was going away from hers, and he was not inclined to throw away any advantage he might have, no matter how slight. The pursuer made some vicious slashes at Ezry's fleeing form, but just failed to connect. Ezry did not do a great deal of talking. On the contrary, he conducted himself like a man who had other uses for his breath just then. But the hunter in this cross country chase kept shouting: "Come back and git that stove." The command was unheeded so far as Ezry was concerned, he probably thinking the conditions were not right for going back after it just then.

When convinced that Ezry did not intend to get lost by hesitating the old woman gave up the chase, much to the relief of Ezry's shocked running gear. After he had taken a position within hearing, but out of poker reach diplomatic relations were resumed, although it was evident from Ezry's manner that he was prepared to make a quick passage home in the event of those relations being suddenly broken off. After some parleying in which Ezry engaged mostly as a listener, it was arranged that he was to go back to the house, get his horse and wagon, also the stove, and the woman was to come to his store next day and select another one more to her taste. He was to get nothing, however, for delivering the rejected stove. This suited Ezry, on condition that she paid cash and carted home the stove she selected. She finally agreed to do so, and Ezry went back, loaded the stove in his wagon and took it home with him.

After getting it there he quietly removed the name plate from it, and substituted a shorter handled poker for the one that had caused him to exceed the speed limit. Now Ezry was born in the country and has lived his whole life there, but his birth was not an event of recent date, nor had the intervening time been wasted by him, as all of his acquaintances are aware. So the next day, when the woman and her husband came to purchase another stove, Ezry, in his unsophisticated way, sold them the same stove over again without their knowing it, and at an advance of $3 over the former price.

As he saw his customers drive off with their purchase and felt the "long green" in his pocket, Ezry calmly milked his chin foliage, and soliloquized something like the following: "She had me purty scart there one spell, but I guess she held the hot end of the poker after all."
—Metal Worker.

NEW MILK MEASURE.

Messrs. T. G. Adams & Co., Birmingham, England, have brought out a novelty in enamelled ware in the shape of a milk measure. The measure is in the form of a tin basin, having grooves or ridges around the measure indicating the exact depth of pints and quarts. Hitherto no lettered milk measures would pass muster, because it was quite easy to tilt the bowl slightly so that the milk reached the measure. In the new bowl the complete line round it prevents any dodging of that kind.

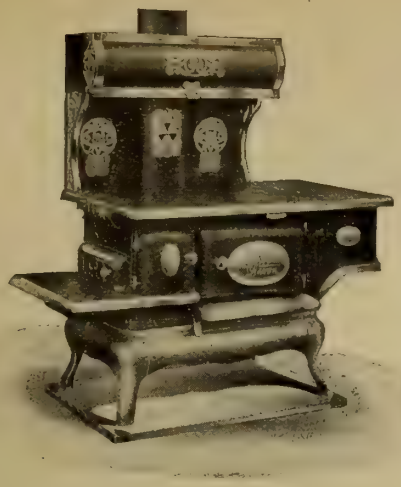
STOVE ITEMS.

What has been your experience with stove demonstrations? Do they bring customers or loafers to the store?

Have you had a stove demonstration in your store? Get the grocer to go in with you and have him supply some new pancake flour or tea. It will benefit both of you.

The James Smart Mfg. Co., Limited, Brockville, have been awarded the contract for installing heating and ventilating systems in the Roman Catholic church at Paris, Ont. Two large Kelsey heaters will be used.

Trouble is saved by seeing that every stove sold is set up properly. Too often this important part of the business is entrusted to the purchaser who has no more idea of how a stove should be set up than that it should be connected with a flue in any old way. The flue must be good and the elbows of the pipe must be as few as possible, besides the height of the chimney and other items are of much importance.



THE EMPIRE QUEEN RANGE

pleases the women

It pleases them because it is a **pleasure** to work with. It is easy to clean, heats uniformly, can be changed from wood to coal without difficulty, and the ashes are easily removed. Would you like to be an agent for **The Empire Queen Range?**

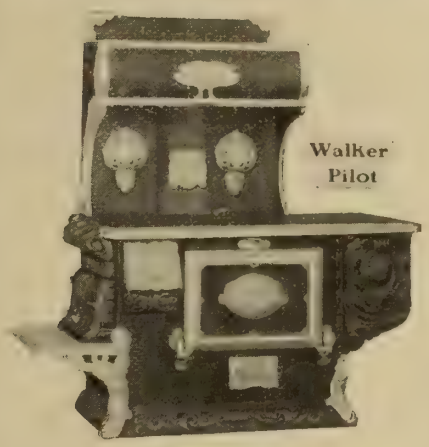
DROP US A LINE.

The Canadian Heating & Ventilating Co.
OWEN SOUND, ONTARIO. Limited

RETURNED
NOV 6 1905

About the

Walker Pilot Steel Range



One of the prominent stove dealers of Western Ontario writes :

. . . . . .

Gentlemen,

Re the Walker Pilot Steel Range we have used in our own kitchen the last six months. Will say it has given every satisfaction, and there can be no better for all purposes.

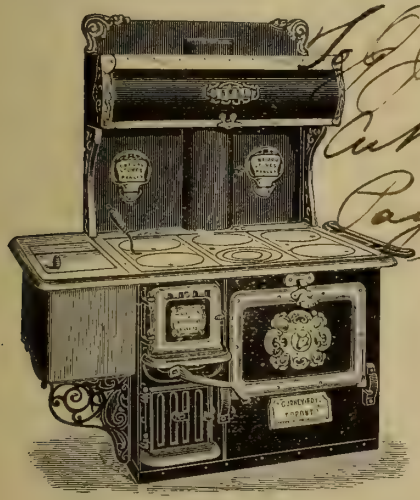
. . . . . .

Many others testify in the same way.

The Walker Pilot will make you larger profits than any other range.

GET OUR CATALOG AND PRICES

THE WALKER STEEL RANGE CO., LIMITED
GRIMSBY, Ont.



Ref. J. Gurney Cat. Book 42 Page 69

Your reputation is too closely tied up in the reputation of the goods you sell for you to tamper with a poor article.

When you recommend the

OXFORD CHANCELLOR RANGE

to a customer you can do it with the enthusiasm born of knowledge that it will live up to every claim for it.

The Oxford Chancellor Range is sold with ease because its reputation as a good baker and coal saver is known far and near, and we are advertising them continuously.

Once sold it is sold satisfactorily to all concerned.

WRITE US FOR PARTICULARS

THE GURNEY FOUNDRY CO., LIMITED

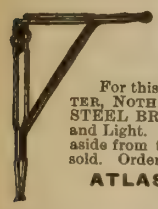
TORONTO——WINNIPEG——VANCOUVER

THE GURNEY-MASSEY CO., LIMITED, MONTREAL, QUE.
THE GURNEY STANDARD METAL CO., LIMITED, CALGARY, ALTA.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.

Wat-r Proof Floors for Malt Houses, Brewer ies, Slaughter Houses Cheese Factories, Cel-lar, Stable Floors, etc-



Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery." Newport.
Emlyn Engineering Work- NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

Don't Forget the Name...
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

WORK AND PRICES RIGHT
GALVANIZING
ONT WIND ENGINE & PUMP CO, LIMITED.
TORONTO, ONT.

...FULL STOCK...
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT.
ST. JOHNS, QUE.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE public have read much of the coal deposits at Medicine Hat, but few have had any idea of its natural gas supply. According to Mayor Forster, the supply is so abundant that gas is furnished to the citizens at 17½ cents per thousand cubic feet for power, light and heating purposes. One of the largest stores in Medicine Hat is well lighted at a cost of 80 cents per month. The proprietor of one of the finest residences in the town paid $60.50 for a whole year's supply of gas for heating during the Winter, lighting the year round and fuel for cooking purposes. A special rate is quoted for manufacturers. Any manufacturer investing $10,000 and employing ten or more hands can secure gas at 5 cents per thousand cubic feet. The town waterworks, the C.P.R. workshops and every industry in the town are operated with natural gas, while the city streets are lighted by a 750-candle-power arc lamp at a cost of 4 cents per night.

The Brantford Screw Co. may extend their works in the near future.

The Plymouth Cordage Co. have decided to accept Welland's offer and locate a factory there.

Guelph City Council has accepted the terms of the Fielding Chemical Co., which are proposing to locate there.

Guelph has decided to purchase an electric lighting plant from Goldie & McCullough, Galt, at a cost of $2,957.

The John Cober Carriage Co., of Listowel, are talking of moving to Hespeler. They employ 20 to 30 men.

A large manufacturing industry in the United States are looking for a site at Toronto Junction. Negotiations are on for the old electric light premises.

Several tests have been made at the works of the Sydney Cement Co., the results being considered very satisfactory. The company expects to be shipping cement in August.

Two of the four open hearth furnaces of the Nova Scotia Steel Co. at Sydney Mines were lighted last Saturday, and the first product of steel will likely be secured this week. For the present only ingot steel will be produced.

The London Machine Tool Co. have decided to remain in London, having secured a splendid site of seventeen and a half acres just east of the city limits, and lying between the Grand Trunk Railway tracks and Trafalgar street.

The Rhodes, Curry & Edmond Co., of Amherst and Sydney, purchased the plant of the Sydney Mfg. Co., and the franchises of that company to manufacture steel cars. The premises will be enlarged and the manufacture of steel and other railway cars commenced.

The site of the blast furnace and coal docks at Port Arthur has been changed, and the works will be located three-quarters of a mile closer to the town, near the Canadian Northern roundhouse. It was found that the bottom at the first site was not suitable for a foundation, and the companies decided to change the site. The new site will greatly benefit Port Arthur. Barnet & Ricord are moving their plant to the site to-day.

The Canadian General Electric Co. will get a large quantity of work out of the conversion of steam power plants into electric power plants in Toronto. As soon as the Niagara power is turned on the construction of the new electric railway to Niagara will be started. In the construction of this line and in the conversion of power plants there will be from $2,500,000 to $3,000,000 of work, the bulk of which will go to the Canadian General Electric Co.

A group of claims of specular hematite iron ore is located at Crawford Bay on the north arm of Kootenay Lake, about 25 miles from Nelson, B.C. The owners have entered upon the development of this deposit, and it is expected that they will soon be manufacturing pig iron upon a large scale. It is said that adjoining the iron ore there is a large deposit of limestone needed for a flux in smelting iron ores. Both deposits are said to be practically unlimited, and the iron ore is the finest yet discovered in the eastern portion of the province.

Thomas Drummond, vice-president of the Lake Superior Corporation, states that the report of the re-opening of the car shops at Sault Ste. Marie is premature. As a matter of fact, the shops which have a capacity of eight finished freight cars per day are ready to open at any time that sufficient business offers, but there is at present no work for them. Speaking of the rail mill, Mr. Drummond says that they are now turning out considerably upward of 500 tons per day, which are all contracted for. The total rail output since the mills opened amounts to 100,000 tons.

The second of the three power development companies at Niagara Falls is now ready for business. On July 1 and 2 the Ontario Power Co. had a section of its power house running and turned power on a transmission line. The water was let into the great mile-long steel and concrete conduit from the head gates, ran down to the table rock, plunged down through the penstocks a hundred and fifty feet, set the ten-thousand horse-power turbines spinning and escaped into the river again. Not a hitch or a delay occurred. Every bit of the ponderous machinery moved like the works of a watch.

Judge Reynolds, Brockville, has given an important decision on a clause of the new Assessment Act. The new Act says that machinery shall be assessed as part of the real estate, but exempts fixed machinery used for manufacturing purposes. James Cummings, of Lyn, who owns a large mill property, appealed against his business assessment, which is based on the real estate value, the assessors having placed the machinery as part of the real estate. The

judge decided that fixed machinery meant any machinery being permanently used for manufacturing purposes, and consequently his milling machinery was exempt. This judgment is very important to manufacturers.

A manufacturing plant which would revolutionize the iron foundry business on the coast may be located in Vancouver if it is found that the possible business would warrant the investment. The plant would be one for the conversion of common iron castings into steel. For instance, an ordinary cast iron gear wheel or a pulley can be turned into steel by an already well-tested and practical process as easily as cream is turned into cheese. The possibilities of the process are practically illimitable. It is stated that ordinary cast iron can even be converted into tool steel that will take a temper superior even to that of Jessop's best. The promoters of the Ottawa Steel Castings Co. are said to be behind the move in Vancouver.

Companies Incorporated.

The Western Canada Cement and Coal Co., Limited, of Ottawa, have been incorporated with a share capital of $1,250,000.

The Ajax Production Co., of the State of Delaware, have been granted the right to carry on the business of an ail company to the extent of $40,000. G. A. McGilivary, of Petrolea, is attorney.

M. Beatty & Sons, Limited, of Welland; share capital, $300,000; purpose to manufacture and sell machinery of all kinds. The directors are: W. L. Beatty, H. L. G. Beatty and A. O. Beatty, all of Welland.

American Radiator Co., of the State of New Jersey, have been granted the right to manufacture and deal in radiators, boilers, etc., and to do business to the extent of $50,000. N. Whitelaw, of Brantford, is its attorney.

The Dennis Wire & Iron Works Co., Limited, of London; share capital, $50,000; purpose to manufacture and deal in architectural and ornamental metal work. The directors are: J. H. T. Dennis, E. R. Dennis and C. H. Ivey.

The Capewell Horse Nail Co., Limited, of the State of Connecticut, have been granted the right to manufacture and sell machinery, horseshoe nails, etc., to the extent of $400,000. C. H. Fleming, of Toronto, is its attorney.

The Matthews Turbine Co., Limited, of Toronto; share capital, $100,000; purpose, to manufacture and deal in goods, wares and merchandise. The directors are: E. MacKenzie, T. Lawless, C. B. Jackes, J. P. Murray and J. P. Beaty, all of Toronto.

The Canada Sand-Lime Pressed Brick Co., Limited, of Toronto Junction; share capital, $60,000; purpose to manufacture and sell brick, etc. The directors are: R. Kennedy, W. M. Flavelle, J. Carew, J. D. Flavelle and J. M. Squire, all of Lindsay.

Fairbanks-Morse Canadian Manufacturing Co., Limited, of Toronto; share capital, $250,000; purpose to manufacture and deal in tin, iron, steel, etc. The directors are: G. W. Sparks, of Chicago, Ill., and C. J. Brittain and A. W. Holmested, of Toronto.

The Mexican Electric Light Co., of Ottawa, share capital, $6,000,000; purpose, to carry on an electric light, heat and power business in Canada. The directors are: A. R. Doble, E.McK. Edgar, L. L. Edgar, C. F. Hibbert and L. Colwell, of Ottawa.



No. 12. OSHAWA, ONT. JULY 8, 1905

IF YOU KNEW

If you **knew** what **Perfect Metal Lath** meant to the builders and contractors of this country — of every country—and what acquainting some of them **meant** to you, you would soon see that no builder or contractor within your territory escaped your attention You would soon see that you profited by the opportunities which are offered—the inducements which we make to **you**. In short, if you are the progressive Hardwareman that we have reason to think you are, you would, in consideration of the above, first, write for our literature, terms and advice; and, second, when thus equipped, start out for conquests and **profits**.

YOU WOULD ACT

Perfect Metal Lath has the same relationship to the plastered wall or ceiling that the keystone has to the arch; it holds the mass together. Therein lies the secret of **Perfect Metal Lath's** success. Wooden lath, at its best, could not be relied upon to do this, because it is **not true.** The cracking of plaster, discolorations, etc., these defects were traceable to wooden lath; but far worse, ill-health, and worst of all **Fire. Perfect Metal Lath** sets at nought all these drawbacks to wooden lath. In addition, it can be applied more quickly than wooden lath—can be applied with **half** the energy, **half** the cost. If **Perfect Metal Lath** was expensive there might be reason for your inactivity. **It costs the builder 10c. per sq. yd.** No reason, then, for **your** not selling **Perfect Metal Lath,** except—**yourself.** Are you going to remain thus **always ? Opportunities pass by quickly.**

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

"DOMINION BRAND"
TARRED FELT
(THE OLD RELIABLE QUICK SELLER)

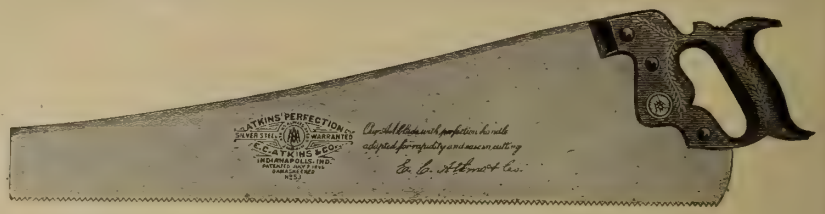
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COAL - TAR

WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

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This gives the greatest ease of operation, reducing wear by eliminating friction. Gurney Cylinder Locks are praised by architects and builders everywhere. "Made in Canada." Better than foreign goods. We can supply numerous designs in artistic trimmings. Get Catalogue No. 7 and Supplements.



No. 1400

THE GURNEY, TILDEN CO., Limited
HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCIES:
Montreal—Nicoll & Barr, 85 St. Peter St.
St. John—Nicoll & Barr, 38 Dock St.

BUILDING AND CONSTRUCTION

MODERN APARTMENT HOUSE.

WHAT is expected to be the finest apartment house in the city, or in Canada, is about to be erected in Montreal, the site and building to cost $600,000. The plans show a building with an area of 125 by 170 feet. The walls will be constructed of stone, brick and terra-cotta, and the greatest care is being exercised to make the whole as nearly fireproof as modern invention will bring it. There will be a steel skeleton, the floors will be of tiles and marble, while the dadoes will be of marble, and the whole building will be finished in the most splendid manner possible.

The kitchen and dinning-room will be placed on the top floor. The building will have accommodation for 80 suites of rooms varying in size from family to bachelor apartments.

A fast passenger and freight elevator will be installed and the electric lighting of the building will be manufactured by the company with its own plant.

It is the intention of the syndicate to furnish the interior in a manner superior to anything in Canada, and if possible equal to anything of its kind in the world. The heating will be of steam, and there will also be an extensive cold storage plant which will be available for the different apartments.

CEMENT IN BUILDINGS.

DEVELOPMENT and expansion in the cement industry during the last decade have been phenomenal. The reason is that the product is immeasurably cheaper than stone, brick, wood, etc., their equal for most purposes and superior for many. The uses to which it can advantageously be applied are almost beyond conception, so that its growth during the next decade will undoubtedly be more wonderful than that of the last. Within the last few years the process of manufacture has so much improved as to reduce the cost more than 100 per cent.

Portland cement is made from natural rock, known technically as Trenton limestone, and when produced in commercial form is a fine powder, possessing the quality, when moistened with water, of binding itself and substances with which it may be mixed into a homogeneous mass, settling with remarkable quickness and drawing to a hardness greater than that of granite. In this condition it neither contracts nor expands, is impervious to water and unaffected by the most intense heat or cold.

In its commercial form the cement can be molded into any required shape. It is used "neat" and in combination with either sand, gravel, crushed stone, cinders, clinkers or slag, dependent entirely upon the uses to which it is to be applied, strength of material required or appearance desired. Many block machines have been invented, and blocks of cement stone of any size, shape or ornamentation can be cheaply and quickly manufactured. These machines make a perfect imitation of stone in any desired color or form, and can be colored in imitation of brown stone, red stone or of a greenish or bluish tinge, making a building more ornamental than can be produced by any natural rock.

Portland cement with iron or steel is used with great economy in the construction of skyscraper buildings, and will doubtless be so used to the almost exclusion of stone and brick in the near future. Scarcely a modern building is now constructed or can be constructed without the use of cement. As was demonstrated in the great Baltimore fire, cement or steel and cement in combination, provide the only fireproof building material.

ACTIVITY IN TWO CITIES.

The business the Toronto architect's office is doing in building permits this year does not indicate any letting up in building activity. In fact, the returns for the first six months of the year indicate a greater boom than ever. The following comparative table shows the situation at a glance.

	1904.	1905.
Jan. 1st to June 30th	$2,625,883	$4,194,326
June	1,100,820	1,303,208
Permits, 6 mos.	922	1,290
Permits in June	217	376
Buildings erected, 6 mos	743	1,535

In Montreal in June the value of new buildings totalled $396,943, with 124 permits issued. Last year, in June, there was a value of $373,827 and only 84 permits.

There was a total value of alterations and new buildings of $471,143, as against $419,285 for June, 1904, a difference of $51,858.

BUILDING NOTES.

A $6,000 Roman Catholic church is to be erected at Rainy River.

Pither & Leiser, Victoria, are to erect a three storey warehouse in Vancouver.

It is said that a large departmental store building will be erected in Hamilton.

Chas. S. Bridgman, Winnipeg, is to construct a warehouse 100 x 120 feet in Winnipeg.

H. O. Bell-Irving is erecting a three-storey store and apartment building in Vancouver.

R. Clohecy, architect, will build a brick house on MacNab street, Hamilton, to cost $4,300.

W. H. Ker, of the Brackman-Ker Milling Co., Vancouver, is to erect an $8,000 residence of the bungalow type.

W. L. Parish, Winnipeg, is building a block of stores and dwellings at Notre Dame and Gertie streets, in that city.

A syndicate of eastern capitalists are to erect a $25,000 business and residential block in Vancouver, to be called the Temple Building.

TORONTO BUILDING PERMITS.

Robert Seal, brick dwelling, 75 Smith street, $2,000.

R. Lock, rough-cast dwelling, Melville avenue, $1,500.

Arthur H. Salter brck dwellings, Givens street, $3,800.

T. G. Brough, alterations to residence, Admiral road, $5,000.

Charles Wilson, Limited, brick stable, Bleecker street, $5,000.

E. M. LeDrew, rough-cast dwelling, Preston avenue, $1,500.

Otto Donatt, stone and brick factory, Carlaw avenue, $2,800.

J. H. Flynn, stone and brick dwelling, Admiral road, $4,500.

Robert McLean, brick dwelling, Lansdowne avenue, $1,700.

G. Meeking, rough-cast dwelling, 108 Brooklyn avenue, $1,500.

S. Frank Wilson, one pair dwellings, Pembroke street, $7,000.

D. C. Smith, brick and stone dwelling, Simpson avenue, $2,000.

C. Courtie, dwelling, brick and cement, Markham street, $3,500.

F. G. Hathway, store and dwelling, 259 Avenue road, $4,300.

L. J. Bland, one pair brick dwellings, Howland street, $4,200.

Andrew Armstrong, brick dwelling, 206 Pape avenue, $1,800.

Angelo Ungaro, store and dwelling, Bloor street west, $4,200.

James Martin, brick veneer dwelling, Armstrong avenue, $1,500.

A. Elliott, one pair brick dwellings, Cottingham street, $5,000.

George Knaggs, three rough-cast dwellings, Woolsley street, $3,750.

Fred A. Grimble, rough-cast dwelling, 534 Deleware avenue, $1,700.

Kay Brothers, one pair brick dwellings, Langley avenue, $6,000.

McArdle & Stanton, one pair brick dwellings, Fuller street, $4,000.

Love Brothers, six rough-cast dwellings, Tiverton avenue, $9,000.

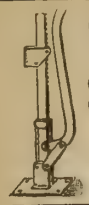
Thomas Hobbs, stone and brick residence, Howland avenue, $3,000.

James Kelly, stone and brick dwelling, 25 Beverley street, $3,800.

G. M. Kennedy and G. Eccles, brick dwelling, Beatrice street, $2.250.

Mrs. D. Gilchrist, brick and stone dwelling, Pearson street, $3,500.

Fred Rustan, brick and stone dwelling, Roxborough avenue, $3,800.



COVERT MFG. CO.
Troy, N.Y.
Steel Carriage and Wagon Jacks
Harness Snaps, Chain, Rope and Web Goods, etc.
SOLD BY ALL LEADING JOBBERS.



A Popular, Profitable and Seasonable Line to Handle.

Dennis' Flexible Steel Wire Door Mats

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Send for Catalogue. LONDON, ONT

Buy the Best.

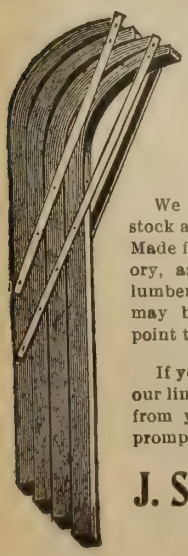


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Star Brand Cotton Clothes Lines
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The Sarnia Hub, Spoke and Bent Goods Mfg. Co.,
SARNIA, ONTARIO



We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, —and— CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory, as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. Loughead & Son
SARNIA, ONT.

Fred J. Goodman, brick and stone dwelling, Sylvan avenue, $2,000.

J. M. Kilgore, brick dwellings, 489 and 490 West Marion street, $7,000.

Fletcher Manufacturing Co., store front, 442 Yonge street, $1,500.

Rev. C. J. Creamer, concrete residence, Gore Vale avenue, $2,000.

S. Frank Wilson, alteration to dwelling, Pembroke street $3,500.

Love Brothers, one pair rough-cast dwellings, Kintyre avenue, $3,200.

William J. Allen, one pair rough-cast dwellings, Withrow avenue, $2,400.

C. J. Gibson, four brick and stone dwellings, Bellevue avenue, $8,000.

Dr. Jos. Graham, brick and stone dwelling, 55 College street, $7,000.

Mr. Powley, one pair brick dwellings, 178 and 180 Pearson avenue, $5,000.

Francis Redican, one pair rough-cast dwellings, Brooklyn avenue, $2,000.

Chas. Hanrahan, one pair brick veneer dwellings, Bellwood's avenue, $3,500.

C. H. Wilson, one pair brick dwellings, 290 and 292 St. George street, $8,500.

T. Frank Slattery, brick and stone residence, University avenue, $4,600.

Samuel Nordheimer, stone and brick residence, Poplar Plains road, $3,200.

Samuel Nordheimer, stone and brick residence, Poplar Plains road, $3,200.

A. Jephcott, brick residence, corner Cluney and Roxborough avenues, $11,000.

J. Worthington, one pair of brick and stone dwellings Markham street, $5,500.

Toronto University, stone and brick students' residence, Queen's Park, $18,000.

James Robertson Co., marble cutting house (stone and brick), Dorset street, $3,000.

John Stark & Co., one pair dwellings, Dufferin street and Lindsay avenue, $4,500.

Bank of Hamilton, alterations to bank, corner Yonge and Gerrard streets, $6,000.

William Waters and William Hart, one pair rough-cast dwellings, Garnet avenue, $1,500.

Acme Loan & Savings Co., three pair brick and stone dwellings, Shaw street, $13,200.

T. Eaton Co., Limited, six-storey store, steel and brick, 110, 112, 114 Yonge street, $50,000.

Consumers Box & Lumber Co., stone and brick boiler-house, Perth and Ernest avenues, $2,000.

Alfred Hawes, apartment house, southwest corner Lowther and Spadina avenue, $55,000.

Royal Insurance Co., entrance to office, cast iron, steel and stone, 29 Front street east, $3,000.

Wesley Methodist Church, brick Sunday school, corner Dundas street and Ossington avenue, $20,000.

PRODUCTION OF BESSEMER.

Great Britain made 916,374 tons of Bessemer steel rails in 1904. Its railmakers received an average of $22.48 per ton for them.

The United States the same year made 2,137,957 tons of Bessemer steel rails for which the members of the rail pool received $28 per ton.

The following table shows the tonnage, price per ton and total gross value of Bessemer rail output of the two countries for last year:

	Production	Av. Price	Gross Value
Great Britain....	916,374	$22 48	$20,600,084
United States....	2,137,957	28 00	59,862,796

THE TRADE PAPER.

That a trade paper can be of great worth to the line of business it represents goes without comment and its worth can be measured in proportion to its use. By this is not meant the total issue printed and circulated altogether, but the total number of its interested readers. This information cannot be easily obtained, but it is a well-known fact that a trade paper has vastly more readers than subscribers. There are several reasons for this. One reason is that a tradesman who thinks he cannot afford to subscribe for one of his trade papers will borrow of his neighbors. He is like a man without a watch. He wants to know the time, and to learn it he must consult the watch of another man. Another method by which extra readers are gained is through the proprietors or managers of establishments. They realize the worth of a paper akin to their business, and will often pass their trade papers around among their employees. Some of the firms go further and will subscribe for a dozen or more of these papers and distribute them among their employes. They do this because they want keen, bright, well-read men behind their line of business, and the trade reviews sharpen these virtues. The public libraries also realize their value and are among the great patronizers of the trade press issues, and supply their shelves liberally with them. There they are read and reread by a large number of trade people. Many expert tradesmen who have risen from the ranks will admit that they owe their success, in a large measure, to the keen interest with which for years they have followed the progress and policy outlined by the leading papers of the trade of which they were a part.—Trade Press List.

WARNOCK CO. EXPANDS.

The James Warnock Co., Limited, Galt, Ont., have recently acquired the business of James Warnock & Co. and will continue in a much larger way the manufacture of edge tools and lumbering tools in which Messrs. James Warnock & Co. have acquired so wide and enviable a reputation. The new company have just disposed of their spring business and will replace their spring plant with a new and entirely modern edge tool and lumbering tool plant. Within six months the James Warnock Co., Limited, will be in a position to supply their numerous customers with tools of the highest possible grade in any quantities they desire.

HARDWAREMEN IN ENGLAND.

REPORTS from England state that the Canadian Manufacturers' Association party touring Great Britain are having a most enjoyable and instructive time. They have been received by the King and have been banqueted in many places, addresses of importance being delivered on tariff and Imperial questions by leading statesmen and manufacturers.

Those representing the hardware trade who are making the trip are as follows:

Allan, F. B., Toronto, Nonsuch Manufacturing Co. (shoe polish).
Boeckh, E. C., Toronto, United Factories, Limited (woodware).
Breckenridge, C., Hamilton, Norton Manufacturing Co. (tinware).
Bush, H. T., Port Hope, Standard Ideal Sanitary Co. (lavatory fittings).
Chapman, S. H., Toronto, Ontario Wind Engine & Pump Co. (engines and pumps).
Cockshutt, H. W., Brantford, Cockshutt Plow Co. (ploughs).
Craig, B. A. C., Toronto, Canada Corundum Co. (corundum).
Depwe, T. S., Hamilton, Sawyer & Massey Co. (engines).
Doolittle, E. A., Toronto, Standard Meter Co. (meters).
Fairbairn, Edward, Toronto, Ontario Wind Engine & Pump Co. (engines and pumps).
Fleury, A. W., Aurora, J. Fleurys Sons (agricultural implements).
Frost, H. L., Hamilton, Frost Wire Fence Co. (fencing).
Galligan, J. Orr, Hamilton, Ontario Tack Co. (tacks).
Gartshore, A. L., Hamilton, Gartshore Thomson Pipe Co. (iron pipes).
Gartshore, Lieut.-Col., London, McClary Manufacturing Co. (stoves).
Gould, J. G., Hamilton, Gurney Scale Co. (scales).
Gray, Robert, Chatham, Wm. Gray & Sons Co. (carriages).
Halstead, J. A., Mt. Forest, J. A. Halstead.
Harmer R., Toronto, Sawyer & Massey Co. (machinery).
Harris, Lloyd, Brantford, Under Feed Stoker Co. (stokers).
Hobson, J. I., Hamilton, Hamilton Iron & Steel Co. (founders).
Howland, G. W., Toronto, Graham Nail Co. (nails).
Hutchings, E. F., Winnipeg, Gt. West Saddlery Co. (saddlery).
Leslie, A. C., Montreal, A. C. Leslie & Co., iron and steel merchants.
McFarlane, Thomas, Smiths Falls, Frost & Wood Co. (agricultural implements).
McKinnon, D. J., Toronto, Pease Foundry Co. (stoves).
McKinnon, L. E., St. Catherines, McKinnon Dash and Metal Co. (saddlers' hardware).
Maxwell, Jas., St. Mary's, D. Maxwell & Son Co. (agricultural implements).
Moffat, T. L., jun., Weston, Moffat Stove Co. (stoves).
Nicholls, H. G., Toronto, Canadian General Electric Co. (electrical apparatus).
Notman, John C., St. Catherines, McKinnon Dash and Metal Co. (hardware).
Pennington, J. D., Dundas, Valley City Sitting Co (chairs).
Robertson, Jas. A., Montreal, James Robertson Co., Limited (paint).
Robinson, S. D., Hamilton, D. Moore & Co. (stoves).
Rogers, A. S., Toronto, Queen City Oil Co. (oil).
Scott, R., Galt, R. Scott & Son (wheels).
Sheridan, J. T., Toronto, Pease Foundry Co. (stoves).
Sinclair, J. M., Toronto, Eureka Mineral Wool & Asbestos Co. (engine packing).
Smith, R. Home, Toronto, Pease Foundry Co. (founders).
Steedman, J. P., Hamilton, Gurney Scale Co. (scales).
Thomson, Dr. W. P., Toronto, Polson Ironworks Co. (founders).
Tudhope, W. H., Orillia, Tudhope Carriage Co. (carriages).
Vanstone, L. N., Toronto, Graham Nailworks (nails).
Waddell, Hugh, Toronto, Henderson Roller Bearing Co. (roller bearings).
Waterous, D. J., Brantford, Waterous Engine Works (engines).
Wiggs, W. H., Quebec, Mechanics' Supply Co. (plumbers' goods).
Wright, H. G., Hamilton, E. T. Wright & Sons (tinware).
Wylie, Norman L., Toronto, New Warren Scale Co. (scales).

Window space is valuable for advertising. Are you utilizing it to the best advantage?

Dark Interiors Made Light.

The only daylight-increasing window glass combining lenses and prisms.

MAXIMUM LIGHT GLASS

Involves new applications of daylight; should not be confused with ordinary corrugated or prismatic glass. Used throughout the world. Unequalled. Our booklet will show you the opportunities that await YOU. We will also send sample of the glass.

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

IF you wish to obtain
QUALITY
DURABILITY
FINE APPEARANCE
FAIR PRICES

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SURE TO SUIT

WRITE if you cannot call
AS WE
assure intelligent attention.

OUR
SHEATHING
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ALEX. McARTHUR & CO., LIMITED, - - 82 McGill Street, MONTREAL.

CURRENT MARKET QUOTATIONS.

July 7, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$32 00 $33 00

TIN PLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
I Allaway's Best"—Standard Quality.	
I C	4 50
I X	5 50
X	6 50

Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. " 14x60, " " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 25	7 50
" " 26 "	7 75	8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B K. Morton & Co.		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M." Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	011
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	[count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 25	16 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60		21 00
Plain, 14 oz		22 00
inned copper sheet		24 00
lanished		32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 41½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 00
Part casks	....	7 25

LEAD.

Imported Pig, per 100 lb	3 50	3 75
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06½
Sheets, 3 to 6 lb. "	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	0 09½

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft.	3 in. rolled rim	$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00

Plate 123 E, lavatories		1st quality	8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 77
1¼ "	7 88
1½ "	9 45
2 "	12 60

Malleable Fittings—Canadian discount 35 per cent. American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c.
Cushion work, discount 50 per cent.
Fuller work, discount 65 per cent.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 55 per cent. With in lots of 2 dozen and over, an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 "	"	1 90
No .7 Fuller's	"	2 20
No. 4½, "	"	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $31; 5 and 10 per cent. discount.

Patent Compression Cushion, bath cock, No. 2208		2 25
Square head brass cocks, discount 55 per cent		
" " iron "	60	"
Thompson Smoke-test Machine		$25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND LADIES' SCISSORS

Fully Warranted



Our Eastern Pattern Ladies' Scissors. This is an exceptional scissor, adapted for clean-cutting work where stiffness of blade is required. Hand forged from finest steel. Ask for discounts.

THE CLAUSS SHEAR CO., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 17½
Wiping	0 15½
Refined	0 16½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	4 60	4 75
No. 1	4 35	4 50
No. 2		4 30
No. 3		3 37½
No. 4		3 35
Munro's Select Flake White		4 75
Elephant and Decorators' Pure		4 75
Tiger brand, pure		5 00
Decorators' Special for exterior use		4 25
Monarch		5 00
Decorator's Pure		4 75
Essex Genuine		4 25
Sterling Pure		5 00
Island City Pure		5 00
Ramsay's Pure Lead	4 75	5 00
Ramsay's Exterior	4 50	4 75

RED LEAD.

Genuine, 560 lb. casks, per cwt	$4 50
Genuine, 100 lb. kegs, "	4 75
No. 1, 560 lb. casks, per cwt	4 25
No. 1, 100 lb. kegs, per cwt	4 75

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	4 50
Pure, kegs	4 75
No. 1, casks	4 00
No. 1, kegs	4 25

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls	1 50
Bulk in less quantity	1 80
Bladders in bbls	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from		assorted to 1 gal., $2.50.

GLUE.

Common	0 08 0 08½
French medal	0 10 0 14
White, extra	0 18 0 22
Gelatine	
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	
Ground	0 12 0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each— Per M.

11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—

11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00 7 00
Best quality	10 00 12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.	

Farm.

American, each	1 35 3 00

House.

American, per lb.	0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65 0 90
Diamond, Shell, per doz	1 00 1 50
Nail and Spike, per gross	2 25 5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½ 0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 8 0	3 10
Canadian pitcher spout	1 4	2 10

LOST

A good order through not carrying a stock of **Paterson's Wire Edged Ready Roofing** and **Building Papers.**

Such has been the experience of many Hardware Merchants before they commenced handling goods of our manufacture.

We make the material your customers want, and it won't pay you to handle any other kind.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65	2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	9 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1½ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		2½	3 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" " 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz			4 40
" " 2,	"		4 85
Barrel, Underhill			5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb			0 06½
" 5-in.,	"		0 06½
" " 6-in.,	"		0 06
" " 8-in.,	"		0 05½
" " 10-in.,	"		0 05½

Light T and strap, discount 65 and 5 per cent.

Screw hook and hinge—			
6 to 10 in	per 100 lb.	....	4 50
12 in. up		....	3 25
Spring, No. 20, per gro. pairs		....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned c 35 per cent.

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	....	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	....	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in. "	6 00 to	6 50
Daisy, 8 -in. "	5 25 to	5 75
Philadelphia, 7½-in. "	6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	2 50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	....	10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	...	7 80
1 " "	"	....	9 60

PLANES.

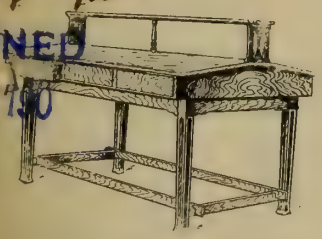
Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

RETURNED
JUL 8 1903

STANDING DESKS

AND EVERY OTHER KIND OF DESKS

Our line of Standing Desks are without exception the best and st[.] Standing Desks in America. Big talk! You're right it is, and [nchester iverham] too; give us your inspection and you'll decide likewise. Made [ntreal.] 6 ft., 7 ft., 8 ft., double and single sizes, in ¼ Oak, Plain Oak a[w Co.] Write for Catalogue.



Our Double Standing Desk

[on]

THE OFFICE SPECIALTY MFG. CO., LIMITED

Factories: NEWMARKET. **97-105 Wellington St. West, (near York), TORONTO**

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0 11
Pure Manilla	0 14½
"British" Manilla	0 11
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ¼ inch 0 25	0 28
Russia Deep Sea	0 16
Jute	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" " common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	0 85
" 18 x 30.....	1 00
" 18 x 36.....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	0 37
2-lb. or over ..... "	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 85
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin.....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	0 13½
Brook's	0 12½
Pipe Vise, Hinge, No. 1	3 50
" " " No. 2	5 50
Saw Vise	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 4 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3.25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17 $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots. fo

COILED SPRING WIRE.

HighCarbon, No. 9	$2 70
" No. 11	3 35
" No. 12	2 95

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

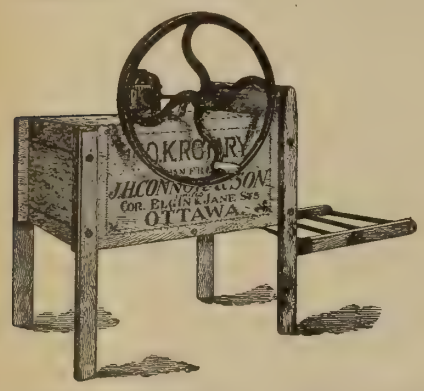
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HARDWARE AND METAL has enquiries from time to time from manufacturers and others wanting representatives in the leading Edgeless centres here and abroad.

Individuals open for agencies in Canada may have their names and addresses placed on special list kept for the information of our various offices throughout Canada they can obtain Britain without charge.

Business Manager
HARDWARE AND METAL
Montreal and Toronto.

CONNOR'S O. K. ROTARY WASHER.



No experiment, but a trade winner. Dealers who handle this washer say they sell easier than any other. Write for our catalogue and price list.

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Morrison, Jas., Brass Mfg. Co., Toronto.
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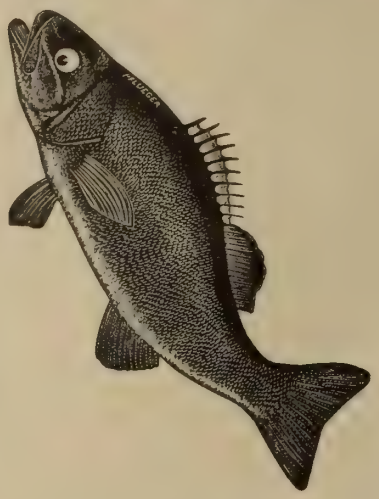
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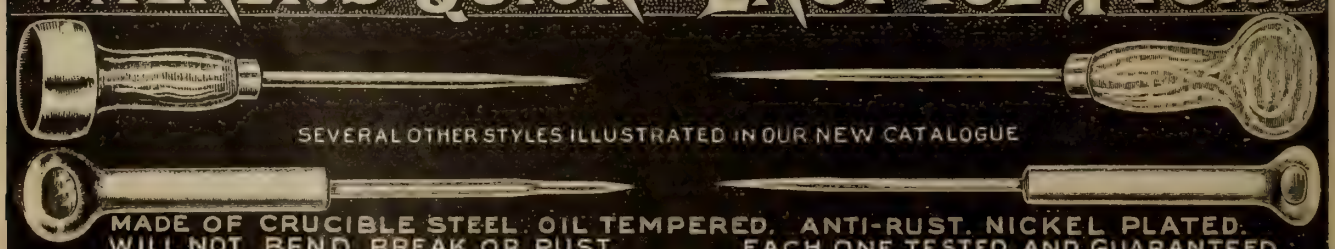
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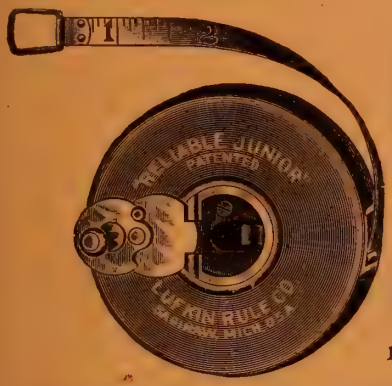
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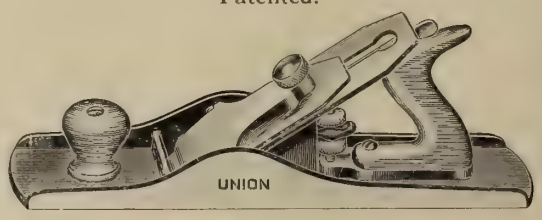
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GUELPH.

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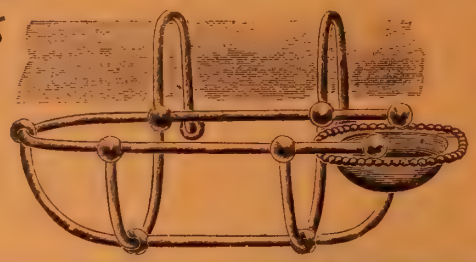
Classified List of Advertisements on Page 103.

Nickel Plated Bathroom Fittings

We carry a most complete stock of Bathroom Fittings, very heavily nickle-plated, and of the newest designs, including:

RETURNED
JUL 18 1905

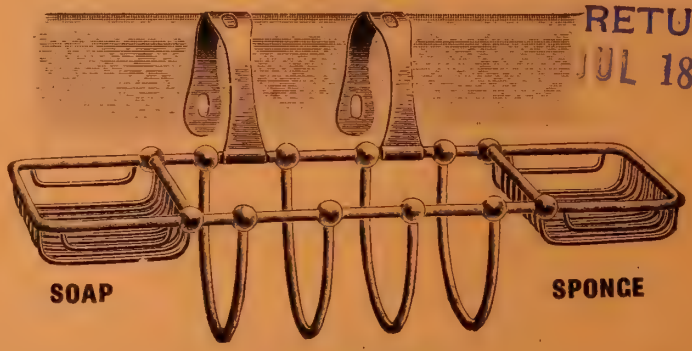
Bathtub Seats
Bath Sprays
Robe Hooks
Match Holders, Etc.



SOAP and SPONGE—BATHROOM COMBINATION

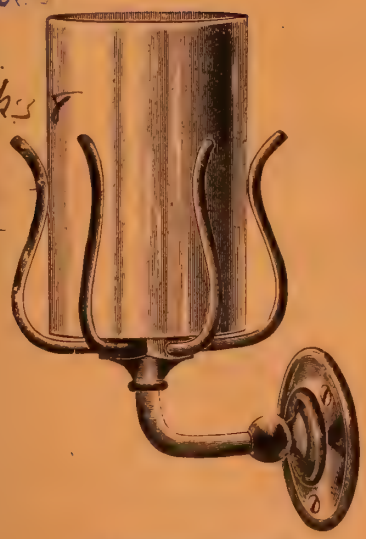
Towel Bars
Paper Holders
Towel Shelves
Soap Holders, Etc.

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JUL 18 1905



SOAP SPONGE

COMBINATION

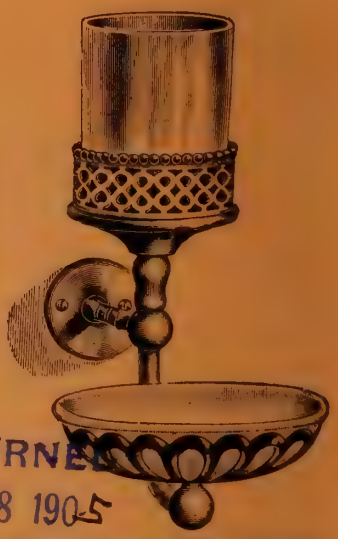


TUMBLER HOLDER

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JUL 18 1905



TUMBLER, TOOTH BRUSH and SOAP HOLDER



TUMBLER and SOAP HOLDER

WRITE FOR PRICES.

RICE LEWIS & SON

LIMITED

TORONTO.

ALWAYS READY FOR USE



Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2 50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

No Smarting after Shaving. With ordinary careful use will

KEEP AN EDGE FOR YEARS WITHOUT HONING.

Booklet coming—if you will ask for a copy, with trade discount.

FOR SALE BY LEADING JOBBERS.

FIRM OF
A. L. SILBERSTEIN, MAKERS OF "Griffon" Cutlery

459-461 BROADWAY, NEW YORK.

To the

Hardware Merchants

and

General Store Keepers

we solicit a call or inquiry.

THOS. BIRKETT & SON CO., LIMITED

WHOLESALE HARDWARE MERCHANTS

OTTAWA, ONT.

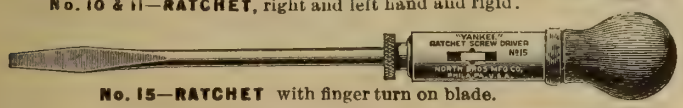
Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



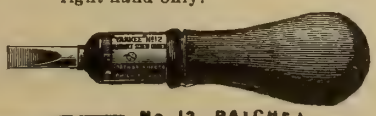
No. 15—RATCHET with finger turn on blade.



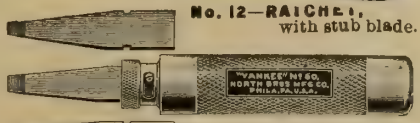
No. 30—SPIRAL RATCHET —right and left hand and rigid.
No. 31— " " (heavy pattern)
No. 20— " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.



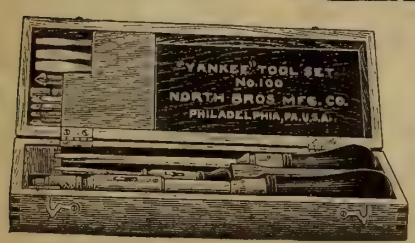
No. 12—RATCHET, with stub blade.



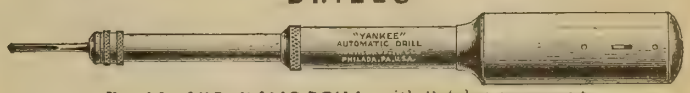
No 60 POCKET SCREW DRIVER.



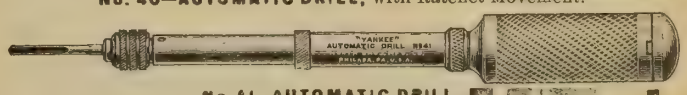
Countersink, for spiral ratchet screw driver.



DRILLS



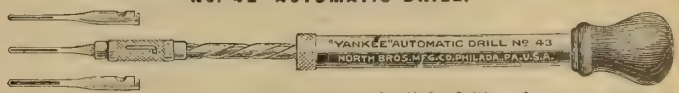
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring



No 50—RECIPROCATING DRILL, for wood or metals

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.



A Catalogue showing a full line of these stoves mailed on application

The "Standard" Blue Flame Wickless

COAL OIL AND GASOLINE STOVES

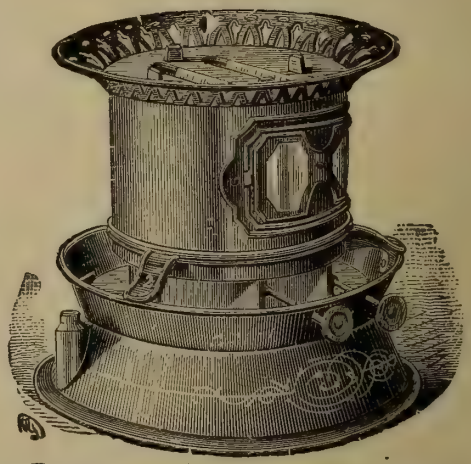
Absolutely Safe and Easy to Operate
Lights Instantly and Cooks Quickly

Simply turn on the oil and apply the match

"Standard" Safety Gasoline Stoves are constructed according to the safety requirements of the National Board of Fire Underwriters, and are on their list of "Permitted Stoves"

THE

"PRINCESS" COAL OIL STOVE



(TWO BURNERS)

A Good Serviceable Stove and a Powerful Cooker, at a very low price.

We have also in stock the "Summer Girl," "Eagle" and German Oil Stoves, Extension Tops, Wicks, etc. Write for prices.

The Thos. Davidson M'f'g Co., Limited

MONTREAL

GALVANIZED SHEETS

"Gordon Crown" "P.F. Crown"

None Better **Lots Worse**

Enquiries solicited for shipment from stock or for import . . .

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

QUALITY

IS ESSENTIAL TO DO
A SATISFACTORY BUSINESS

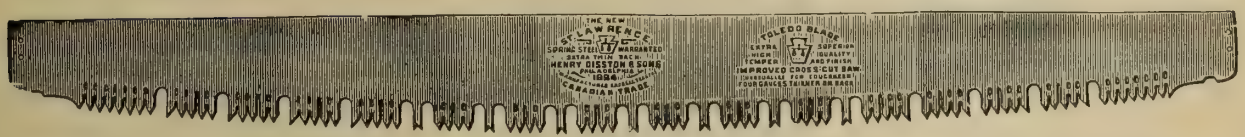
DISSTONS SAWS

HAVE STOOD THE TEST FOR SIXTY-FIVE YEARS

QUALITY SELLS
AND
QUALITY TELLS

RETURNED
JUL 18 1905

IN DISSTONS YOU HAVE BOTH



ST. LAWRENCE

Toledo Blade. Ground Four Gauges Thinner on Back than on Teeth. Very Best Quality of Spring Steel. The Fastest-cutting Saw in the World.



RETURNED
JUL 18 1905
To Owner
Cut Book
Page 8

D 8

Warranted Spring Steel, Patent Ground and Tempered. Apple Handle with Polished Edges, and Five Improved Screws.

SEND US A TRIAL ORDER

LEWIS BROS., LIMITED

Importers and Distributers

14 TO 28 BLEURY ST.

(Always address Head Office at)

MONTREAL

Branches:

VANCOUVER CALGARY TORONTO OTTAWA

☞ NOTE OUR NEW ADDRESS.

Best on the Market

FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

IN CASES

Table Cutlery, etc.

SOLD BY

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

DOMINION WIRE MANUFACTURING CO.

MONTREAL AND TORONTO LIMITED

NOTICE!

We beg to advise our many customers that notwithstanding the TRADE REPORT in issue June 10th, page 37, we are in a position to EXECUTE PROMPTLY all orders for the following goods:

Barb Wire, Galvanized Wire, Wire Nails,
Wood Screws,
Bright and Galvanized Fence Staples,

—also—

Steel Wire Barrel Hoops

MADE IN CANADA

THE TORONTO SILVER PLATE CO., LIMITED

MANUFACTURERS OF

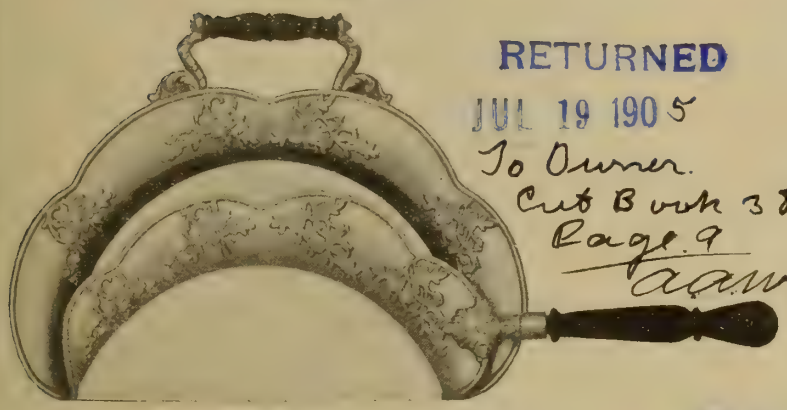
Sterling Silver and Electro-Silver Plate of every description and suitable for all markets.

RETURNED
JUL 19 1905



No. 2220.—BAKER.

RETURNED
JUL 19 1905
To Owner.
Cut Book 35
Page 9



No. 0176.—CRUMB TRAY AND SCRAPER.

RETURN
JUL 19

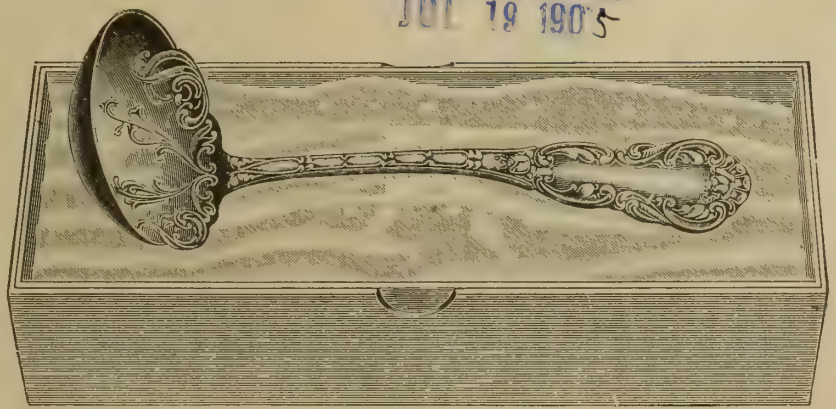


No. 0203.—BREAD TRAY.

Illustrations of some more of our new patterns in Hollow and Flatware.

The Trade had better wait and see the others before placing their orders elsewhere.

RETURNED
JUL 19 1905



Rosalind Pattern. GRAVY LADLE. In Fancy Lined Box.

We issue special Hollow and Flatware Catalogues. If interested write for them.

Will the trade please remember that we are not in the trust or members of any Silverware association or combine which naturally must offer some inducements to do business with us.

Factories and Salesrooms: West King Street, Toronto, Can.

E. G. COODERHAM, Managing Director

In Selling Horse Nails

Don't forget, that the recollection of the quality will remain with the purchaser, long after the price has been forgotten by him.

Also, that cheapness is not based on what you pay for Horse Nails, but upon what you get for what you pay.

We solicit your orders for our "C" brand Horse Nails, which we have been manufacturing in Canada for the past forty years.

They represent the best in every particular—quality of material, pattern and proportions. We use exclusively Swedish Charcoal Steel Nail Rods for their manufacture, which by our special process, and with skilled artisans of long experience, enables us to produce Horse Nails equal to any in the world—bar none.

When ordering Horse Nails, please specify particularly for our "C" brand, and accept no other substitute, especially at same price. We shall be pleased to supply you, if you cannot obtain them on request.

Our price is 40, 10 and 7½% discount, f.o.b. Montreal.

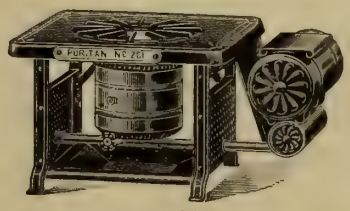
CANADA HORSE NAIL COMPANY,
MONTREAL.

Established 1865.

BLUE FLAME COAL OIL STOVES



No. 203

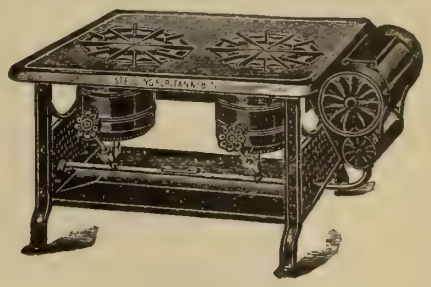


No. 201



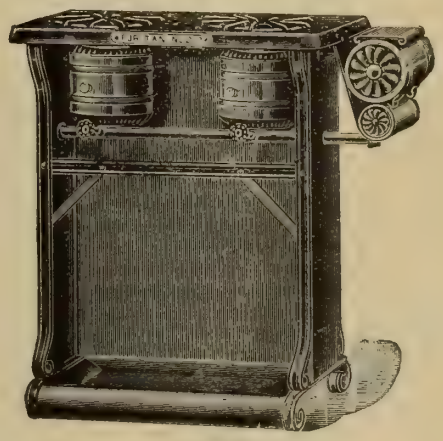
No. 202

Nos. 811, 812, 813, are "Sterling-Puritan." Nos. 201, 202, 203, 212, are "Puritan," which is quite similar in construction, the principal difference being in the construction of the valve. The "Puritan" is cheaper. We stock this stove and Nos. 811, 812, 813, 852, 853, 844, and 845 of "Sterling-Puritan."

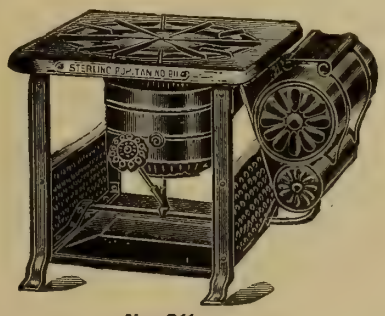


No. 812

The best wickless stove on the market. Simple in construction, perfect in operation; cheaper than gas, coal, wood or gasoline, and much cooler and more satisfactory to work with. Will do any kind of cooking. Just the thing for kitchen, camp, nursery and bath-room. Special features, such as the improved vaporizing bowl, and specially constructed top grates, covered by strong patents. Every stove guaranteed.



No. 212



No. 811



No. 813

Write for Particulars

FOR SALE BY

The Hobbs Hardware Co., Limited

London, - - Ontario

Manufactured by The Cleveland Foundry Co., Cleveland, Ohio



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

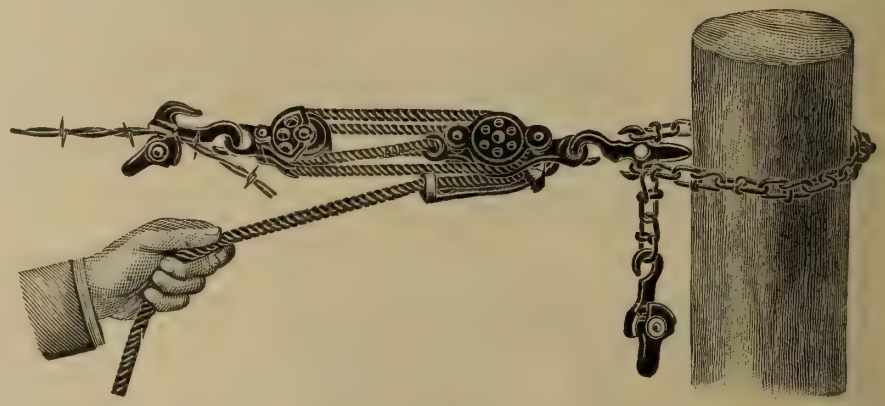
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

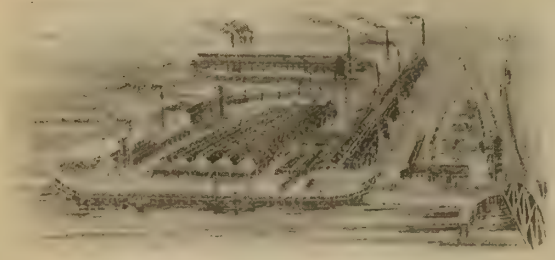
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



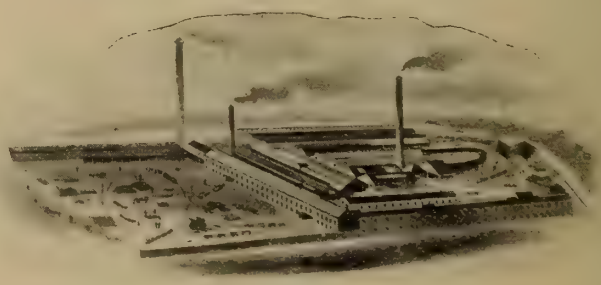
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.

LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

Made from steel of our own manufacture straight from the raw materials; we are therefore able to guarantee the quality.

It will not pay you to buy inferior sheets.

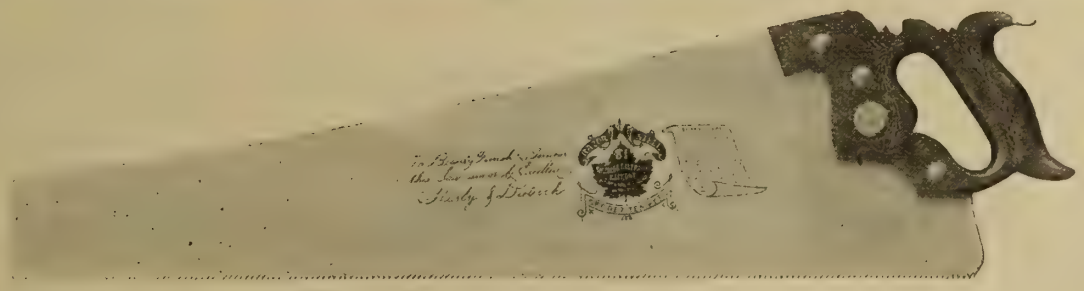


Dead Flat Sheets

Tough and pliable.
Will stand any amount of working up.
Right Material. Right Quality. Right Price.

Agent: F. Hankin, Montreal

Canada Leads the World in the Manufacture of HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



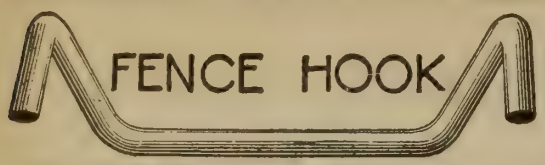
No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

RETURNED SEP 12 1905 To Dominion 55 Watson Rd Paris 11 Jan

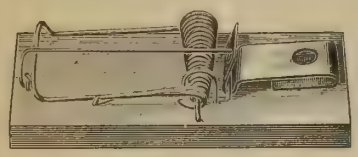
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO.
London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.
LITITZ, PA.

GLAZIERS' DIAMONDS

Sharratt & Newth
43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

ALSO
Established 181

Lead Vices,
Carbon Tools,
Etc., Etc.,



Agents for Canada: **A. Ramsay & Son Company, Montreal**

GLAZIERS' DIAMONDS



Ahead of all others in **quality** and **workmanship**. If **sparks** of **fine quality**, **set by experts**, are what you require, buy Diamonds of **A. Shaw & Son's** make.

Canadian Agent

GODFREY S. PELTON
388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 155 Chambers St
NEWARK, N.J., U.S.A.

SEYMOUR SHEARS

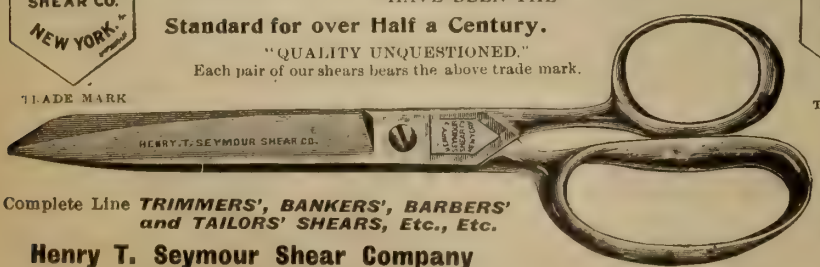
HENRY T. SEYMOUR SHEAR CO. NEW YORK.

TRADE MARK

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."
Each pair of our shears bears the above trade mark.



HENRY T. SEYMOUR SHEAR CO. NEW YORK.

TRADE MARK

Complete Line ***TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.***

Latest Catalogue will be sent in exchange for your business card.

Henry T. Seymour Shear Company
WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents



ADVANTAGES OF THE

IDEAL COMBINATION COOKER AND BAKER

On an ordinary basis the cooker saves 144 hours labor and over a ton of coal each season. Easy to manage and keep clean. The cooker will pay for itself in one season for cooking canned fruit alone; and it is just as good for baking as for cooking. Retains the nutriment of the food and saves one-third of the food lost by ordinary cooking methods. No boiling dry, nor burning. No offensive odors, nor damp walls. We guarantee the cooker will pay 100 per cent. interest annually. Made in eight different sizes, varying from 9¾ to 20 inches in height, and having a capacity of from 2¼ to 14 gallons Prices range from $2.50 upwards Booklet on request.

Sole Manufacturers

The Toledo Cooker Co., (Inc.)
Box 400, Toledo, Ohio

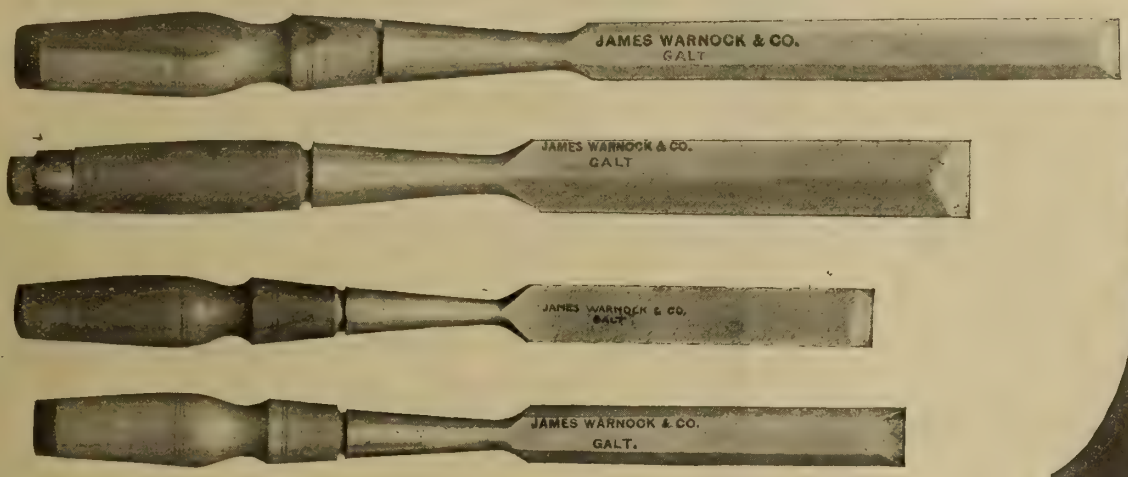
J. A. Ross, Sole Canadian Representative, Winnipeg, Man.

MAPLE LEAF STITCHED COTTON DUCK BELTING

DOMINION BELTING CO. LTD.
HAMILTON CANADA

Warnock Tools

BEST IN THE WORLD





Jas. Warnock & Co., Galt, Ont.

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

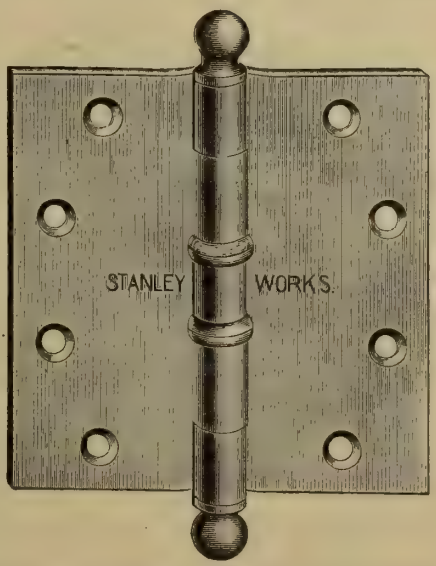
Stanley's Ball-Bearing Hinges

FOR ALL THEIR IMPORTANT WORK. DEALERS SHOULD HAVE THEM IN STOCK.



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.

Butler's
Famous Cutlery
AND
Electro-plate.

Sole Makers of Butler's "KEEN" Razors, the "Cavendish" Brand of Table Knives, Carvers, and Plate (Regd.).

HIGHEST AWARDS. SPECIAL MENTION.

GEORGE BUTLER & CO.'S
London Showroom:
62 HOLBORN VIADUCT, E.C.
(Over Snow Hill Station).
Manufactory: Trinity Works,
SHEFFIELD, ENGLAND.

"BUTLER" was Registered as a Trade Mark A D. 1768.

GRANTED A.D. 1681. ART 1861.



THE WAGGONER
EXTENSION LADDER

All Eavetroughers, Painters, Plumbers and Roofers prefer It because

It is **SAFEST** — The first requisite in a ladder.

It is **LIGHTEST** and **HANDIEST** — An important matter to a man who has to handle a ladder day after day. One man can set up and extend a 40-ft. W.E. Ladder.

A pair of our **LADDER JACKS** (steel reversible) with two ladders and a plank form a splendid **PORTABLE SCAFFOLD.**

We make also

The "Davis" Clothes Line Reel, Lawn Swings, Clothes Racks, Etc., Etc.

Write for circulars and discounts.

The Waggoner Ladder Co., Ltd.
LONDON, - ONTARIO

Western dealers write E. H. BRIGGS & CO., WINNIPEG, our Western Representatives.

When you write please mention "Hardware and Metal."

IF YOU OWN STOCK

in a tool steel mill there may be some excuse for you continuing to forge lathe and planer tools. You may get some of the loss back in dividends.

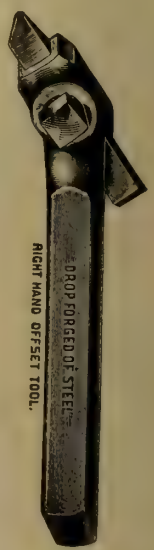


ONE POUND OF TOOL STEEL USED IN AN ARMSTRONG TOOL HOLDER

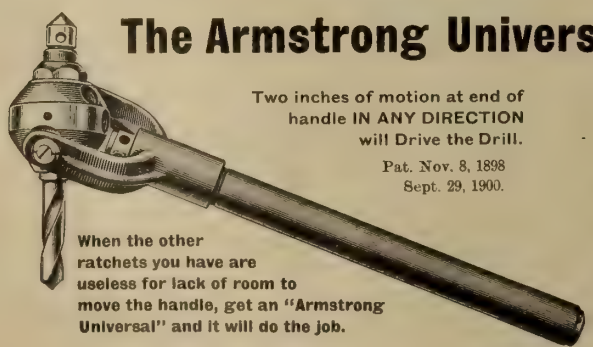


Patented February 28, 1893.

EQUALS TEN POUNDS USED IN FORGED TOOLS



The Armstrong Universal Ratchet Drill



Two inches of motion at end of handle IN ANY DIRECTION will Drive the Drill.

Pat. Nov. 8, 1898
Sept. 29, 1900.

When the other ratchets you have are useless for lack of room to move the handle, get an "Armstrong Universal" and it will do the job.

STRONGER and FASTER than any other rachet made.

Even a vertical movement of handle drives the drill.

Adopted by the U. S. Navy.

Used by 60 railroads.

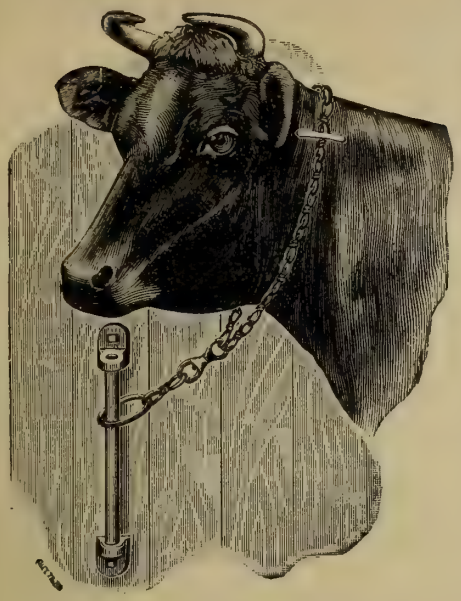
WRITE FOR OUR CATALOG of Tool Holders for Turning, Boring, Planing, Cutting-off and Threading Metals.

Armstrong Bros. Tool Co., "The Tool Holder People" 104-124 North Francisco Ave., Chicago, U.S.A.

Imitations are Unsatisfactory--Infringements are Unlawful

GREENING'S PATENT

GREENING'S



COW TIES

These cow ties have stood the test for years.

Undoubtedly the best and strongest on the market.

It will pay you to handle only the best.

A complete line of all sizes ready for shipment.

FOR SALE BY ALL JOBBERS

THE B. GREENING WIRE CO.
LIMITED

HAMILTON, ONT. MONTREAL, QUE.

Dillon Hinge-Stay —Fence—



Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

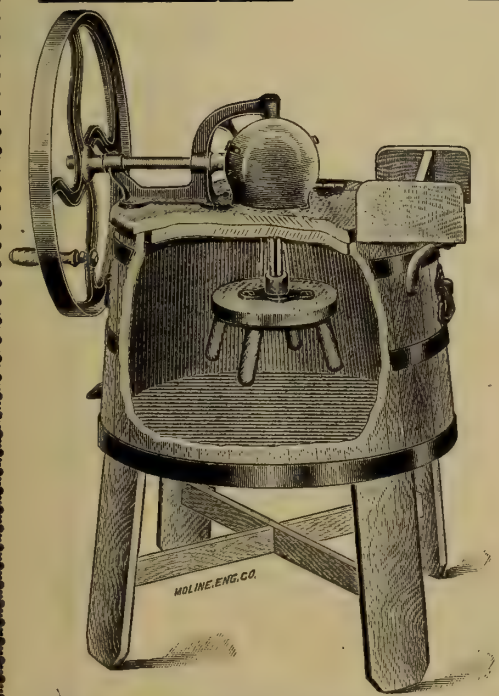
OWEN SOUND WIRE FENCE CO., LIMITED,

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) Montreal and Winnipeg

1905 Ocean Wave Washer



Accident Proof! Dust Proof!

SPECIAL FEATURES:

1st. Covered Gearing
which can be opened instantly to expose working mechanism.

2nd. Improved Dasher
We do not use **wooden** Dasher Pole.

3rd. Mechanical Movement Most Simple ever Constructed.

4th. The Best Seller
because it is more attractive than others

Sold to only one dealer in each town.
Trial Order will convince.
Write us.

VOSS BROS. MFG. CO.——DAVENPORT, IOWA, U.S.A.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



14540.—FRUIT DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and **SHIP'S OUTFITS**, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

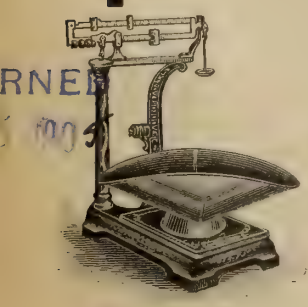


31197.—E.P.N.S. CAKE BASKET

"FAIRBANKS"

The World's Standard in Scales for over three quarters of a century.

Fairbanks Standard Scales are manufactured in the largest scale factory in the world by skilled workmen, each workman having but one particular part of a scale to manufacture. In this manner we are enabled to attain a higher degree of excellence in scale manufacture than would be possible by employing ordinary workmen.



RETURNED
SEP 15 1905
St. Montreal
Cut Book 40
Page 37

Fairbanks Scales
Last a Life Time





"FAIRBANKS SCALES" and "SATISFACTION"
"The Same Thing"

Write for our Scale Catalogue

The Canadian Fairbanks Co., Ltd.

Montreal Toronto Vancouver Winnipeg

Lowmoor Bar Iron

TRADE MARK
LOWMOOR
REGISTERED

The iron to use where other kinds fail, but be sure to use it first before you have the expense of a failure.

What is Lowmoor Bar Iron ? It is iron this firm has handled since most of us were boys. It has special properties due to the way it is made in Yorkshire, England, which particularly adapt it for use where toughness to resist repeated shocks and uniformity of quality are of importance.

If your customer demands good iron, recommend Lowmoor.

Largest stock of Iron and Steel in Montreal.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants, - - Montreal, Canada.

For Nearly a Century in the Hardware Trade.

BRANTFORD, JULY, 1905.

MR. DEALER :

Just a minute of your close attention to a subject in season—**BINDER TWINE.**
Our Factory is in operation at hurry-up speed and full capacity.
Orders are coming in daily.
It is an even race between supply and demand.

We offer you, at regular prices, **OUR 4 MAPLE LEAF BRANDS,** which are not surpassed in quality by any others in the Canadian market.

To state our claim briefly :—We have succeeded in making our goods the **BEST** for the **FARMER** to **BUY** to **USE,** and therefore the best for the **DEALER** to **BUY** to **SELL.**

REPEAT ORDERS we are receiving from those who have been selling our goods.

TRIAL ORDERS are particularly welcome to us, as every one we receive adds one more to our list of satisfied customers.



Registered Trade Mark.

These are our four Brands :

GILT EDGE, 650 ft., Pure Manila
GOLD LEAF, 600 ft., Manila
SILVER LEAF, 550 ft., Standard Manila
MAPLE LEAF, 500 ft., Standard



A word to the wise is sufficient. Thanks for your attention. May we not have your order ? You ought to have the goods we offer ; they are trade builders. We fill orders by prompt shipment from Toronto, Brantford, Winnipeg and Brandon.

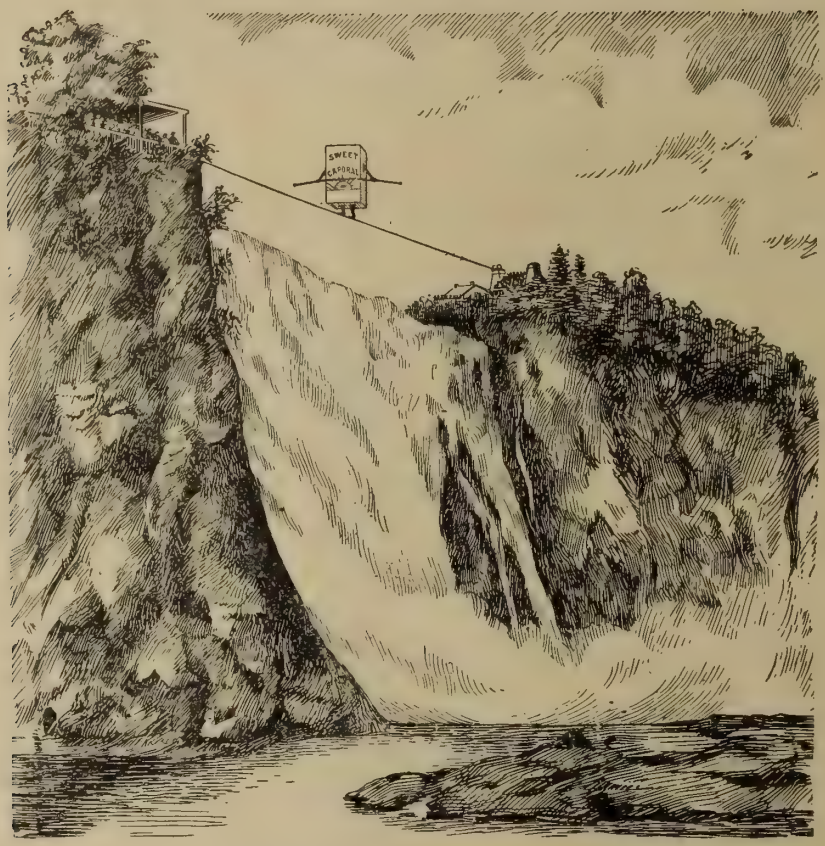
Yours faithfully,

THE BRANTFORD CORDAGE CO., LIMITED,

BRANTFORD, CANADA.

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

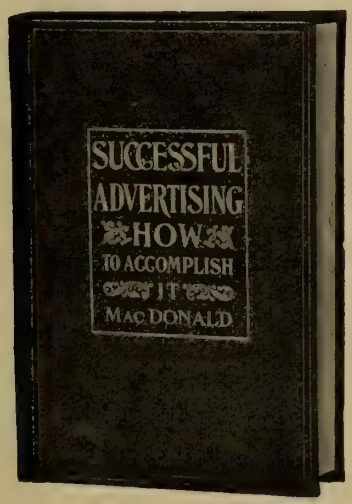
BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; GEO. WOOD, London, Eng.

SUCCESSFUL ADVERTISING

How to Accomplish It

By J. ANGUS MacDONALD



Competent critics have recognized this as the **Best Book on Advertising** yet published. It is a PRACTICAL work for advertisers and business men.

The *Brooklyn Eagle* says of Successful Advertising :

"Advertising is one of the biggest businesses—perhaps the biggest business—in the world. To treat of it comprehensively is as difficult as to treat comprehensively of military strategy or the making of a newspaper. Mr. MacDonald has succeeded. He has produced an admirable and exhaustive monograph.

"Perhaps the deepest pitfall into which an author might fall in writing upon such a subject as this is too much theory and not sufficient practicality. Most happily has Mr. MacDonald avoided this chasm: he writes from practical experience in the field, and his methods as presented have been given the thorough tests of time and circumstances.

"Any one with even a superficial knowledge of advertising cannot but perceive that in the many examples shown are evidenced a thorough knowledge of the subject and a businesslike and practical grasp of advertising which is far removed from the light, airy and entirely impractical and hare-brained stuff which is not uncommon in literature treating of the subject of advertising."

The General Advertiser, The Retail Advertiser, The Advertising Writer, The Mail Order Advertiser will find this work invaluable. The price is out of proportion to its worth. Cloth bound. 400 pages.

Postpaid $2.00 per copy

The MacLean Publishing Co. Limited

TORONTO MONTREAL WINNIPEG



Steel Frame Support.

DAVID MAXWELL & SONS

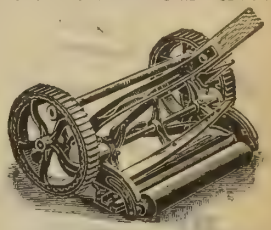
ST. MARYS, ONT., CANADA.

"Maxwell Favorite Churn."

PATENTED FEATURES: Improved Steel Stand, Roller Bearings, and Foot and Hand Lever Drive, and Detachable Driving Link. Improved for season of 1904. Steel or Wood Frame as desired

Lawn Mowers.

High and Low Wheels, from 12 in. to 20 in. widths. Cold Rolled Steel Shafting, Crucible Steel Knives and Cutting Plate.



If your Wholesale House does not offer you these articles

SEND DIRECT TO US.



MAXWELL MOWER

8-in. Low Wheel.

Wheelbarrows.

In Four Different Sizes.

Before placing orders for **CHAINS** and **ANCHORS, WIRE RODS, TUBES, ETC. ETC**, communicate with :

Rd. JOHNSON, CLAPHAM & MORRIS, LTD.

MANCHESTER, ENGLAND

who will quote delivered any point as may be required.

Money for You

There's money for you in handling our

METALLIC ASH SIFTER

There's no money handling the antiquated Wooden sifter. The ***Metallic Ash Sifter*** is durable and cheap. The Wooden Sifter is ***not*** durable and so ***not*** cheap. Better get the durable kind. Write for booklet.

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

STANLEY RULE & LEVEL CO.,

NEW BRITAIN, CONN., U.S.A.

IMPROVED CARPENTERS' TOOLS

SOLD BY ALL HARDWARE DEALERS.

TRADE MARK

This design a guarantee of quality

Manilla Paper

SMOOTH, TOUGH, BRIGHT, CLEAN ALL SIZES AND WEIGHTS

Fibre Paper

THE TOUGHEST OF THE TOUGH ALMOST WATERPROOF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.

TORONTO LIMITED MONTREAL

We Want You

to examine the quality of our

LOOSE LEAF LEDGERS

They are perfection itself. Our Stock Sheets are cheaper than bound books.

Our **Monthly Account System** is just the thing for the retail trade.

It saves time, money and worry.

Let us send you samples and prices.

The Rolla L. Crain Co. Limited

Ottawa, Canada.

Toronto Office : 18 Toronto St., Phone Main 298

Montreal Office : 74 Alliance Building, Phone Main 3023

Mention this Paper.

Persons addressing advertisers will kindly mention having seen their advertisement in The Canadian Grocer.

Trade With England

Every Canadian who wishes to trade successfully with the Old Country should read

"Commercial Intelligence"

(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)

Moreover, regular subscribers are allowed to advertise without charge in the paper.

WE DESIGN AND MAKE

Office Trucks

Warehouse Trucks

Factory Trucks

OF ANY SIZE FOR ANY SERVICE

Special Long Steel Frame Trucks for handling Bar Iron, Angle Steel, and Pipe.

MONTEITH, NIXON & CO.

Makers of Good Trucks

256 Macdonell Ave., - TORONTO

Telephone Park 1318.

HOTEL DIRECTORY.

NEILMcCARNEY, Prop. W. C. McCARNEY, Manager

THE PROVINCIAL

Leading Commercial Hotel. GANANOQUE, ONT

Located in Heart of Business Section. Ten First-class Sample Rooms.

HOTEL GRAND

O. F. BAKER, Prop. GALT, ONT

First-class accommodation for Commercial Men.

WINDSOR HOTEL, HAMILTON, BERMUDA

This House is pleasantly and conveniently located on the East Side of Queen Street. The rooms are bright and cheerful. Every attention paid to guests. Billiards and pool. Hot and cold water baths. A. McNicol, Prop.

TOWER HOTEL, GEORGETOWN, DEMERARA, BRITISH GUIANA.

This first-class hotel is most conveniently situated in the coolest and healthiest part of the city, within one minute from Post and Telegraph Offices, Tram Junction and principal clubs. Five minutes from railway station and steamer stallings, and near to all principal public buildings. Cool and lofty bedrooms. Spacious Dining and Ladies' Rooms. Billiard Room. Electric light throughout.

VICTORIA LODGE

Mrs. J. F. SMITH, Proprietor. HAMILTON, BERMUDA

Opposite Victoria Park and Cedar Ave. Private board $12 to $14 per week.

BOARD AND ROOM

"THE ARGYLE,"

Mrs. FRASER Cedar Avenue, HAMILTON, BERMUDA

Terms moderate. Also furnished cottages.

THE AMERICAN HOUSE

A. PASCHAL (Prop.) HAMILTON, BERMUDA

Centrally located. Open all the year round.

WOODSIDE BOARDING HOUSE

(Corner of Main and Lamaha Streets, GEORGETOWN, DEMARARA.)

Cool and airy Bedrooms, Excellent Cuisine, Attendance Qualified. Terms Moderate. Electric Car Loop at gate of premises. Patronage Solicited. Manageress, E. Cottam.

WINTER RESORT – Queen's Park Hotel.

PORT OF SPAIN, TRINIDAD, B.W.I.

John McEwen, Manager. For Rates, etc., apply Trinidad Shipping & Trading Co., 29 Broadway, New York.

ALCOHOLISM

The best treatment for all persons afflicted with the disease of drunkenness, is known only to

DR. MacKAY, Address City Hall, Montreal, Que.

Absolutely private treatment.

THE TELEPHONE

Is a companion, friend and servant combined.

Invaluable for convenience in the household.

LONG DISTANCE TELEPHONE SERVICE

Has no equal for the facility it affords in business life.

Full particulars as to rates and service at the nearest office o.

THE BELL TELEPHONE COMPANY OF CANADA

This list is for the purpose of placing retailers, manufacturers' jobbers and other readers in touch with reliable and competent accountants and auditors whose services are so frequently required for such purposes as opening books,

Leading Canadian Accountants and Auditors

adjusting and auditing accounts, arranging partnerships or organizing joint stock companies, devising special office systems, making collections and investigations, handling estates, making valuations, etc.

DAVID HOSKINS, F.C.A.
Chartered Accountant, Auditor, Financial Valuator.
27 Wellington Street East, - - Toronto, Canada.

This Space $15 a Year.

JENKINS & HARDY,
Assignees, Chartered Accountants, Estate and Fire Insurance Agents.
15½ Toronto Street. Toronto.
465 Temple Building, Montreal.
100 William Street, New York.

This list is for the purpose of placing manufacturers, wholesale and retail merchants and other readers throughout Canada, and firms abroad doing business in Canada, in touch with the legal profession throughout the Dominion, for the collection of accounts, legal representation,

LEGAL CARDS.

organization of companies, the arrangement or dissolution of partnerships, or assignments, as well as all other matters of a legal nature.

For advertising rates apply to MacLean Publishing Co., Limited, Montreal or Toronto.

TUPPER, PHIPPEN & TUPPER,
Barristers, Solicitors, Etc.
Winnipeg, - - Canada.

ATWATER, DUCLOS & CHAUVIN
Advocates. Montreal.
Albert W. Atwater, K.C. Consulting Counsel for City of Montreal. Chas. A. Duclos. Henry N. Chauvin.

BEATTY, BLACKSTOCK, FASKEN, RIDDELL & MABEE
Barristers, Solicitors, Notaries, Etc.
Offices, Bank of Toronto.
Tel. Main 3813. - - - - - Toronto, Ont.

IRWIN & JONES, Barristers, etc.
H. E. Irwin, K.C., Clerk of the Peace, County of York; B. Morton Jones, B.C.L.; Solicitors for Equity Fire Insurance Co., Berlin Fire Insurance Co.
24 King St. W., Toronto. Weston, Ont.

W. G. WILSON
Barrister, Solicitor, Notary, Conveyancer, etc.
Napanee, Ont.

MEWBURN & AMBROSE
Barristers, Solicitors, etc.
S. C. Mewburn, E. H. Ambrose,
Hamilton, Ont.

WM. A. McLEAN
Barrister, Solicitor, Etc.
Head Office, Guelph, McLean's Block.
Branch Office, Acton, Town Hall.
Corporation Solicitor, Etc.

ROBINSON & GREEN
Barristers, Solicitors, Etc.
John A. Robinson, John R. Green.
Solicitors for the Imperial Bank of Canada, the Southern Loan & Savings Co., St. Thomas, Ont.

LOUGHEED & BENNETT,
Barristers, Solicitors, Advocates, etc.
Calgary, Can. Cables: Lougheed, Calgary
Solicitors for: Bank of Montreal. Canadian Bank of Commerce, Bank of Nova Scotia, Merchants' Bank of Canada.

This space $30 per year.

1,000 White Business Envelopes, $1.00

(PRINTED TO ORDER)

This offer is to get you started. We want your trade, and we don't do cheap-looking work, either. Give us your next job, and you will be satisfied.

G. A. WEESE & SON, 44 Yonge St., TORONTO

Write for Catalogue of Printing.

Successful Advertising—How to Accomplish It

By J. Angus MacDonald

A volume of 400 pages packed full of good stuff for advertisers. Price $2.00.

Sent post paid upon receipt of price.

TECHNICAL BOOK DEPARTMENT
MacLEAN PUBLISHING CO. LIMITED, TORONTO.



THE UNDERWOOD

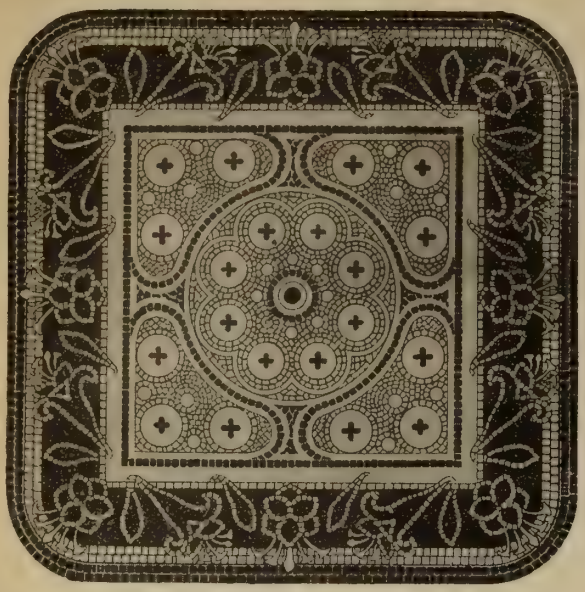
The Writing-in-Light Typewriter

Will do your work 25% to 50% faster than any other writing machine. Highest award "Grand Prize," St. Louis Exposition, 1904.

UNITED TYPEWRITER CO., LIMITED

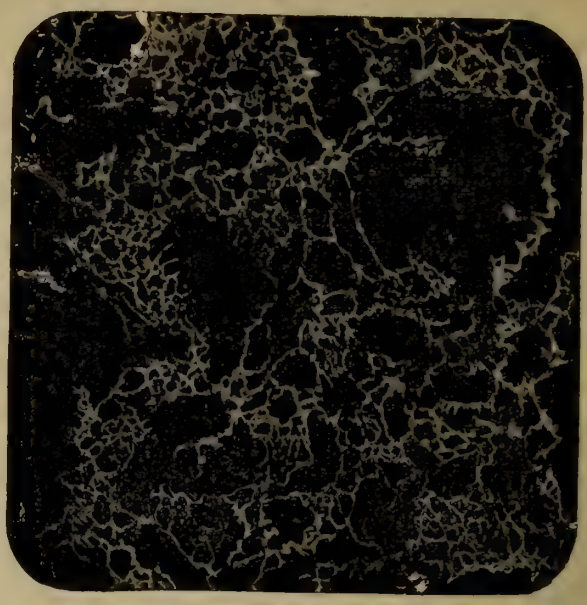
7 ADELAIDE STREET EAST, TORONTO *and at* **99 ST. FRANCIS XAVIER STREET, MONTREAL**

HAMILTON LONDON OTTAWA QUEBEC ST. JOHN, N.B.



ELITE STOVE BOARDS.

Lithographed; assorted colors; made in 12 sizes; wood lined and paper lined.



ONYX STOVE BOARDS.

Assorted colors; made in 12 sizes; wood lined only.

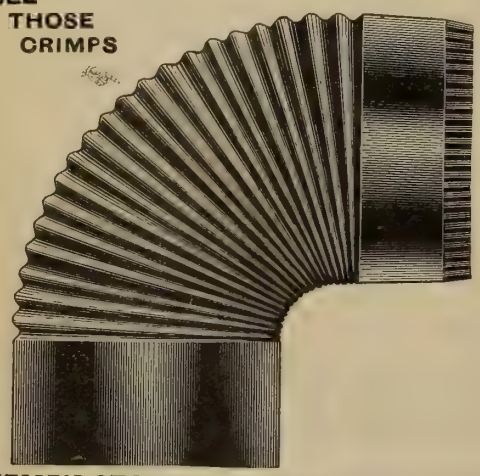




ARCTIC SNOW SHOVELS.

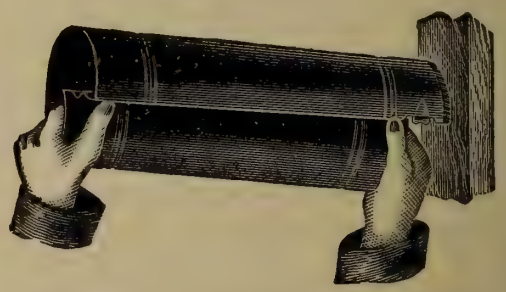
Solid steel blades, securely bolted to handles.

SEE THOSE CRIMPS



KEMP'S STANDARD ONE-PIECE ELBOW

Made of extra smooth iron; uniform in size; will not damage in shipping.



KEMP'S STANDARD STOVE PIPE.

Packed 25 joints in a closed crate; secures lowest freight rates; requires no rivets or tools to put together.



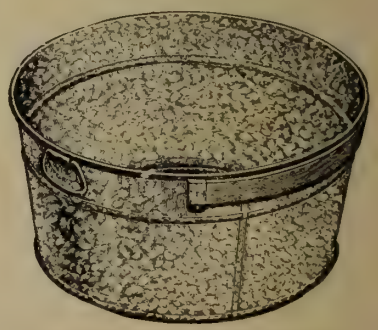
SAVORY ROASTERS.

Covered; seamless; no folded corners; easily cleaned



GALVANIZED BASKETS.

Corrugated bottoms; the best basket for handling grain, potatoes, apples, roots, etc., strong and serviceable; made in two sizes.



GALVANIZED WASH TUBS.

With wringer attachments; no hoops to fall off; strong, light, durable; made in three sizes.

WE WILL GLADLY QUOTE PRICES

KEMP MANUFACTURING COMPANY, TORONTO, ONT.

KEMP MFG. & METAL CO., Limited,
McDermot Ave. East, Winnipeg, Man.

THE KEMP MFG. CO. of MONTREAL,
58 McGill St., Montreal, Que.

Winnipeg as a Wholesale Centre

IT is a commonplace to indulge in high-flown generalities concerning the wonderful growth of Winnipeg during recent years as a wholesale distributing centre for Western Canada, and it is not the intention of the present article to repeat a multitude of platitudes and generalities which are now as an oft-told tale. At this day no one doubts the prosperous present and still more roseate future of Winnipeg and the great fertile prairie country lying west of the lakes. It is no longer fashionable to doubt it; the westerner is outdone in his praises of the newer Canada by the eastern man, who probably knows the country only by hearsay. Business men in all parts of Canada are looking to the west for the expansion of their trade, and the interests of the country west of the lakes occupy about three-quarters of the time of the Dominion Parliament. It is not necessary to occupy any valuable space explaining in a general way the wealth and potentialities of the west.

But, while no one now is brave enough to cast any doubts upon the prosperity and bright prospects of Winnipeg, it is nevertheless the case that very few visitors on their first arrival in Winnipeg are prepared to see the immense warehouses in which the merchant princes of the western city transact their business. The man from Montreal or Toronto who pays his first visit to Winnipeg is not prepared to find warehouses as large as those he has known in the large eastern cities and many that are larger. He is not prepared to find in a city of about 80,000 inhabitants serving a country whose population is not much in excess of one half million, warehouses larger than he has known in eastern cities of larger population serving a constituency with a much larger population. But this is exactly what he finds. In spite of all that he has heard the reality surprises him

This article attempts to sketch the history of the leading jobbing and manufacturing firms of Winnipeg, and to show by illustrations to what proportions the Winnipeg firms have grown. Winnipeg's business history is yet in the making and there are few firms here which have been in business in Winnipeg for twenty years. The number who have commenced doing business in Winnipeg or have built large warehouses during the last four or five years is astonishing. New establishments are being opened out with astonishing rapidity, and the number of eastern firms sending representatives to Winnipeg and establishing branch warehouses and sample rooms to cater to the western trade is legion.

Nevertheless there are few indications of a boom; the rapid growth of Winnipeg as a commercial and distributing centre rests upon solid foundations. It is true that a number of firms have built beyond their present requirements, but he is a foolish business man in Winnipeg who does not provide for future expansion. At the present moment Winnipeg is the undisputed distributing centre for the people of the most fertile and largest continuous wheat belt in the world. It is true that only a small portion of this wheat area is yet under cultivation, but immigrants are pouring in by the thousands every season to take up free Government lands and every new arrival means a new customer to be supplied from Winnipeg or the east. Undoubtedly there will be other jobbing centres in the west, but Winnipeg, having been first in the field, should maintain the first place. Her relative importance as a commercial centre is shown by the fact that she ranks third in Canadian cities in clearing-house returns.



Winnipeg, Looking North.

Few Manufacturing Industries.

A glance through the pages that follow will show that there are as yet very few manufacturing industries in Winnipeg. The prairie city is, as yet, essentially a distributing centre, handling the manufactured products of eastern cities and outside countries. That this will always be the case no person believes, and already there are a number of pros-

perous manufacturing plants. The chief drawback is the absence of cheap power. Power generated from coal costs relatively so much more in Winnipeg than in the east that manufacturers hesitate to locate here. At the present time the city council and the most enterprising business men are looking for a solution of the difficulty in the water power available at the Winnipeg River, between sixty and seventy miles distant from Winnipeg. It is urged by those who have studied the situation that, contrary to the popular opinion, Winnipeg occupies one of the most commanding positions of any manufacturing centre in the country, and that it will be the fault of Winnipeg's citizens if the advantages of cheap water power are not realized.

distance there are three principal groups of falls. The first is Big Bonnet Falls, with a drop of over 35 feet; the second is White Mud or Electra Falls, with a drop of 13½ feet, and the third is Silver Falls, with a drop of over 22 feet.

It is estimated by power experts that the Big Bonnet Falls will easily yield 390,000 horse-power, that the Electra Falls will yield 227,000 horse-power, and that the Silver Falls, if improved, will yield additional 227,000 horse-power, or a total of 884,000 horse-power within 6½ miles.

That is, within 65 miles of Winnipeg, an enormous amount of water power is going to waste and is available for use in Winnipeg if advantage be taken of the situation of the city. It is estimated that this amount of power is equal to

Winnipeg River and of the St. Andrew's Rapids on the Red will mean a revolution in the industries of Winnipeg. In addition to being the distributing centre for the west Winnipeg will also be its manufacturing centre.

J. H. Ashdown Hardware Co., Limited.

Closely associated with the history of Winnipeg is the name of Jas. H. Ashdown. The history of Mr. Ashdown and his business is indeed the history of Winnipeg, and one might almost say that wherever anything is known of Winnipeg the name Ashdown is associated with it. Ashdown's wholesale is undoubtedly the oldest hardware business in the west, and although there is no design in the arrangement of the references in this article to the different

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J. H. Ashdown Hardware Co., Winnipeg.

Water Power.

In a paper by Mr. Chas. Esplin, who has made a personal examination of the Winnipeg River and has given the whole power question a careful study, the situation is reviewed at length. The commonly accepted data show the elevation of the Lake of the Woods to be 1,042 feet. The elevation of Lake Winnipeg is 710 feet, and the total fall of the Winnipeg River from the Lake of the Woods is consequently 332 feet. The portion of the river in which Winnipeg business men are most keenly interested because of its potentialities as a source of cheap power is near the Big Bonnet Falls. In a distance of less than six and one half miles from the head of the Big Bonnet Falls to the foot of Silver Falls the river drops over 94 feet and in that

that which can be obtained from 7,000,000 tons of coal per year.

The river at the points in question is about half a mile wide. It contains not only the water from the region drained by the Lake of the Woods and its tributaries, but also another volume of water about twice as great, from the region drained by the English River and its tributaries. Sixty feet is not an uncommon depth and the volume of water is not less than 7 000,000 cubic feet per second. While several hundred thousand horse-power can be developed there, the total amount of horse-power used in the manufactures of Toronto is about 150,000 horse-power.

It is unnecessary to dwell upon the possibilities which access to such power opens to Winnipeg industries. The development of the water power of the

firms, it is only fitting that precedence should be given to the pioneer business.

The story of Mr. Ashdown's business career is so well known that there is no necessity to go into details. It is very interesting to note in that quaint, gossipy old book, Begg's "Ten Years in Winnipeg," (1869-1879), various references to the Ashdown business in its early modest beginnings. In the early pages of the book the following reference is made :

"Jas. H. Ashdown arrived in Winnipeg shortly before the Rebellion, and started a small tinsmith shop in a room in the buildi[illegible] opposite the Hotel du Canada, on Post Office street. Unfortunately for him, however, he became mixed up in the troubles of the country and was held for some time in durance vile, a prisoner in Fort Garry, during

his sojourn in which his small shop remained closed, no doubt at great sacrifice to the proprietor. Mr. Ashdown having bought out one Moser—a tinsmith who left for the States—by strict attention to his business and hard work began to build up a good trade. He had no opposition, and as the other stores gave way to him in the hardware and tinware trade he had a fine opportunity to make money."

Evidently the business was growing, and it is amusing to find in the chapter devoted to the year 1871 the following reference to Mr. Ashdown and his store: "We see about this time an evident reign of prosperity in the business of J. H. Ashdown, for that gentleman, finding his trade increasing so rapidly, had to engage an assistant tinsmith." In that year it appears that Mr. Ashdown secured the contract for the first tin roof in Winnipeg, the work being done for Bannatyne & Begg. It was in that year also that Mr. Ashdown built his first store on the Main street site of his present retail establishment. To quote again from that quaint old chronicle of the early days of Winnipeg: "Mr. J. H. Ashdown finding his premises too small on Post Office street erected a store for himself on Main street. It was two storeys high, and its dimensions were 20 x 40 feet. It was flat-roofed and covered with tin." Readers familiar with the Winnipeg of to-day can not help comparing the description of that first Main street store with the handsome structure destroyed by fire last Fall, and the still more handsome building now in course of construction on the old site. It is small wonder that, as Mr. Ashdown explained at the meeting last February of the Western Retail Hardware Association, he is much attached to the old site, and did not hesitate long in his decision to rebuild.

The old chronicle by Beggs rambles on in gossipy style, and there are frequent references to the Ashdown business. The story of the year 1876 tells of his first dinner to his employes and commends the custom to the favorable attention of other firms. To quote again from the old chronicle: "To give some idea of the trade of the Northwest we will here mention one small order given Jas. H. Ashdown in March, 1876: 3,500 tin pails, 1,800 round pans, 1,500 oval pans, 1,800 pint cups, 1,500 half-pint cups, 400 teapots, etc. No wonder Ashdown grew rich."

Evidently the west was in those early days a country of large ideas and increasing trade.

In the advertising pages of this old volume there is a page devoted to the following announcement of the Ashdown firm:

HARDWARE
MILL AND RAILROAD
SUPPLIES.
HOUSE FURNISHING GOODS.
COAL AND WOOD STOVES.
THE LARGEST AND BEST ASSORTED STOCK IN THE PROVINCE.
AGENTS FOR HALL'S SAFES.
WHOLESALE AND RETAIL.
J. H. ASHDOWN
331 and 333 Main Street,
WINNIPEG.

From such small beginnings has sprung the immense wholesale business of the J. H. Ashdown Hardware Co., Limited. The story of its growth is the story of the growth of the west, and it has kept pace with the immense development of the New Canada beyond the lakes.

The officers of the company are: Jas. H. Ashdown, president, and John Emslie, secretary-treasurer. A. Buehler is manager of the business.



Warehouse Marshall-Wells Co.

Marshall-Wells Co.

It was in the year 1900 that Marshall-Wells Co. opened an office in Winnipeg, with W. G. McFarlane in charge. The business was then a branch of the Marshall-Wells Hardware Co., of Duluth, but in 1901 it became a separately incorporated concern under its present name, Marshall-Wells Co. W. G. McFarlane was elected vice-president and manager of the Canadian business, and he is still in charge of it. The growth of the business in the five years of its Canadian history is evidenced by the increase in the number of its travelers. During the first two years they employed two travelers and had an office staff of three. In 1905 they have eight travelers and some 65 employes in the office and warehouse.



Warehouse of The McClary Manufacturing Co.

The present warehouse was built in 1901, and already it is too small to accommodate the business. Property has been purchased on Market street and a new warehouse eight storeys high is to be erected very soon. The plans for its construction are now well under way.

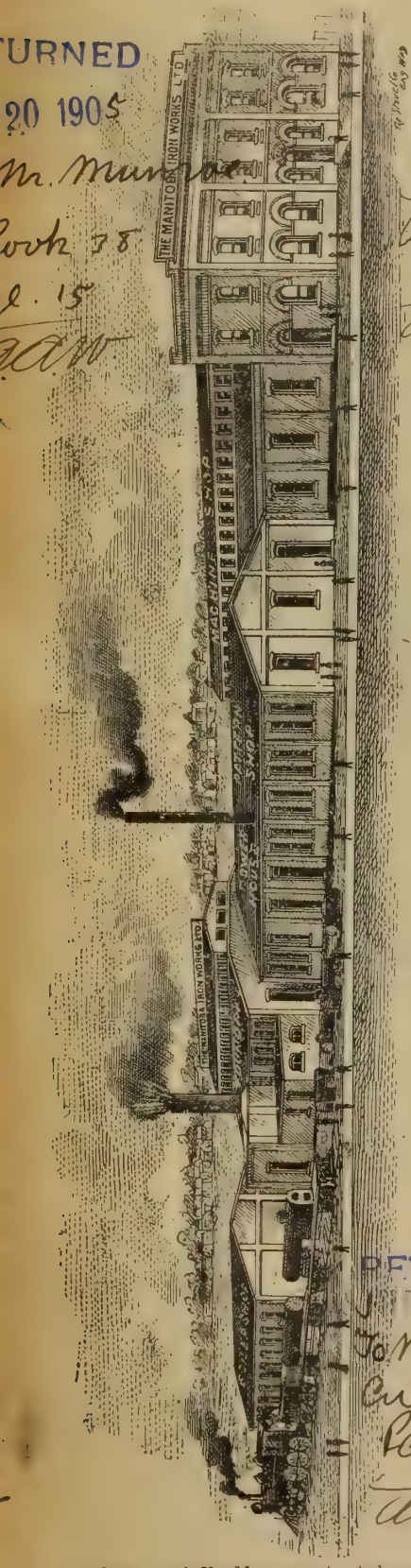
The officials of the company are as follows: W. G. McFarlane, vice-president and manager; A. B. Kent, secretary; H. M. Howell and T. G. Matheers, Canadian directors. E. B. Loucks is sales manager.

McClary Manufacturing Co.

Like so many other firms, the McClary Mfg. Co. date their existence in Winnipeg since the exciting "boom" days of 1882. It was in March of that well-remembered year that a branch of the McClary Mfg. Co., of London, was opened in Winnipeg and a stock was carried in the Prairie City. The first location of the firm was in a small building on Point Douglas avenue, and the business was opened there by J. W. Driscoll, who is still in charge. The present building was erected about three years ago, and with an addition which has been built to it since it is now six storeys high with a basement. The dimensions are 50 x 135 feet, and hence ample accommodation is afforded for carrying a large stock in Winnipeg. McClary's stoves, ranges, furnaces, tinware and similar manufactures are carried in stock in Winnipeg.

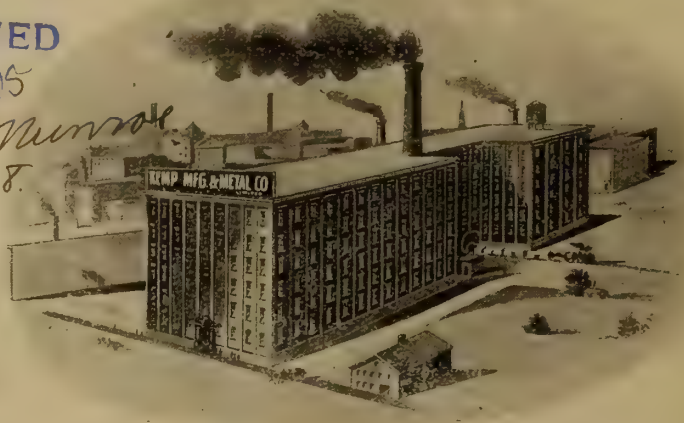
The Manitoba Iron Works.

A new firm which has made a place for itself in the West is the Manitoba Iron Works, which was organized in March, 1903, by T. R. Deacon, H. B. Lyall, J. A. Coulter, and R. Murray, to take over the business and plant of the Standard Machine Works, Winnipeg, and the Rat Portage Iron Works of Rat Portage. A general foundry and machine business is conducted in the works of the company on Logan avenue west, where they have approximately 25,000 square feet of floor space. While machinery is given the most attention by this firm many of their manufactures are handled through the hardware trade. General mill supplies are manufactured and carried in stock. As may be seen from the illustration, their works are very extensive.



Plant of the Manitoba Iron Works.

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Factory and Warehouse of the Kemp Metal and Manufacturing Co.

Kemp Manufacturing & Metal Co., Ltd.

As it name implies, the Kemp Mfg. & Metal Co., of Winnipeg, is an offshoot of the Kemp Mfg. Co. of Toronto. Although now a separate incorporated company, the business was opened first in April, 1900, as a western branch of the Toronto house. The immense new building illustrated herewith was erected in the Fall of 1903, and in April of the following year the western branch was incorporated as a separate concern under its present name of the Kemp Mfg. & Metal Co., Limited. A great part of the firm's output is manufactured in Winnipeg, and large stocks are carried. Enameled sheet metal ware, plain and re-tinned, stamped and pieced tinware, metal shingles, siding and accessories, are among the lines manufactured and handled in Winnipeg.

The officers of the company are: - A. E. Kemp, M.P., president; W. A. Kemp, vice-president; John E. A. Wildman, secretary, and Wm. Crawford, director.

The Winnipeg Paint & Glass Co., Ltd.

A newcomer would find it hard to realize that the Winnipeg Paint & Glass Co., with its large handsome warehouse in the city proper and its factories in Fort Rouge, dates its existence only from January 1st, 1903. The thirty months of its history have been marked by a rapid development, and the company is an important factor in the paint, oil and glass trade of the western market.

Business was commenced on Donald street, and in 1904 the present warehouse and ornamental glass factory was built on Notre Dame street east. This ornamental glass factory is one of the most interesting establishments in the west for there can be seen in full operation the only plant of its kind in Canada outside of Toronto and Montreal.

In the basement of the building is the sand blast machine, which is used in the



Warehouse and Factory of Winnipeg Paint and Glass Co.

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manufacture of ground glass, while the whole of the upper storeys is occupied by the bevelling plant, mirror works, lead and copper light department and glass painters room.

In the bevelling shop, under the charge of Mr. McGinnis, there are in operation eight bevelling machines of the latest pattern, while adjoining the bevelling room are the mirror works, where the company also do acid cut work and manufacture artistic chipped glass, such as is used in bank partitions, office doors, etc.

In addition to this ornamental glass factory and a woodworking factory in Fort Rouge, where they manufacture office and bank fittings and similar goods, the company have their plate glass and Portland cement warehouses at the foot of Notre Dame avenue.

E. Cass is president of the company, James McDiarmid and John Carr are vice-presidents, and R. W. Paterson is secretary-treasurer.

George D. Wood & Co.

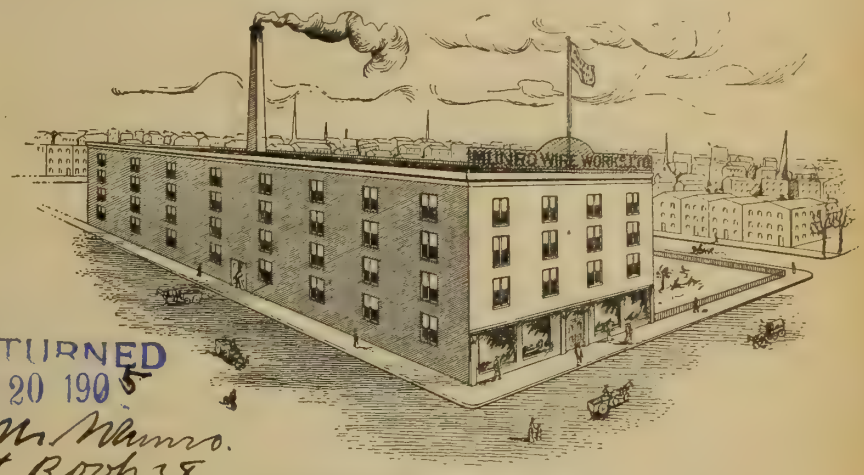
The Winnipeg firm of Geo. D. Wood & Co. are a branch of the Hamilton firm of Wood, Vallance & Co. Few Canadian firms have a longer history than this well-known hardware house. It was founded in 1849 by the late Senator A. T. Wood, and the business was conducted under his name for ten years. In 1859 the firm name was changed to Wood & Leggat, and the business was conducted under that name until 1889, when the firm became known under its present name of Wood, Vallance & Co.

The Winnipeg branch was opened in 1880, under the name of Geo. D. Wood & Co. The establishment of a branch in Winnipeg was a step in accordance with the policy of the firm, for there are at the present time other branches of the Hamilton firm in Nelson, Vancouver and Toronto. The firm are known in Nelson as the Wood, Vallance Hardware Co., and in Vancouver as Wood, Vallance & Leggat, Limited.

The Winnipeg branch is among the oldest of the wholesale hardware firms of Winnipeg, and it has always been an important factor in the wholesale hardware trade of the west. The large warehouse on McDermot avenue was built by Geo. D. Wood & Co. in 1897, and as they have, in addition, a large heavy goods warehouse near the C.P.R. tracks they have ample facilities for handling their increasing trade.

Munro Wire Works.

"Made in Winnipeg" is the motto of the Winnipeg branch of the Munro Wire Works, and the device is being stamped on all the goods which they manufacture in the Prairie City. Early in the year Jas. Munro came to Winnipeg from New Glasgow, N.S., and started a factory in the old Scott Furniture warehouse on Graham avenue. The plant in Winnipeg is already quite extensive and additions are contemplated as the growth of the business warrants them. Wire fencing, door mats, bed springs, almost anything that can be made from wire, are among the manufactures of this firm. "The spring that springs and will not sag," is the phrase used by Mr. Munro in describing the bed springs of his own invention and manufacture.



Factory Munro Wire Works, Winnipeg.

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Winnipeg Ceiling & Roofing Co.

One of the new manufacturing industries of Winnipeg which has already by its aggressive policy won for itself a place in the western trade, is the Winnipeg Ceiling & Roofing Co., whose plant is situated in Fort Rouge. Formed only one year ago, it is now manufacturing a large output which is sold in all parts of the west. All Western Canada is building, and hence metal roofing and ceiling supplies of the right quality find a ready market.

The factory is fairly large, its dimensions being 50 x 220 feet, and there is a large output of iron roofing and siding, metal ceilings, cornices and skylights. Special attention is being paid to a new line of eavetroughing. Expansion has been the motto of the firm from the first, and they are now putting in a 15 ton press for the manufacture of metallic window frames. In addition to their own manufactures the company also job different lines of galvanized iron and tin plate.

W. J. McMartin is president and manager of the company, W. McFarland is vice-president, and T. J. Mathers is secretary.



Factory Winnipeg Ceiling & Roofing Co.

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Vulcan Iron Works, Limited.

Winnipeg has still very few manufacturers, but she has reason to be proud of the extensive plant of the Vulcan Iron Works, Limited. The business dates back to the year 1874, when it was conducted under the name of McKechnie & McMillan. Later it was known as the Vulcan Iron Co., and now it is conducted under the name of the Vulcan Iron Works, Limited. The president of the company is John McKechnie, and the offices of vice-president,

secretary and treasurer are filled by E. G. Barrett.

The company have a very extensive plant to the north of the C.P.R. tracks and opposite the new C.P.R. station. Extensive additions have been made during the last three or four years, and the plant would do credit to cities which make greater pretensions than Winnipeg to be manufacturing centres.

Merrick, Anderson & Co.

This firm, founded in 1882 by Geo. A. Merrick and Thos. A. Anderson, illustrates the tendency of modern business towards consolidation. They are a firm of manufacturers' agents representing in the west nine large industries which do a thriving business in this part of Canada. Stock is carried for these firms in the big warehouse illustrated herewith, which is situated at 117-119 Bannatyne avenue east. This is a five-storey brick structure with a basement, the dimensions being 77 x 99 feet.



Warehouse Merrick, Anderson & Co.

Full lines of goods are carried for the following firms: Burrow, Stewart & Milne, Hamilton — "Grand Jewel" stoves, ranges furnaces, scales of all kinds, etc.; the D. Moore Co., Limited, Hamilton—stoves, furnaces, hollow ware, tinners' tool machines, etc.; the Canada Paint Co., Limited, Montreal—"Elephant" brand white lead and ready-mixed paints; the Thos. Davidson Mfg. Co., Limited, Montreal—stamped tin and enameled steel ware of all kinds; the Manitoba Building Paper Co., Winnipeg—plain and tarred building paper, ready roofing, etc.; the Dominion Bag Co., Limited, Montreal—jute and cotton bags of all kinds and for all purposes, printed in Winnipeg; Wortman & Ward Mfg. Co., London—pumps of all kinds; National Sewing Machine Co., Belvidere; Eldridge B. Sewing Machines, and the Consumers' Cordage Co., Montreal—binder twine and cordage.

The firm have six travelers covering the territory to the Rocky Mountains.

James Robertson & Co.

The Winnipeg branch of Jas. Robertson & Co., of Montreal, was established in the late 70's, some time before "the boom." While the manufacturing end of the business is confined to the east a complete stock of the firm's manufactures and of general lines of hardware has always been carried in Winnipeg. The firm have always been in their present location on Pacific avenue. Twelve years ago their place of business was destroyed by fire, but they rebuilt on the same ground. Jas. Robertson & Co. are among the oldest of the Winnipeg wholesale hardware establishments, and they have always had an enviable reputation for fair dealing.

G. F. Stephens & Co., Limited.

This firm dates its existence since 1882, being established like many others in the old "boom" days. Unlike many of its contemporaries of that period, it survived the early troubles and is now one of the strongest houses in the west. In the early days the only towns outside Winnipeg were Emerson and Portage la Prairie, and hence there was not very much scope for a wholesale paint business. A start was made in the old Spencer block in a flat 25 x 75, and after a time the firm moved to premises on Main street adjoining the Molson's Bank. For two years the firm were located in this old "Bird Block," and then a move was made to their present location on Market street, the building being first rented and afterwards bought outright. Large additions have been made, a complete manufacturing plant added, and further additions are to be made this Summer. In 1901 the firm were incorporated as G. F. Stephens & Co., Limited, and two years later the growth of the business was evidenced by the establishment of a branch at Calgary.

G. F. Stephens is president of the company, and M. F. Christie is secretary-treasurer.

Henderson & Potts Co., Limited.

This firm are among the new arrivals in the western field, that is to say, they have only recently opened their Winnipeg branch, although, of course, their Anchor brand paints were sold the western trade before. The Winnipeg and western business is in charge of J. Irwin, who was formerly in a responsible position in the Montreal office of the company. H. V. Lawlor represents the firm on the road, and has the reputation of being a hypnotic salesman. This charge he disclaims himself and ascribes it all to the merits of his goods. A stock is carried in a warehouse at the eastern end of Lombard street, and western merchants will be welcomed at the office during the Exhibition.

P. D. Dods & Co., Limited.

A branch of this well-known paint firm has recently been opened in Winnipeg, premises having been secured on Smith street. The Winnipeg branch is in charge of Ernest Guertin. For years the western trade have been supplied with "Island City" paints from Montreal, but with a branch in Winnipeg even better service should be assured the trade. The firm's Winnipeg history is only a few months old, and hence is necessarily brief, and its Montreal history is beyond the scope of this article. The opening of a branch in Winnipeg is a good business move and shows the sagacity of the general manager, Mr. Tougas.

Oil Companies.

The demands of the west for illuminating oils are supplied by three companies. The trade in lubricating oils is more widely distributed.

Mackenzie Brothers.

Mackenzie Bros. date their existence as a Winnipeg firm since 1898, when the two brothers, John and Gordon, came to the Prairie City from Sarnia, Ont., and commenced business as manufacturers' agents, representing two or three eastern firms. The new firm steadily added to its list of agencies, and recognizing the advantage of carrying a stock in Winnipeg they secured a warehouse on Bannatyne avenue, where they remained until the growth of their business demanded larger quarters. They are now located at 244 Princess street in a large brick warehouse about five times the size of their previous one. They have excellent track facilities at their new warehouse and all conveniences necessary. They conduct a wholesale business in hardware specialties, confining themselves principally to heavy hardware and building supplies. Their travelers now cover the territory from Fort William to the Rocky Mountains, calling upon the hardware, harness and building trades. The following are some of the manufacturers for whom Mackenzie Bros. are exclusive western agents:

Doherty Mfg. Co., Sarnia, Ont. — manufacturers of stoves and ranges.

J. A. & W. Bird & Co., Boston, Mass.—"Rex Flintkote" roofing, etc.

Duplex Hanger Co., Cleveland, Ohio—Wall and joist hangers, etc.

American Mason Safety Thread Co., Boston, Mass.—Safety treads and sidewalk lights, etc.

Fraser-Johnson Saddlery Co., Hamilton, Ont.—Harness.

Hamilton Whip Co., Hamilton—Whips.

L. H. Gaudry & Co., Quebec—Cast iron "Scotch" pipes and specials.

Lavril's patent cast iron pipes and specials.

In addition to the lines of the above firms, Mackenzie Bros have a large stock of plain and tarred building paper, and other heavy goods. They are a growing firm.

Miller-Morse Hardware Co., Limited.

Perhaps no better example of the rapid but substantial and steady growth of a business house is to be found in any part of Canada than is to be found in the history of the Miller-Morse Hardware Co. The owners of the largest hardware warehouse in Canada commenced a retail business in Winnipeg in the old "boom" days of 1882. In 1887 they changed their business from retail



Warehouse Miller-Morse Hardware Co., Limited.

to wholesale, and built their first warehouse on Princess street. This marked the first step in the development of the present immense wholesale business.

Five years later the demands of a growing business made further extension necessary, and the warehouse then in use was duplicated by another immediately adjoining it, thus doubling the available floor space and storage capacity. In 1896 a third warehouse of the same size was built, affording evidence of steady growth.

Finally, in 1904, Miller, Morse & Co. built their present premises, which cover half of an entire block. The new building is five storeys high with a basement; dimensions 84 feet by 265 feet. This is probably the largest wholesale warehouse of any kind in Canada. Excellent track facilities are provided and cars can be loaded at the warehouse. There are six doors for receiving freight and six for shipping freight. The building is also equipped with three fast running elevators.

On January 1st of this year, simultaneously with the occupation of the new building, Miller, Morse & Co. were incorporated as the Miller-Morse Hardware Co., Limited. Although the name of the firm was changed the ownership is as before. Hyman Miller is president; F. W. Morse is vice-president; F. M. Morse is secretary, and A. Reed is treasurer.

The Sherwin-Williams Co., Limited.

In pursuance of their policy of "covering the earth," the Sherwin-Williams Co. have had a branch in Winnipeg since January 1st, 1903. Previous to that date Walter Woods & Co. had acted as their western agents. The Winnipeg branch was in charge of Benj. D. Ross, but as he found it necessary to spend much of his time on the road he was succeeded in the office by J. H. Hawkins. Mr. Ross now spends all his time on the road, and is ably assisted by two other travelers, J. J. Whalen and Harry H. Eager. These gentlemen cover the territory from Western Ontario to the Pacific Coast.

Northwest Machinery & Iron Co., Ltd.

The charter of the Northwest Machinery & Iron Co. is dated December, 1903, and since that date they have been carrying on a general machinery and blacksmiths' supply business. Readers of Hardware and Metal will remember that this firm met with disaster by fire last December, when their warehouse in Louise Bridge was totally destroyed. This fire has in a measure crippled the firm, but they are steadily regaining lost ground.

A large majority of the blacksmiths and carriage builders from Winnipeg to the Pacific Coast hold a few shares in the business. After the fire the company was reorganized. Clarence Vennilyea, the manager, bought out some of the larger shareholders and some changes were made in the directorate of the company. Clarence Vernnilyea is now president of the company, Hon. Hugh John Macdonald is vice-president, S. R. Mostyn is secretary, and A. Kirkland is treasurer. The management are preparing to put on the market the balance of the treasury stock, amounting to $25,000, and when it is sold the proceeds will be devoted to building a new plant in place of that destroyed by fire.

J. A. Ross.

J. A. Ross, manufacturers' agent, is sole Canadian agent for the Ideal Steam Cookers, and for some other strong lines. His place of business is at 141 Bannatyne avenue.

Ross & Ross.

Ross & Ross commenced business in Winnipeg in 1898, and having a good line of agencies they have secured a valuable connection among the trade. They are western agents for the Page Wire Fence Co., the K. C. Hay Press Co., and the Aullman & Taylor Machinery Co. They are locaeed on Market street east.

Consolidated Plate Glass Co. of Canada, Limited.

The Consolidated Plate Glass Co. have a branch establishment in Winnipeg at 271-273 Fort street. The western business is under the management of H. R. Wemp.

Pease-Waldon Co., Limited.

For many years the Pease Foundry Co., of Toronto, sold their line of "Economy" furnaces and general heating goods direct from Toronto through their travelers, but during the last year the Pease-Waldon Co. have been here on the spot to look after the growing demands of the western trade. A complete stock is carried in Winnipeg, and the business has been growing rapidly.

This season the company are placing on the market several new lines of heaters—warm air furnaces, hot water boilers and combination heaters for steam and ventilation. A new series of Pease "Economy" warm air furnaces has been manufactured to suit the special requirements of the western trade and the heating trade and general public are according it the encouraging reception which enterprise of the kind deserves. Booklets describing this furnace are now being distributed to western dealers.

The Pease-Waldon Co. sell their heating goods to the trade only where the trade employ competent mechanics capable of installing furnaces satisfactorily. A sufficient profit is secured by the local dealer to enable him to instal these heaters in a workmanlike manner. The company furnish the local dealer with plans for the installation of their warm air, hot water, steam and combination heaters.

Record Foundry & Machine Co.

Two years ago the Record Foundry & Machine Co., of Moncton, N. B., commenced to build on Mill street, Montreal, an immense stove foundry from which to supply the western trade. The foundry having been completed, it was decided to open branch warehouses in Winnipeg, Calgary and Vancouver. R. R. Kinread, who was in charge of this firm's exhibit at the Dominion Exhibition, held in Winnipeg last Summer, is in charge of the Winnipeg branch, which was opened this Spring and is located on Princess street.

Gurney Foundry Co.

The Winnipeg branch of the Gurney Foundry Co. was opened in 1898 by J. Drewe, who is still in charge. For the convenience of the western trade a full stock is carried in Winnipeg. The firm are located on Lombard street.

F. S. Hallam & Co.

This firm succeeded E. G. Low & Co. in March of this year, and they are conducting their business at the old location on Market street east. They are western representatives of the Guelph Foundry Co., the Ottawa Foundry Co., and the Western Foundry Co., of Wingham, Ont. Although a new firm their principals have been established in the western market for some time, and business is coming their way from the start.

Clare & Brockest.

Clare & Brockest are the western representatives of Clare Bros. & Co., Limited, and the Metal Shingle & Siding Co., Limited, both of Preston, Ont. They took over this business in January, 1902, and as they represent two strong and enterprising firms success has been assured from the first. They have a large warehouse on Princess street, where they carry a stock for these firms.

The Jas. Smart Manufacturing Co., Ltd.

It was in 1901 that this firm opened their branch warehouse in Winnipeg, and the move westward was made because of the steady growth of a business in the country beyond the lakes which could not be satisfactorily handled from their Brockville headquarters. The Winnipeg branch was directed by W. H. McGuire until his death in 1903, when he was succeeded in the management by Wm. Sutherland, who is now in charge. The firm have always been located in their present premises at 131 Bannatyne avenue east. During the last few months the Winnipeg stock has been considerably increased in several departments in order that sorting orders of all kinds may be promptly filled.

An exhibit of their general lines of hardware, "Perfection" stoves and ranges, and "Kelsey" warm air genera-

tors, will be made this month at the Winnipeg Exhibition, the exhibit being in charge of Malcolm Campbell. Special prominence will be given to the "Kelsey" heaters, lawn mowers, tools, and refrigerators. L. D. Sutherland will be pleased to welcome the trade at the warehouse during the exhibition.

Caverhill, Learmont & Co.

The western branch of Caverhill, Learmont & Co. is situated in the Stovel block, on McDermot avenue, where T. L. Waldon, the manager in charge, will be glad to welcome the trade during the exhibition.

The Imperial Oil Co., Limited.

The Imperial Oil Co., Limited, have offices in the Bank of Hamilton Building, and the business is under the general management of H. E. Sharpe. H. J. Guthrie has more especial charge of the lubricating oils department.

The Canadian Oil Co., Limited.

The Canadian Oil Co., Limited, of Toronto, have a branch in Winnipeg under the management of S. Walker. Their offices are situated in the Merchants' Bank Building, and their warehouse is in Louise Bridge. This company are also manufacturers of "Sterling" brand paints, oils and varnishes.

The Winnipeg Oil Co., Limited.

The Winnipeg Oil Co., Limited, have offices at 456 Main street. C. W. Filmore is president, Andrew Wright is vice-president, and George E. Cooper is secretary-treasurer.

McColl Brothers & Co.

This Montreal and Toronto house have a large branch warehouse in Winnipeg, on the corner of Henry and Sherman streets. The western branch is under the management of H. H. Bradburn, and a large business is done in lubricating oils and greases, and in varnishes and engine packings and similar goods.

Coltart & Cameron.

The firm of Coltart & Cameron, although one of the youngest, is at the same time one of the most aggressive in the west. It was formed in January, 1904, when John Coltart and W. S. Cameron entered into partnership and commenced a general commission business in hardware specialties, stoves, iron and brass beds, and similar goods. Having secured a strong line of agencies, to which they have been making constant additions, they at once became an important factor in the hardware trade of the west. Space would not permit an enumeration of all the agencies of this firm, but the following are some of them :

Findlay Bros., Carleton Place, Ont.
W. J. Copp, Son & Co.
The Rome Mfg. Co.
F. W. Bird & Son, East Walpole, Mass., and Hamilton, Ont.
Streator Metal Stamping Co.
Ferrosteel Co.

Winnipeg Rubber Co., Limited.

The Winnipeg Rubber Co., although operating under a different name, is in reality the western branch of the Gutta Percha & Rubber Mfg. Co., of Toronto. It has exclusive control of that company's goods in the west. For more than twenty years the Gutta Percha & Rubber Mfg. Co. have been represented in the west, but it is only since 1897 that their western branch has been known as the Winnipeg Rubber Co. The firm have commodious quarters in a large warehouse on Princess street, and they are able to carry a heavy stock. A. A. Andrews is manager.

Thomas Black.

Thos. Black has for years conducted a general manufacturers' agency business in hardware lines in Winnipeg, and he has a large warehouse on Lombard street where he has storage room for large supplies of goods.

F. J. C. Cox.

F. J. C. Cox is an established manufacturers' agent representing a number of important firms. Among others, he represents the Hamilton Powder Co., Dominion Powder Co., and Alex. McArthur & Co., of Montreal.

The Canadian Rubber Co.

The Winnipeg branch of the Canadian Rubber Co. is situated at 80 Princess street, where the company have a large warehouse enabling them to carry a heavy stock. This ancient company have been doing business in the west almost from the time when the country was opened up. Charles Holden is the manager in Winnipeg.

The Canadian Fairbanks Co., Limited.

A branch establishment of what was then the Fairbanks Co., Limited, was opened in Winnipeg in May, 1903, under the management of F. Ross Newman. After some delay the firm were located in the handsome large warehouse on Arthur street, which they now occupy. On March 15 of this year the Canadian business of the Fairbanks Co. was incorporated separately under the name of the Canadian Fairbanks Co., of which Henry J. Fuller, the Montreal manager, is president.

The distinctively western history of this firm is short, but it has been one of substantial and steady progress. Fairbanks scales and the general mill and machinery supplies of the company have been pushed energetically in the west.

Metallic Roofing Co.

At the corner of Notre Dame avenue and Monkman street the Metallic Roofing Co., of Toronto, are erecting a large warehouse and factory. It is their intention to manufacture in Winnipeg their most bulky goods, such as fire-proof glass windows, metallic cornices and sky lights, and a full stock of other lines manufactured in Toronto will be carried in Winnipeg. G. J. S. Morrison will be in charge of the western business.

Tilden, Gurney & Co., Limited.

As their name implies, Tilden, Gurney & Co., Limited, are an offshoot of the Gurney-Tilden Co., Limited, of Hamilton, Ont. As early as 1875 this Hamilton firm were shipping stoves and ranges from their home foundry to the western trade, and in 1879 they opened a branch here under the firm name of E. & C. Gurney & Co. Later the western business was incorporated as Tilden, Gurney & Co., Limited. For 23 years it has been under the management of I. Walter Martin, who has been connected with the Gurney business for 30 years.

In 1880 a warehouse was erected on the same street on which the present building is located. In 1895 a four storey building with a basement was erected, and this season two storeys are being added.

If Winnipeg ever secures the boon of reasonably cheap power there can be no doubt that this firm, like many others, will establish in Winnipeg a separate plant for the manufacture of stoves and ranges for the western trade. In the meantime a heavy stock is carried in the west.

Northern Iron Works.

This is a comparatively new addition to the list of Winnipeg's foundries, but under the capable management of enterprising young men it is making a place for itself in spite of a disastrous fire in the Fall of 1903, which brought temporary disaster to the business.

Wm. Buck Stove Co., Limited.

This eastern house have a branch in Winnipeg at 246 McDermott avenue. It is under the management of W. G. McMahon. The western country offers a splendid market for the stove manufacturer, and the Wm. Buck Stove Co. seem to be getting their share.

James Stuart Electric Co.

This is a new electrical supply house recently organized by James Stuart, of the Stuart Machinery Co., Limited. Premises have been bought from the Miller-Morse Hardware Co., on Princess street, and the firm are installed in part of the old warehouse formerly occupied by Miller, Morse & Co. A large stock is carried and the new firm seems to have a bright future in store.

G. E. Griffith & Co.

A new plumbing supply house has recently been opened in Winnipeg under the name of G. E. Griffith & Co. Premises have been secured at 199 Main street in the old location of R. J. Nott, plumber and steamfitter. The new firm handle the goods of H. R. Ives & Co., Montreal; the Canada Radiator Co., and the Amherst Foundry Co. This is a strong line of agencies, and as in addition they will handle general plumbers' supplies, the firm should soon develop a good trade in the west.

They are represented on the road by F. S. Murdoch, a popular traveler who was connected for a number of years with the James Robertson Co., and later with the Canada Paint Co.

The Great West Wire Fence Co., Ltd.

The Great West Wire Fence Co., Limited, have recently been incorporated and they are commencing the manufacture of fencing in Winnipeg. They are sole owners in Canada of the Rankin patent wire lock, and are therefore in a position to manufacture a superior line of fencing. The principal shareholder is Thomas Black, and associated with him is Wm. Andrews, who is general manager of the business. The firm are located on Lombard street.

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Great West Wire Fence.

A HANDSOME catalogue has recently been issued by the Great West Wire Fence Co., Limited, of Winnipeg, illustrating the line of fencing which they have commenced to manufacture in Winnipeg. In the introduction the firm state that they feel they "are fortunate in entering the market at a time when both railways and farmers recognize the value of a strong and lasting fence, to replace others of a lighter and less durable make of web fencing." They announce that they have purchased all rights for the Dominion of Canada of the "Rankin Wire Lock," and are placing on the market a new field-erected wire fence. The introduction draws attention to the clamp, or lock, as the particularly attractive feature of the fence—a distinctive feature for a field-erected fence. "These clamps are made of No. 9 gauge hard-steel wire, and make an absolute lock, are easy to put on, and being galvanized will not rust. The life of lock and fence is consequently the same—this is a strong point."

The Great West Wire Fence Co. are appointing hardware merchants in the different western towns as their agents, and hardware dealers who are open for an agency would do well to get a catalogue and inspect the new fence.

New Canvas Canoe.

R. Chestnut & Sons, the well-known hardware merchants of Frederickton, N.B., have started a new industry in connection with their business in the shape of a new canvas canoe, which they claim is the only one of its kind made in Canada. Its principle feature is that it is non-leakable, and can be left out of the water any length of time without any fear of it spreading or leaking. It is wider than the ordinary canoe, and is built more for pleasure trips. The factory is already working night and day filling orders, as there has been a big demand for these canoes. The makers are looking for agents in all parts of Canada, and a catalogue will be sent to anyone interested.

A Magnificent Volume.

"History of the Bolt and Nut Industry of America" is the title of an interesting and comprehensive volume pertaining to this important branch of manufacture recently issued. The author is W. R. Wilbur, of Cleveland, Ohio, by whom the book is dedicated to Isaac P. Lamson, president of the Lamson & Sessions Co., of Cleveland, whose desire that the annals of the bolt and nut industry in this country should be carefully collected and preserved was the chief motive that inspired the publication of the book. Acknowledgment is also made of the assistance generously given in the compilation by many prominently identified with the business. The book contains more than 400 pages, and is bound in stiff covers with leather backs and corners. It is embellished with 51 illustrations, principally portraits of the leaders and pioneers in the industry. The frontispiece is a view of the first bolt factory in America, that of Rugg & Barnes, Marion, Conn., which business was established in 1840, the plant being 20 x 30 feet in dimensions. The book closes with a general summary giving briefly in chronological order the various important developments of the business, such as issuance of patents, new machinery, standardization of threads, etc., a list of manufacturers in this field being also given. The volume is an exceedingly creditable one, and is a valuable contribution to the literature of this branch of the trade.

The Greatest Profit Can be Made

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THE SHERWIN-WILLIAMS BUGGY PAINT



is a paint specialty that meets the popular demand for a durable gloss paint for outside exposure. It is a trade-winner.

S-W. Buggy Paint was first made for painting buggies, carriages, etc.; but it proved so good for outside wear, where a varnish gloss paint of great durability was wanted, that it is now used extensively for porch, lawn, and other outdoor furniture.

A good demand exists for it among livery stables in your neighborhood. It is fine for touching up carriages, surreys, phaetons, etc.—keeps them looking well at small cost.

S-W. Buggy Paint is a good profit maker that you should have on your shelves. Write for prices and color cards today.

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PAINT AND VARNISH MAKERS.
CANADIAN DIVISION:
Headquarters: 21 St. Antoine St., Montreal,
Depots: 86 York St., Toronto; 147 Bannatyne St., East Winnipeg.

1441

Helps in Selling.

With all their customary enterprise and logical insight, the J. D. Warren Mfg. Co., Masonic Temple, Chicago, Ill., have gotten out a very practical, interesting booklet containing description and illustrations of the various uses to which the Warren sectional shelving can be put. In the preface they ask the very pertinent question: "Why should not as efficient helps be provided for the hardware merchant to take care of and sell his goods as to buy them?" This booklet containing this and other very valuable information for every hardware dealer, will be forwarded to the trade upon application. When writing mention Hardware and Metal.

A Handsome Series.

The Canadian Rubber Co., of Montreal, Limited, have issued some handsome catalogues during the past few weeks

Catalogue "C" deals comprehensively with interlocking rubber tiling, and other unique rubber floor coverings. This catalogue is printed in several colors, and all the illustrations are in half-tone. As a departmental catalogue, illustrating a very special line of goods, this publication is said to be the finest issued by any rubber company in Canada or the United States.

Catalogue "D" is devoted exclusively to rubber belting and rubber covered rolls. This book comprises 90 pages, with a handsome embossed cover in gold and black. A mass of valuable information concerning the care and use of rubber belting has been inserted, and the illustrations, of which there are a great number, are all in half-tone. This belting catalogue will no doubt be keenly sought after by the trade. As a reference book on everything pertaining to the care and use of rubber belting under

all conditions, catalogue "D" is one of the most complete we have yet seen, and is a striking testimonial of the up-to-dateness of the company.

Catalogue "E" (60 pages with handsome embossed cover) comprises the principal lines of rubber and special hose manufactured. Much valuable information is given as to the care of hose, and many half-tone illustrations are shown to illustrate the text. This particular catalogue is in keeping with the other high-grade trade catalogues.

The complete series of handsome catalogues is concrete evidence of the progress made by the rubber industry in the Dominion. Any of the catalogues issued can be obtained from the sales branches of the company throughout Canada, or direct from the head office, Montreal.

Lumbering Tools.

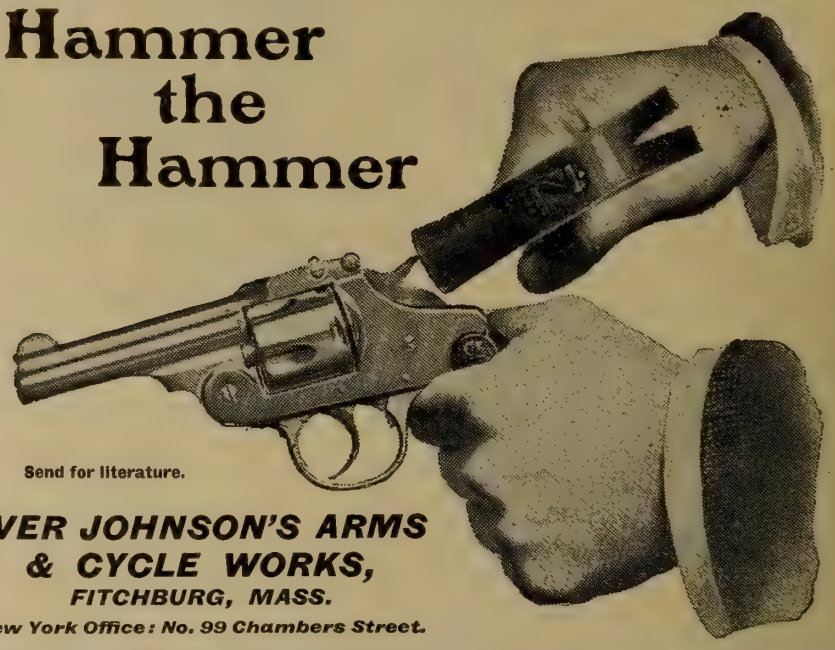
Pink Lumbering Tools are advantageously illustrated and described in a well-gotten up catalogue of 44 pages just sent us by Thomas Pink, Pembroke, Ont. Pink peaveys, cant hooks, pike poles, handspikes, etc., are shown in considerable variety, while piling hooks, boom hooks, chains, loading blocks, and every sort of lumbering tools are listed and their construction explained. The catalogue cover is typical of the lumbering industry, and the book is, on the whole, one which every hardware dealer in lumbering districts should have on his desk. Mention Hardware and Metal if you write for a copy.

There are **HAMMERS** *that "Knock," and there are* **HAMMERS** *that convince. We employ the convincing kind; for instance, we say contact with the Hammer will not discharge an*

IVER JOHNSON REVOLVER

And then we use our **HAMMER** *just to demonstrate the truth of our assertion. We call this a convincing argument, not "Knocking."*

Hammer the Hammer



Send for literature.

IVER JOHNSON'S ARMS & CYCLE WORKS,
FITCHBURG, MASS.
New York Office: No. 99 Chambers Street.

PIG IRON BOOM IN GERMANY.

IT is reported from Berlin that there is no mistaking the boom in pig iron at present throughout Germany, but particularly so in the Silesian district. The demand for pig iron in Upper Silesia is constantly increasing, and is running especially on steel and foundry supplies. It is noticed that speculation secures but little interest, for practically all shipments are going directly to consumers. The output is sold out up to the end of the year, and many orders have been booked for the first quarter of next year. Many furnaces which have been on the market as sellers for several years, have withdrawn, as they require the whole production now for their own steel mills, and are even buying iron in fair quantities.

A POLICY OF DRIFT.

THE long expected and anxiously awaited budget has at last made its appearance, and the hopes of many long-suffering manufacturers are again dashed to the ground. It was believed that the Government had at last awakened to the urgent necessity of protecting some of our industries against the unfair and unequal competition that has been gradually ousting them from the market, and it was reported in the public prints that the forthcoming budget would remedy not a few of the existing grievances. But it is apparent that Mr. Fielding has failed to appreciate the true state of matters. He has chosen the inglorious expedient of referring the matter to a committee of inquiry, which means that nothing will be done till Parliament meets next year.

The binder twine manufacturers have special reason to be dissatisfied with this neglect. They are fighting under the most adverse conditions against the machinations of a colossal and unscrupulous trust, whose avowed object is to drive every Canadian binder twine factory out of business, and already half a dozen factories have closed down after a brave but futile struggle to meet the ruinous prices of the American trust. The facts are plain and well known to Mr. Fielding, and no inquiry is necessary.

This is a case in which the interests of the farmer and the manufacturer are identical, for the farmer will in the long run be the principal sufferer from the creation of a monopoly in binder twine. Moreover, that monopoly, once gained, will be engineered to create other monopolies—monopolies in self-binders, in seeders and the other agricultural implements manufactured by the International Harvest Trust—and heavy indeed will be the burden of the farmer if that comes to pass. The Government would be alienating no class of its supporters by imposing a moderate duty on imported twine, and that they have failed to do so argues either a callous indifference to the interests of our manufacturers or an indecision of mind that would discredit an ordinary business man.

BATTY CO MOVE.

The Batty Stove & Hardware Co., of Toronto, have removed from 76 York street to their new office and wareroom 182 Adelaide street west, where Mr. Batty, manager of the firm, has gone to great expense in having it specially adapted to their line of business. A basement extending the full length of the building is used as storeroom for stoves, tilings, etc. The office is located on the front part of the main floor, the rear of which is used as a storeroom for Jewel stoves and castings, of which this firm carries a complete line and sell to the trade only.

The Batty Co. are probably best known to readers of Hardware and Metal as dealers in mantels, the whole of the second floor being given over as a showroom for these goods, being very tastefully and attractively arranged. In all there are ten thousand square feet of floor space. An electric elevator connects the four floors. The building is so well lighted throughout that the goods are shown off perfectly, a point which all hardwaremen will appreciate, as goods well displayed are half sold.

Hardware and Metal hopes that in a few years this enterprising firm will find these premises too small for their business. As the adjoining building is owned by the firm it will be a very easy matter when such time arrives to obtain double the amount of floor space.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Wholesale Only

138-140 WEST FRONT STREET, TORONTO

Only Wholesale

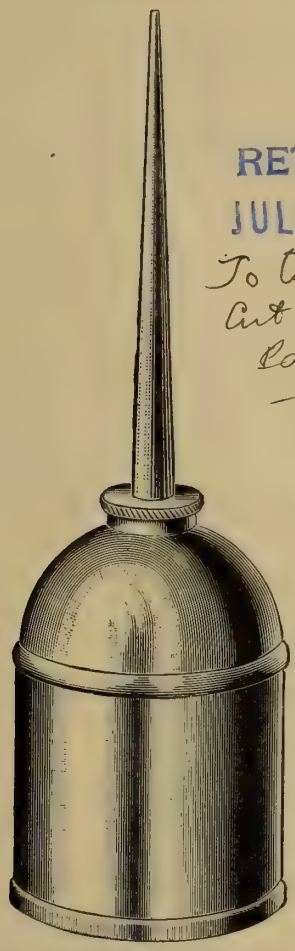
MOWING MACHINE OILERS

RETURNED JUL 18 1905



No. 701. Zinc Oiler
0701. Copper Plated

RETURNED JUL 18 1905
To Owner.
Cut Book 37
Page 4
Acct.



No. 600a. Steel Anti-Rust Oilers

RETURNE
JUL 18 19



No. 620. Steel, Copper Plated

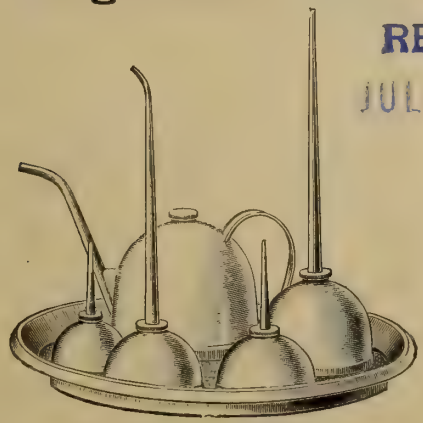
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No. 690. Zinc Tin Bottom

Engineers' Sets

RETURNED JUL 18 1905



No. 30, 5 piece, Round Tray
40. 6 " " "
45. 6 " Oval "

RETURNI
JUL 18 19



Steel Anti-Rust Oiler

For a fuller line see our Hardware Catalogue

H. S. HOWLAND, SONS & CO., LIMITED, Toronto.

We Ship Promptly.

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto, Ont.

Our prices are right.

"DOMINION BRAND"
TARRED FELT
(THE OLD RELIABLE QUICK SELLER)

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COAL - TAR

WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

CONSULT THE WELL-KNOWN MANUFACTURERS

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ATKINS HIGH-GRADE, CROSS-CUT SAWS ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

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Write for Catalogue and Prices.

GURNEY CYLINDER LOCKS



are the outcome of Canadian brains applied to Canadian material, so they are thoroughly "Made-in-Canada" Locks, and the best at that. The difference in price alone enables you to do more business with Gurney Locks than with American Locks.

Gurney Cylinder Locks

are praised wherever used, and merchants tell us they have little difficulty in proving their merits. *You* could do the same. As regards artistic trimmings, we can supply numerous designs. Catalogue No. 7 and Supplements on application.

THE GURNEY, TILDEN CO., Limited
HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

HOW TO USE CEMENT.

THE following general rules referring to the practical use of cement will be found convenient for reference :

Quality of Sand.—The sand should be clean, sharp and coarse. When the sand is mixed with loam, the mortar will set comparatively slow, and the work will be comparatively weak. Fine sand, and especially water-worn sand, delays the setting of the cement, and deteriorates strength. Damp sand should not be mixed with dry cement, but the cement and sand should be mixed thoroughly and uniformly together, when both are dry, and no water should be applied until immediately before the mortar is wanted for use.

Proportion of Sand.—The larger the proportion of cement the stronger the work. One part of good cement to two parts sand is allowable for ordinary work; but for cisterns, cellars, and work requiring special care, half and half is the better proportion. For floors, the cement should be increased toward the surface.

Water in Concrete.—Use no more water in cement than absolutely necessary. Cement requires but a very small quantity of water in crystalizing. Merely dampening the material gives the best results. Any water in excess necessarily evaporates and leaves the hardened cement comparatively weak and porous.

Concrete in Water.—Whenever concrete is used under water, care must be taken that the water is still. So say all English and American authorities. In laying cellar floors, or constructing cisterns or similar work, care must also be taken to avoid pressure of exterior water. Cement will not crystalize when disturbed by the force of currents, or pressure of water, but will resist currents and pressure after hardening only. In still water, good cement will harden quicker than in air, and when kept in water will be stronger than when kept in air. Cements which harden especially quick in air are usually slow or worthless in water.

How to Put Down Concrete.—When strong work is wanted, for cellar floors and all similar work, the concrete should be dampened and tamped down to place, with the back of a spade, or better, with the end of a plank or rammer; then finished off with a trowel, thus leveling and compacting the work. Only persons ignorant of the business will lay a floor or walk with soft cement mortar. All artificial stone is made in a similar way to that described, and, when set, is strong and hard as stone.

Delay in Use.—Do not permit the mortar to exhaust its setting properties by delaying its use when ready. Inferior cements only will remain standing in the mortar-bed any length of time without serious injury.

Stone and Brick Work.—In buildings constructed of stone or brick, the best protection from dampness and decay, and also from the danger of cyclones, is a mortar of cement and coarse sand. The extra cost is inconsiderable, and the increased value of the structure very great. Chimneys laid in this manner never blow down, and cellars, whose foundations are thus laid are always free from atmospheric moisture. Cement may also be mixed with lime mortar for plastering and other purposes, to great advantages.

Effect of Frost and Cold.—At temperature less than 60 degrees Fahrenheit, all good cement sets slowly, though surely, but if allowed to freeze its value is seriously impaired. In cold weather or cold water do not fear to wait for your concrete to crystalize.

Damage from Moisture.—Good cement is not injured by age, if carefully preserved from moisture. Lumps in bags or barrels of cement are caused by exposure to moisture. They prove the originally good quality of the cement.

MACHINE BRICKLAYER.

P. H. LOUD, of Williston, S.C., has invented a brick-laying machine that will revolutionize the art of building, in addition to cheapening the cost of construction and the time necessary for the erection of brick structures.

It is claimed by those who have seen the machine that it will lay brick with all the skill of the most accomplished bricklayer, with perfect accuracy and with a rapidity that discounts the human hands. The report is to the effect that with two or three men operating the machine, supplying it with bricks and mortar, it will do the work of a dozen bricklayers in the course of a day, carrying up a wall as if by magic.

It is further claimed that the machine can be easily and quickly regulated so as to skip wherever it is desired to leave doors and windows, doing this work with seeming human intelligence. It is also said that the machine is not complicated, will not easily get out of order, and is in every way a practical and useful invention, sure to come into general use by contractors.

BUILDING NOTES.

Owen Sound is to have a new post office.

A $30.000 school is to be erected at Virden, Man.

H. Mitchell, butcher, is to build a new store at Mortlach, Assa.

Messrs. Calhoun & Ferguson will build a large hotel at Edmonton.

The Cockshutt Plow Co. will build a three-storey building at Regina.

The A. K. Melbourne Co. are erecting a $6,000 warehouse at Hamilton.

W. G. Breckon and W. E. Fraleigh will build stores at Fort Frances.

W. S. Sandhoff, of Oxbow, Man., will build an $18,000 hotel at Estevan.

The Penman Mfg. Co., Paris, are to erect a large five-storey warehouse.

The Weyburn Cement Brick & Block Co., Weyburn, have been incorporated.

Rasmusson's new hardware store at Quill Lake, Sask., is nearly completed.

J. B. Mack, Prince Albert, has secured a site for a grist mill at Vonda, Sask.

Central Congregational Church, Winnipeg, is to be altered at a cost of $26,000.

The corner stone of a new Roman Catholic church, to cost $20,000, has been laid.

The Edmonton Tent & Mattress Co., Edmonton, will erect a brick block in that town.

V. W. Horwood, Winnipeg, is the architect for a new $4,500 residence at Riverview.

T. R. Vardon, MacGregor, invites tenders for the erection of a municipal hall, 34 x 24 feet.

The Canadian Northern Railway Co. will erect a station and freight sheds at Prince Albert.

Geo. Miller, Oakbank, will receive tenders for the erection of a municipal office building.

An asylum is to be erected at Sydney River, N.S. The architect is R. B. Whitten, Sydney.

Cotter Bros. and Mrs. Geo. Mitchell are to erect a business block on Fort street, Winnipeg.

The Lake of the Woods Milling Co. will erect an elevator at Victoria Harbor, near Midland.

The Brackman-Ker Milling Co. will erect a warehouse and wharf at New Westminster, B.C.

The Chatham, Wallaceburg & Lake Erie Electric Railway Co. will erect a large power house.

W. P. Bate, Saskatoon, will receive tenders for the erection of a new post office building there.

F. Fitzgerald and H. Bowen, Edmonton, will erect a theatre building at a cost of about $20,000.

The Town of Sussex, N.B., has decided to erect a new school building at a cost of about $25,000.

Vachon Bros., New Westminster, are to erect another business block on Granville street, Vancouver.

The Intercolonial Railway are constructing a station and freight shed at McIntyre's Lake, N.S.

The British Columbia Telephone Co., Victoria, will erect a three-storey central exchange building.

W. T. Williams has prepared plans for the erection of a new town hall at Medicine Hat, to cost $30,000.

T. J. Hepburn, architect, Stratford, has the erection of a curling rink in that city under his charge.

A fine new Masonic Temple is to be built at Sydney, N.S. It will be three storeys in height and 38 x 80 feet.

The Western Canada Flour Mills Co. have advertised for tenders for a six-storey mill structure at Winnipeg.

The Commonwealth block at Winnipeg will be enlarged at a cost of $50,000. Forty new offices will be provided.

J. S. Aikins and G. A. Mutlebury will erect a two-storey apartment block at Fort Rouge, at a cost of $30,000.

James Ryan is to build a $22,000 apartment house at Winnipeg. A hot water heating system will be installed.

Metallic ceilings are being installed in

GOLD MEDAL AWARDED 1904

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SWORD CUTLERS
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MANUFACTURERS OF RAZORS SHAVERS CUTLERY SCISSORS FROM SWORD STEEL

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WILKINSON SWORD CO., LONDON, ENG.

the legislative buildings at Winnipeg in every room where they are not yet in use.

Messrs. Ross & Howard, Vancouver, wil, shortly commence work on the erection of a large business block in that city.

John Franski has secured the contract to build a cement block church for the Baptists of Emerson, Man., the cost to be $6,500.

The Toronto & Niagara Power Co. are to build three power stations at Stoney Creek, Twenty-mile Creek, and Clarkson's, Ont.

The Canadian Steel Goods Co. are advertising for tenders for their cement and frame factory, to be erected on Arthur street, Hamilton.

J. H. G. Russell, architect, Winnipeg, is inviting tenders for the erection of a five-storey warehouse for Messrs. Scott, Bathgate & Co., that city.

James McDiarmid, Winnipeg, will shortly call for tenders for a new church building to cost $18,000, for the Point Douglas Presbyterians.

H. Hoffmeister is to erect a $2,200 residence on Granville street, Vancouver, and John Wickhem a $2,500 house on Gore avenue, in the same city.

A. C. Patch, Winnipeg, has secured the contract for the addition to the Hudson's Bay Co.'s stores at Fort William, the cost being $20,000.

Messrs. J. S. Mitchell & Co., Sherbrooke, Que., have purchased a stock of nearly 1,000 squares of steel shingles from the Pedlar People, Oshawa.

Hamilton Orangemen have commissioned Messrs. Stewart & Wilton, architects, to build a three-storey building and meeting hall, to cost $18,000.

The Dey-Manson Building & Construction Co. have been awarded the contract for the erection of a warehouse for the Moline Plow Co., at Winnipeg.

The new building to be erected at Victoria, B.C., by Oscar Promas, of San Jose, Cal., is to contain two stores and will be 45 x 140 feet, two storeys high.

The contract for the big storage reservoir to be constructed in connection with the Winnipeg waterworks has been let to the Toronto Contracting & Paving Co., for $69,771.

The new Methodist church at Shawbridge, Quebec, has been fitted out with a new steel ceiling. Other improvements were made and the building now presents a very nice appearance.

The Carlyle, N.W.T., school board, has let the contract for the building of a four-roomed school for $8,790. This, with heating and ventilating fixtures, will make a $10,000 building.

J. B. Dagainas, of Montreal, has completed the installation of the Pedlar Perfect Steel Lathing in the new Memorial Building which is being erected on Sherbrooke street of the same city.

Dr. W. A. Molson, Montreal, will build an $18,000 structure at 854½ Sherbrooke street, the house being built of stone and being a three-storey dwelling. It will be forty feet by sixty-five feet in dimensions.

F. R. Evans, architect, Winnipeg, will receive tenders for the erection of a five-storey warehouse for Messrs, Foley, Lock & Larson; also for the erection of a three-storey business block, 112 x 70 feet, for M. and L. Orris.

The Vancouver Construction Co. have secured a five years' contract for the supply of crushed rock to the City of Vancouver. The same firm are also constructing the new Canadian Pacific Railway wharves at Victoria, B.C.

Mr. Frank Peden, architect of the Bank of Montreal, is erecting a new residence at Montreal Junction. The new building, which is large, is being constructed on a fire-proof basis. The exterior walls are being built of cement, reinforced with Pedlar's lathing.

The Wm. Weld Co., Limited, and Mr. F. C. Bell, are to erect a $40,000 four-storey office building in Winnipeg, and the former company will likely instal a heating and power plant. The Weld Co. publishes the Farmers' Advocate, with head offices at London.

The Weber Co., Chicago, has charge of the construction of a steel concrete chimney for the new electric light station at Sydney, N.S. The chimney will be about 125 feet high and cost about $3,000. It is the first of its class to be erected in the lower provinces.

The Canadian Pacific Railway Co. intend to erect large elevators at Victoria Harbor, their newly selected terminus on the great lakes, from which point there will be all-rail transportation to Montreal. The new route will save 150 miles of rail haulage compared with Owen Sound.

The erection of the dairy and science building, power house and principal's residence in connection with the Manitoba Agricultural College, will be proceeded with at once, the contract having been given to George A. Mitchell, of Winnipeg. The total cost of the contract is between $56,000 and $57,000.

TORONTO BUILDING PERMITS.

Permits aggregating in value $176,000 were issued in Toronto from July 5 to 8, as follows :

W. G. Cooper, brick dwelling, Hogarth avenue, $2,200.

John Douglas, brick office, 1275 Queen street west, $2,000.

Hon. Melvin-Jones, brick stable, Lowther avenue, $5,000.

G. A. Hayden, roughcast dwelling, 149 Victor avenue, $1,500.

Dr. Charles O'Reilly, brick residence, College street, $5,000.

James Finlay, roughcast dwelling, 20 Millicent street, $1,800.

S. Sneath, store and dwelling, 381 Broadview avenue, $3,500.

Howard Ayre, brick and stone dwelling, Victor avenue, $3,500.

Hon. J. J. McLaren, brick dwelling, Roxborough avenue, $7,000.

John Adair, store and dwelling, 320 Queen street west, $6.000.

Jennie Preston, one pair brick dwellings, Booth avenue, $3,000.

Robert Greig, brick dwelling, 20 Chestnut Park road, $12.000.

H. F. Squires, one pair brick dwellings, Markham street, $4,400.

William Smith, brick and stone dwelling, Gladstone avenue, $2,000.

Hon. S. H. Blake, alterations to dwelling, Maple avenue, $3,400.

A. O. Beardmore, brick and stone stable, St. George street, $3,000.

Alfred E. Sawtell, one pair brick dwellings, Howland avenue, $4,500.

Board of Education, addition to school, Cottingham street, $21,000.

Sisters of Charity, boiler house and laundry, West Lodge avenue, $15,000.

Robert Darling Co., warehouse, corner Adelaide and Sheppard streets, $37,000.

Charles Hanrahan, one pair brick veneer dwellings, Gore Vale avenue, $4,000.

S. Lanskail, two stone and brick dwellings, 3 and 5 Pine Hill road, $7,200.

A. C. Stanner, store and dwelling, 1200 and 1202 Queen street west, $7,000.

A. P. Walker and J. C. Kemp, one pair brick dwellings, Rusholme road, $6,000.

York County Loan & Savings Co., three stores, Roncesvalles and Wright avenues, $5,000.

William Henderson, roughcast store and dwelling, corner Wallace and Lansdowne avenues, $1,800.

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INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE Cape Breton Coal, Iron, and Railway Co. are seeking concessions from the City of Sydney with a view of establishing in Canada a branch of the Armstrong Arms Works, of England, shipping piers for their Broughton collieries, and other works, involving a $20,000,000 expenditure. Besides exemption from taxation and water privileges, they ask for the transfer to them of Victoria Park, and Imperial Government property on harbor front. Most of the directors of the company are also directors of the Armstrong works.

Swift & Co., Chicago, will erect a $200,000 plant at Vancouver.

The Montreal Steel Works Co. have purchased a site and will extend their works.

Drilling for oil will be recommenced by the Nova Scotia Oil & Gas Co., at Pansboro, N.S.

The Canadian Westinghouse Co. have prepared plans for doubling the size of their foundry at Hamilton.

J. A. Gardiner, Barrington, N.S., is to establish a marine iron works at North Vancouver, alongside the Wallace shipyards.

The Winnipeg gas plant is now in operation, the buildings having been built by the Manitoba Construction Co., at a cost of $140,000.

The John Inglis Co., Toronto, have been awarded the contract for the installation of three new boilers at the water works at Brantford, Ont.

The ratepayers of Perth, Ont., have voted favorably on a by-law granting $25,000 to H. K. Wampole & Co., of Philadelphia, Pa., for the erection of a factory for the manufacture of milk sugar, etc.

The oil boom at Leamington, Ont., is over, and the industry is settling down to its real worth. The production runs nearly 20,000 barrels per month, and the large companies are buying all that is produced.

The Town of Strathcona, Alta., are installing a 120,000 gallon steel tank, to be erected on an 80-foot steel tower, for their new water works system. The Ontario Wind Engine & Pump Co. supply the tank and tower, the cost being about $10,000.

The Climax Good Roads Machinery Co., Marathon, N.Y., has asked the council of Peterborough what inducements it could promise the company to establish works there. Besides road machinery, structural steel shapes would be manufactured.

The Jenckes Machine Co. do not intend moving their main shops from Sherbrooke, Que., but will merely establish a branch in St. Catharines. The terms of the bonus granting the Jenckes Co. assistance by the City of Sherbrooke do not expire for fifteen years yet.

The British Columbia Wire & Nail Co., Vancouver, B.C., have purchased 20 nail machines to make one-half to six-inch nails; also a drawing bench. The firm also bought a machine shop outfit and a staple machine. They are now erecting large factory buildings which will have a capacity for turning out 10 to 20 tons of nails per day.

The extension of the Pender Nail Works at St. John will be larger than the whole of the present plant. The addition will include a new machine room 48 x 40, a new wire mill 60 x 100 and a new cleaning house 46 x 78. Among other improvements the cleaning house will have an improved five-alley baker, which will have a number of improvements not found in other mills.

Companies Incorporated.

The Boundary Iron Works have been incorporated at Victoria, B.C., to carry on a general foundry business.

The Canada Wire & Nail Co., Sydney, N.S., have been organized with a capital of $200,000. J. E. Burchell, Sydney, is interested.

The Raymond Mfg. Co., of Guelph, Limited, has been granted power to increase their capital stock from $130,000 to $250,000.

The Hickey Oil Co., of Arizona, has been licensed to do business in Ontario. H. F. Slater, of Leamington, is the company's attorney.

The Pollock Mines Co., Yale, B.C., have been incorporated with a capital of $1,000,000, to carry on a mining, smelting and refining business.

The South Bay Oil Co., of Ohio, has been licensed to develop oil property in Ontario. G. G. Moncrieff, of Petrolea, is the company's attorney.

The New Ontario Iron Co., of Maine, has been licensed to develop mining property in Ontario. Clara Brett Martin, Toronto, is the company's attorney.

Concrete Steel & Tile Construction Co., of Michigan, has been licensed to do construction business in Ontario. Gus Kahn, Toronto, is the company's attorney.

R. Scott & Son, Limited, Galt, share capital $100,000; purpose, to manufacture wooden work for wagons, etc. The directors are: R. Scott, E. Scott, and E. Scott, all of Galt.

Western Canada Cement & Coal Co., Limited, Ottawa, share capital $1,250,000; purpose, to manufacture cement and building materials. The directors are: A. F. MacLaren, W. A. Fleming, C. A. Irvine, J. Lavelle and S. F. Bell, all of Ottawa.

Toronto Welsbach Light Co., Toronto, share capital $50,000; purpose, to manufacture lighting apparatus. The directors are: J. G. Lohrman, of Elkhart, Ind.; J. R. Adamson, J. Fleck, F. J. P. Gibson, and G. C. Arnott, all of Toronto.

Osborne Oil Producers, Limited, Petrolea, share capital $100,000; purpose, to develop oil wells and gas lands. The directors are: J. Armstrong, Owen Sound; W. McIntosh, Petrolea; Peter Ryan, J. A. McIntosh and D. Urquhart, all of Toronto.

Johnston Oil Engine Co., Limited, Toronto, share capital $250,000; purpose, to manufacture engines and motors. The directors are: H. A. Johnston, A. M. Wickens, O. Jull, C. M. Watts, all of Toronto, and W. F. Johnston, of Ingersoll.

Monarch Brass Mfg. Co., Limited, Port Colborne, share capital $100,000; purpose, to manufacture brass goods, plumbers' supplies, etc. The directors are: C. A. Masten, J. R. L. Starr, J. H. Spence, S. Whittaker and L. M. Heal, all of Toronto.

Concrete Pole Co., Limited, St. Catharines, share capital $100,000; purpose, to manufacture concrete poles and other materials. The directors are: J. Jennings, H. L. M. Weller, of Toronto; E. J. Odlum, H. H. Collier and J. B. Burson, all of St. Catharines.

General Explosives Co., of Montreal, Limited, share capital $20,000; purpose, to manufacture explosives of every description. The directors are: R. L. Dillon, Montreal; J. McMartin, Cornwall; E. A. Lesaeur, N. W. Drummond, and J. F. Orde, all of Ottawa.

Sur-Coat Mfg. Co., Limited, Windsor, share capital $10,000; purpose, to manufacture chemical compounds for preserving metals and other plumbers' supplies. The directors are: C. T. Askin, Windsor; T. Hurley, J. T. Hurley, D. M. Hurley and J. H. Walsh, all of Detroit.

Ontario Gas & Fuel Co., Limited, Hamilton, share capital $100,000; purpose, to develop natural gas property. The directors are: F. M. Lowry, J. C. McDowell, of Pittsburg, Pa.; W. A. Spratt, of Hamilton,; W. J. Aikins, of Dunnville, and C. A. McGara, of Dundas.

Corrogated Concrete Pile Co., of Canada, Limited, Montreal, share capital $50,000; purpose, to do construction work. The directors are: V. E. Mitchell, D. Armour, A. C. Cascrain, C. M. Cottom, S. Lehuray K. J. Beardwood, and L. L. Legault, all of Montreal.

Ingersoll Nut Co., Limited, Ingersoll, share capital $25,000; purpose, to carry on business as engineers, machinists, founders, bolt, screw and nut makers, etc. The directors are: J. A. Coulter, Ingersoll; W. H. Shapley, Toronto; F. H. Deacon, Milton; O. E. Robinson, Ingersoll, and W. R. Wortman, London.

The Maritime Art Glass Works, Limited, St. John, N.B., have been incorporated with a capital of $25,000, to acquire the business of the Maritime Art Glass Works, and to manufacture mirror plate, prism lights, etc. The provisional directors include Archibald Bauer, W. C. Bauer, and J. A. Bauer, St. John.

Western Counties Electric Co., Limited, Brantford, share capital $500,000; purpose, to manufacture and sell electric power. The directors are: S. F. McKinnon, J. N. Shenstone, C. G. Harstone, all of Toronto; J. Knox and C. S. Scott, of Hamilton; H. Barber, Toronto, and A. T. Duncan, of St. Catharines.

The Canadian Fairbanks Co., Limited, has been granted power to increase their capital stock from $500,000 to $650,000. Kaministiquia Power Co., Limited, Fort William, share capital $2,000,000; purpose, to develop electric power for heating and lighting. The directors are: H. F. Holt, C. R. Hosmer, F. W. Thompson, H. W. Notron, all of Montreal, and F. H. Phippen, of Winnipeg.



No. 13. OSHAWA, ONT. JULY 15, 1905

FIRE!

When a Hardware Merchant sees a pile of wood lath in front of a house in course of construction, two thoughts naturally arise in his mind. The first is that the house is a "Fire Trap" and dangerous to live in, and the second, that he is missing a chance to make a profit by selling **Pedlar's "Perfect" Lath** for that purpose. Why not use the first thought to work out a successful result for the second? Go to the owner of the house and tell him that the time is now at hand when tenants will refuse to live in houses plastered in Wood Lath, and that common sense dictates a change before the plastering is done.

THE SERVANT

The mortar used in plastering houses (especially the patent plasters) is fire-proof, and if held in place on the walls and ceilings would keep the flames in check until water could be applied, but if spread on Wood Lath it will drop as soon as touched by the heat, leaving the inflammable Wood Lath exposed to quick combustion. If the water is spread on **Pedlar's "Perfect" Lath** no amount of heat it is likely to be subjected to will loosen its hold on the Metal Lath, insuring the retention of the mortar as a fire protector, besides the great safety in the use of Metal Lath as a substitute for Wood Lath.

THE MASTER

The greatest wonder in the world is the custom of using Wood Lath as a device for holding mortar in place on walls and ceilings of houses for human habitation and occupation. This custom originated in early days when wood was cheap and no substitute was available, regardless of the fact that every house so constructed is liable at any moment to burn with such rapidity (through the extreme inflammability of the Wood Lath) that the death of one or more of the occupants is a frequent result. The time has come to stop this wholesale slaughter by using **Pedlar's "Perfect" Lath,** made of steel, which, when covered by the mortar is an effectual obstacle to the spread of flames. A postcard to us will secure facts and figures.

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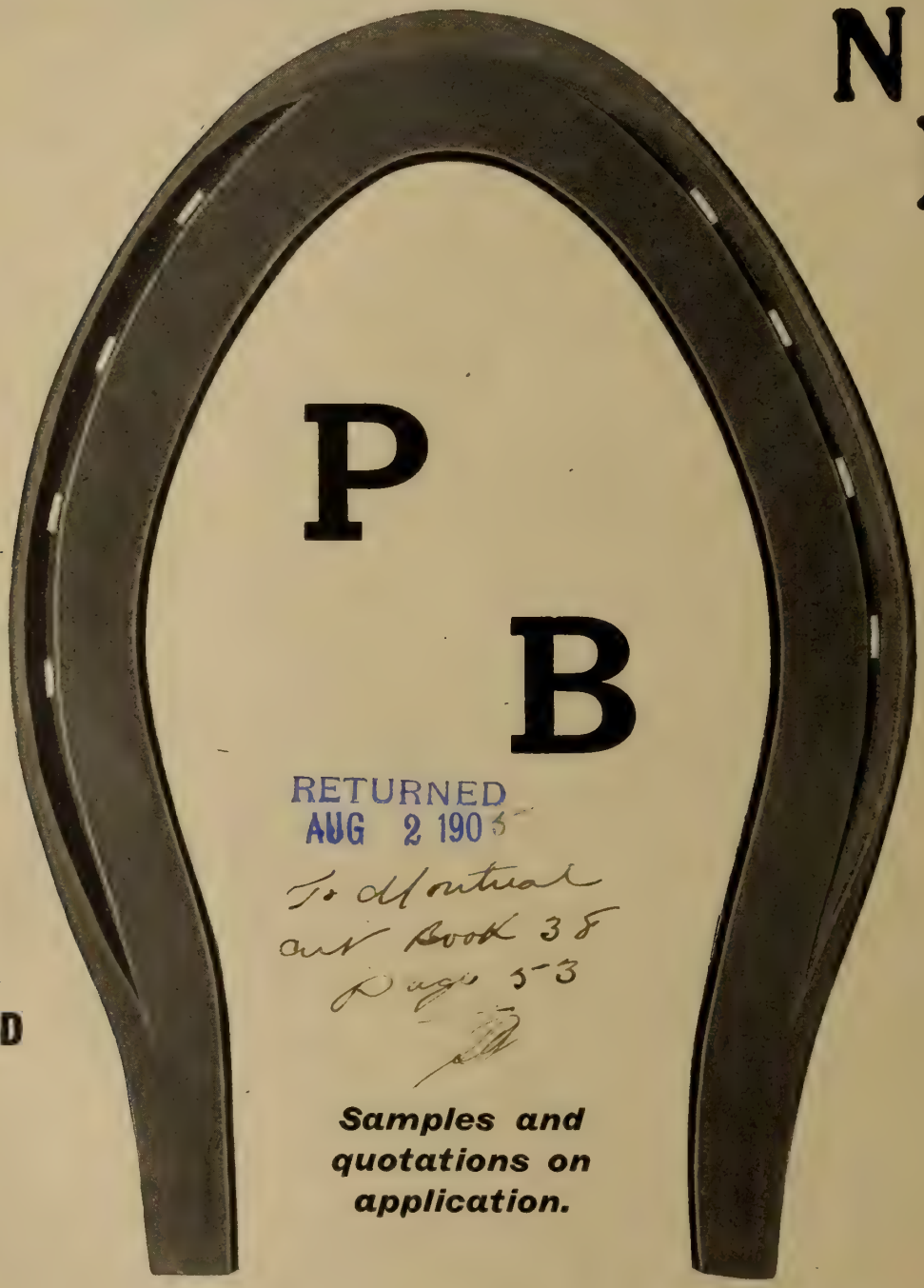
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Clare Bros. & Co., Preston, Ont.
Guelph Foundry Co., Guelph, Ont.
Record Foundry Co., Moncton and Montreal.
Winnipeg Ceiling & Roofing Co., Winnipeg, Man.
Scarfe & Co., Brantford, Ont.
G. F. Sterne & Son, Brantford.
Jones Bros., Bracondale, Ont.
Batty Stove & Hardware Co., Toronto.
Findlay Bros., Carleton Place.
J. & J. Turner & Sons, Peterborough.

THE STOVE TRADE.

WHILE this is the off season in the stove trade, manufacturers report an unexpected activity in the demand for all classes of goods. It could not be expected that farmers or townspeople would be placing orders for stoves or ranges at present, yet the movement of this class of goods is much greater than usual at this season of the year. The influx of population and the activity in building circles offers a partial explanation.

In the cities and towns, as well as in the country districts, an excellent business is being done in gas and gasoline stoves. The saving in fuel and the absence of discomfort from unnecessary heat are two strong features which commend themselves to all classes. Retailers who do business near Summer resorts or where there is much camping are selling many two and three-burner gasoline stoves for camp use. Oil stoves are also selling well for the same purpose. In the cities where gas is to be had the demand is large for hot plates and everything up to ranges.

Peddlers are active in some sections, and will endeavor to sell many ranges in the Fall, especially if crops are good. An energetic advertising campaign in the local newspapers, and by circulars and personal letters, will do much to head off the securing of business by these itinerant vendors. Catalogue house competition can also be met by duplicating the offers made by the departmentals and drawing attention to the fact that when stoves are bought from the home merchant he is always there to see that the goods give satisfaction.

COMPETITION IN SHOVELS.

ONLY a small part of the spades and shovels used in Canada are imported from Great Britain, the United States and other countries, the value of the imports being about $35,000 to $40,000 yearly, for the nine months ending March 30 having been about $25,000. The Canadian demand has been well supplied in the past by the plants already in operation, and while the demand is steadily increasing, owing to the large amount of railway construction and development work, two new plants at Peterboro and Hamilton will soon be producing.

Jobbers are speculating as to the probable effect the entry of the new manufacturers will have on the market. In the past, prices have been well maintained and price-cutting has been an absent evil. It is feared, however, that with the additional plants in operation there will be an overproduction, the result being that if jobbers are unable to buy the output, the manufacturers will endeavor to unload upon the retailers, the profits of the jobber being eliminated and the maintenance of the retailers' prices being endangered. Are these fears well grounded?

A healthy competition is desirable at all times, but all branches of the trade suffer from conditions which encourage price-cutting.

AN ENCOURAGING OUTLOOK.

ASK manufacturers or jobbers what the outlook for the Fall is and in most cases the reply will be, "It depends upon the crops." There is much in this view, and it applies to the makers and sellers of stoves as much as to any other section of the trade.

Reports from the west give encouraging news regarding the prospects of a splendid crop, one estimate being that 100,000,000 bush. will be produced while a more conservative estimate is that 70,000,000 bush. of wheat will be harvested, a total of 15,000,000 more than last year. Other provinces promise good crops also, and no sections of trade dependent upon the agricultural community have no reason to feel downhearted.

In the American metal trades the first half of 1905 was one of the most remarkable periods in the history of the trade. Production surpassed all previous half year records, Canada participating in the general activity. While few hope that the last half of the year will duplicate the first, and there are few who would not be satisfied with a falling off, there seems to be little reason to expect much of a decline, as the actual production now is as great as at the beginning of the year. Mills and furnaces may not be booked so far ahead but the rate of consumption is as heavy as six months ago. The situation is remarkable and basing the future upon the past, the prospects are that the records for 1905 will show the highest figures yet recorded. Owing to the condition of trade it is unlikely that any lengthy suspensions of plants will take place during the Summer months.

With such a satisfactory condition in both field and factory, there is no reason why the retail trade should anticipate anything but a continuance of the era of prosperity Canada is enjoying. While clouds may darken the horizon in some directions the warmth of the sunshine of Canada's growing time should be felt and enjoyed by all participating in the mercantile development of the country.

TWO NATIONAL HOLIDAYS.

AS usual, Winnipeg saw this year the celebration of two national holidays, Dominion Day and the Fourth of July. The American Association in Winnipeg is a well organized body, and it held a very successful celebration in Elm Park. In many respects the celebration was a notable one. No citizen of Winnipeg was allowed to remain in ignorance of the fact that the day was the anniversary of the signing of the Declaration of Independence, and the Fourth of July was a much more notable day in Winnipeg than was the Canadian national holiday just three days before. We find no fault with the enthusiasm of our American friends, who are among our very best citizens, and who are doing so much to build up the west. A Fourth of July celebration which is brought to a close by the singing of the British National Anthem can find no critics in Canada.

But we do feel that the enthusiastic American shows Canadians an example which should be followed. No sane man would advocate celebrations which result in the appalling death list reported the morning after the great American holiday, but nevertheless all such occasions have their place in cultivating an enthusiastic and healthy patriotism. Western Canada is filling up with a heterogeneous population gathered from

the four corners of the earth, and all such occasions should be used to impress upon the new comers the fact that they are citizens of no mean country. The example of the Americans in Winnipeg might well be followed by patriotic Canadians.

THE CHINESE BOYCOTT.

IT would be practically impossible to over-estimate the importance of the boycott declared by the Chinese people on all goods of American origin. The movement has become so general that it is bound to attract a great deal more attention than it has so far done. Not only in the coast cities of British Columbia has the action been taken, but all down the coast the Chinese communities in such cities as Portland and San Francisco have taken up the cudgels. Recent events in China and other points across the Pacific are detailed at length in papers received the other day by the Empress of China, which arrived from Hong Kong. The determined action of the Chinese has been given force by the proposal to exclude from the United States even Chinese merchants and students. The protests of the Chinese against the signing of the proposed Act by the president took the form of a convention in the Canton Guild Hall at Shanghai, on May 12. This was one of the most notable and largely attended meetings ever held in Shanghai. Bankers and Chinese merchant princes from every province in China were present, and the utmost decorum was observed in the calm deliberations of the distinguished body of business men. Business-like resolutions were adopted briefly setting out the action to be taken to emphasize the protest. Not only will all American goods be boycotted, but every servant will leave his employ if American, and no coolies or other laborers will aid in discharging cargo from any ship loaded, in part even, with American goods. It was also decided to urge upon the Imperial Chinese Government not to grant passports to the interior to Americans, or to grant any concessions to them should the proposed new Exclusion Act of the U. S. Congress go into effect.

CEMENT AND WHITE LEAD.

RETAIL hardware merchants are interested in the recent changes in the tariff, two of the most important affecting the hardware merchant. Cement and white lead are the two articles upon which their attention is centered.

Cement, the value of which is being recognized more each day, has received more protection, and the duty which has hitherto been in the neighborhood of twelve and one-half cents per hundred has been advanced to twenty-five per cent. ad valorem on the bags which contain the product. Much of the cement imported into this country comes from the United States, and although a small portion is received from Great Britain it has the British preference of one-third of the duty to protect the imports from that source.

It is predicted that the American product will continue to arrive despite the change in the duty. This will be noticed especially in the eastern part of the Dominion, where it is difficult to sell the Canadian cement at a low figure owing to the heavy charges for haulage.

The change in the duty on white lead from five per cent. to thirty per cent. was made to protect the new industry in Montreal established a few weeks ago. In the past a large amount of lead in the corroded condition has been received from Germany, but this advance, when added to the surtax, will result in the cutting off of this trade from that country. The new duty may tempt other foreign companies to erect Canadian plants.

White lead, on account of it being used extensively in mixed paints, will undoubtedly at a later period advance the price of that article. The change was not unexpected, and both wholesale and retail merchants have had an ample warning to prepare for the new conditions.

Mr. J. A. Bremner, of Alex. Bremner & Son, Montreal, said that in his opinion both English and Belgian cements would still continue to be imported. This advance in the duty will, nevertheless, greatly help to protect the Canadian producers. The American cement is manufactured for about ninety-five cents per barrel, and the difference between this and the price on our market will also allow them to ship into Canada at a profit.

Mr. W. Dods, of P. D. Dods & Co., Montreal, is quite enthusiastic over the future prospects of the Canadian industry, and claims that when it gets in full running order it will be difficult to find foreign lead on the Canadian market. It is certain that Germany cannot compete, as the new duty when added to the surtax will make an obstacle too hard to overcome. There is no reason, as yet, why in a few years we should not have a white lead corroding industry equal to any other country.

Mr. Munro, of the Canada Paint Co., stated that the change in the tariff for dry white lead was not altogether unexpected. He had felt for a long time that the anomaly which shipped out our own lead and brought in other leads for consumption could not always continue, and now that the Minister of Finance has given a working margin, Canada will very soon contain corroding factories for the manufacture of all the dry white lead used within the Dominion. This is the object of the legislation and it will have its fulfillment.

The general impression was that it would have been left to the Tariff Commission to deal with the matter, and now that the essential features are dealt with, there is yet a great deal for the Tariff Commission to arrange. The differential between dry lead and paint is too little, and besides, as white lead enters into all general paints, it will be necessary to adjust the tariff under the heading of paints generally to the new conditions. Mr. Fielding has promised that the whole question will be taken up by the commission, and from his treatment of the items dealt with, we may depend that the others will also be suitably adjusted.

It is not customary for the Finance Minister in the case of manufactured goods to make so great a change immediately operative, and it is hoped that he will permit lead on contract, both with buyers and sellers, to be dealt with exceptionally at the former rate. We all want to see our own minerals used in our domestic consumption, and it is a pleasure to see this being gradually developed. The Canada Paint Co. operates four different mineral properties, and will soon have domestic lead ore treated from start to finish in their factory.

Price of mixed paints will remain as they are for a month or two until arrangements are made to issue fresh lists, but they certainly will be higher in the new year, if not before. The advance in prices really forms no grievance, because lead, owing to acute competition, is still extremely low, and mixed paints in the best qualities can well afford some advance.

Pending the erection of a sufficient number of factories, the new tariff (seeing it grants so important a preferential to Great Britain) will cut off all German and American leads, so that any temporary shortage of production in Canada will be imported from Great Britain.

As to whether the change from 5 p.c. to 30 p.c. is not too severe, I would point out that the duty on pig lead is 15 p.c., and duty on other lead manufactures is about 35 p.c. Suppose pig lead were scarce in Canada and imported lead remained subject to 15 p.c. (as it is bound to do), the manufacture of white lead in the country would be impossible at a less duty than 30 p.c. gross, because there is only 10 p.c. clear between 15 p.c. and 30 p.c. after deducting the preferential.

Fruit jar wrenches are a good line to push now.

An assortment of padlocks on a card will help to sell these goods.

ABOUT OURSELVES

IT is our desire to make Hardware and Metal of the greatest possible value to its readers. To do this we must know each reader's opinion—not his general opinion, but his opinion of each individual part. From all sides we hear complimentary remarks concerning the value and interest of the paper, but this general criticism, although an inspiration to us, is not the kind that is of must value. It is the pointing out in detail of each good point and each weak point as the opinion of the critic dictates that will enable us to increase the value of the paper to each of its readers. Even the man with the most fertile brain can get new and good ideas from nearly every one he converses with, and thus it is that ideas and suggestions sent in by readers are of extreme value to the editors.

We make it a point to see personally as many of our readers as possible, but we cannot hope to reach all of our thousands of readers that way. Therefore we address you through the columns of the paper.

You are pleased when you get a valuable suggestion from the paper, yet it probably originated with one of your fellow merchants in some other part of the Dominion. You are anxious to get suggestions from your fellow merchants, but remember that he is just as anxious to get suggestions from you. Therefore it is our aim to facilitate the interchanging of ideas and suggestions.

There are several ways in which each merchant reading this can make the paper of more value to himself and others. Supposing each takes half an hour and goes over the paper department by department and jots down a criticism of each, either commending or disapproving, then having reached the end, supposing he add any suggestions of a general nature that may occur to him. That would be one way. Or supposing that a merchant has thought of and devised some simple and efficient method of displaying some line of goods, such as garden implements, machinists' tools, etc., and sent to the paper a short description of it with sketches, if necessary. That would be another way. If each individual merchant would take the trouble to act upon these suggestions he would be amply repaid in the ideas he receives from his fellow merchants.

A hardware merchant in Brantford has a handy, neat, but inexpensive method of arranging and displaying his shelf hardware. He had shelves constructed and in his own tin shop had tin boxes made to fit these shelves. A sample of the contents of each box is held to the front of the box by means of a simply arranged spring on the inside. This is not a costly system and yet is handy and quite attractive. The idea he picked up from a merchant in another town. A merchant in Galt has an extremely good method of displaying linoleums, which idea he got from a hardwareman he called on in another town. The device consists of placing the rolls of linoleum on wooden rolls, the ends of which are made to fit into bearing receptacles in an upright frame work. Each set of receptacles are placed one above the other. Thus the linoleums are kept off the floor, and can easily be displayed by unrolling.

AS OTHERS SEE US.

MacLean Publishing Co., Toronto:

Gentlemen,—Find enclosed $2.00 to pay my subscription to HARDWARE AND METAL for year ending June 1st, 1905. I like your paper very much, and think it should be in the hands of every plumber and tinsmith, and especially those who have a mixed business and who carry a small line of hardware, etc. It is also valuable as an educator along the lines of plumbing and heating to those in towns and villages, and indeed, some large towns, whose knowledge of the craft is very limited. HARDWARE AND METAL comes as a welcome visitor and should be contributed to and supported by our best master mechanics, and when this is done, through such a useful medium, our master plumbers and other associations will be kept in closer touch with and helpful to all their members. We have to rely on your journal for latest current market quotations on plumbing goods, iron, paints, oils, etc., and I hope and trust you will always give them to us correctly. It saves time and we do not have to sit down and write to "the house" for quotations. Your Spring Trade Number was a revelation of good things and brought to our notice many new firms unheard of before. I am especially interested in hot air furnace work and plumbing work and cornice work. Any information along these lines will be appreciated.

Yours truly,
H. T. ANDREWS.

Orillia, May 22, 1905.

MacLean Publishing Co., Toronto:

Gentlemen,—I consider HARDWARE AND METAL to be the best trade paper in Canada, and I personally look forward to the receipt of the weekly journal, and find many items and reports of interest and benefit. Yours truly;

JOHN A GORDON,
Secretary National Association of Master Plumbers.

Montreal, June 19, 1905.

MacLean Publishing Co., Toronto:

Gentlemen,—I have to compliment you on the noticeable increase of the valuable matter which is appearing in the plumbing department of your weekly issue of HARDWARE AND METAL.

Yours truly,
J. THORP BLYTH,
Secretary Master Plumbers' Association.

Ottawa, July 8, 1905.

MacLean Publishing Co., Toronto:

Gentlemen,—I have taken HARDWARE AND METAL for some time now, and am well pleased with it. I like the way you stick up for plumbers and plumbing in Canada.

W. A. LOUGHREY.

Amherst, N.S., July 1, 1905.

All that was needed in each case was the idea, and the two illustrations indicate the ways in which one merchant can help another without injury to himself and with little trouble.

Thus it is if we are to get out a paper of maximum value we must have the interested co-operation of all readers.

Has your local hotel men or restaurant keeper a supply of ice tongs, choppers, shavers, etc.

SUCCESSFUL HARDWARE STORES.

HAVE the readers of Hardware and Metal been noticing the series of illustrated descriptions of successful hardware stores which have been appearing in these pages during recent issues ?

Much interest has been evoked by the series, and many favorable comments have been made in letters received by the publishers. Readers of Hardware and Metal in foreign countries are surprised to see the handsome photos of windows and interiors of stores not only in the larger cities but in the smaller towns. The pictures not only advertise the merchant as enterprising, but do much to dissipate vague ideas persons in foreign countries have as to the class of stores in existence in Canada. The view of Messrs. Emerson & Fisher's store at St. John, N.B., in a recent number, and of Messrs. Wells & Emmerson's store at Port Arthur, in this issue, have been particularly creditable.

The idea must not gain credence that the merchants whose stores are written up pay for the space in Hardware and Metal, or that the publishers are discriminating in any way. On the contrary, any dealer who can show a clean, bright, creditable store, is at liberty to communicate with the editor and have his store illustrated and described in the series. Photos of window displays or store interiors should be sent to the publishers and, if acceptable, illustrations will be made without cost to the merchant.

REPUTATION.

A GOOD reputation is a splendid asset for any business man. It costs little to procure; it is worth much to retain. Any merchant can gain it, if he starts soon enough. All that is necessary is persistence. Once the standard of excellence is set, a continuous adherence to it inevitably brings a good reputation sooner or later.

Take a list of the stores in any town and it will be found that the places of business of which the townspeople are proud, are the stores with good reputations. Why is it that in the larger cities there are a few stores left, which have not succumbed to the inroads of the department stores? It is because they have been sustained by their good reputations.

It is true that human nature likes variety. This is the reason for the restless rushing from store to store. Still it will be found that this frenzied rush is merely for novelties. The staple necessities of life are usually procured from one or other store of repute. The housewife comes to realize that she can rely on a certain merchant for her supply of a certain line of goods, and she sticks to him through thick and thin. If he prove unreliable the connection breaks. The continuance of the relationship depends on the maintenance of a good reputation on the merchant's part.

RETURNED
JUL 21 1905

1905 JEWEL 1905

STOVES, RANGES AND FURNACES



Made in every style—in four sizes

THE DOMINION JEWEL RANGE

The Latest and Most Up-to-Date Range.
Oven is Made of One Piece Cold Rolled Sheet Steel.
Removable Duplex Grates—Clinker Proof.
Large Firebox.
Drop Hearth Plate and Extra Large Ashpan.
Reservoir has Direct Flue Connection with Fire.
Handsome Nickel Ornamentations.

THE IDEAL JEWEL BASE BURNER

Every Stove a Double Heater.
Spacious Fire Chamber with Full Mica Illumination.
Improved Duplex Grate—Clinker Proof.
Shaker Ring Clears Ashes from Outer Part of Firepot.
Large Ashpit and Ashpan.
Nickel-Plated Swing Top, Reflector Top.
Side Wings, Base Ashpan Door, Etc.

RETURNED
JUL 21 1905
To Owner
Ad Booker
Page 18
ads.



Made in two sizes with and without oven.

STEEL RANGES in great variety

The Royal Jewel" Steel Range is just out—new for this Fall's business. Finest appearance—more good points than any other steel range yet produced.

The BURROW, STEWART & MILNE COMPANY, Limited

HAMILTON, - CANADA

INTERIORS AND WINDOW DISPLAYS

THE SHOW WINDOW OF TO-DAY.

A PERSON returning to this country after a dozen years' absence would note no change in its commercial progress more striking than the development of the show windows of the large stores.

The most pretentious metropolitan displays a decade ago would hardly compare with those to be found in some of our provincial towns of to-day, while some of the work now shown in stores of our larger cities approaches close to the work of true decorative art.

This transformation is largely due to the fact that the merchant has come to realize that one of his quickest and surest ways of reaching the public is through the medium of his show window.

Those who are quick to criticise the displays they may see, would be much more charitable if they but understood the difficulties under which many displays are made, and the effort required to produce them. It is a noticeable fact that some establishments seem to have nice displays at all times, while others are often found to be unattractive. This is due more to the class of goods displayed than to the skill of the trimmer who arranged them. A display of fine goods will appeal to the masses regardless of how crude the arrangement may be, while a display of cheaper merchandise, although arranged in a more attractive manner, as viewed from a professional standpoint, will fail to catch the public eye.

The beautiful displays of large department stores around opening days and holidays represent an expenditure of time, labor and money quite beyond the popular comprehension. Some of these displays are under construction for months.

The show window has been termed the poor man's encyclopaedia, and rightly too, we think, for here he may see displayed goods from all parts of the world.

Window displays may be likened to the Sunday newspapers, inasmuch as they cater to all classes. The funny page of the paper finds its counterpart in the toy department display—the society woman gets her impressions from the fashion page and sees them carried out in the display of Paris gowns and hats—and so on through the list.

If the art of window trimming advances as rapidly in the next ten years as it has in the past, we may look forward to displays that will far surpass in beauty the show windows of to-day.

DON'T NEGLECT THE INTERIOR.

If you have good window displays, your store inside should be kept up in appearance with the window. If not, the ideas of neatness and taste suggested by the window display will be greatly lowered upon the customer stepping into the store, and that of itself forms a bad impression. If there is to be a difference between the two, the store, as a whole, should present the better appearance, for there the ideals produced by the window display will be elevated and rendered more pleasurable by the store display. Timely decorations help greatly to beautify a store, and the retailer would do well to give some attention to them. Gorgeous and lavish decorations are not necessary, but something simple in character and good taste will serve the purpose.

LOCOMOTIVE DISPLAY.

A Minnesota hardwareman recently attracted considerable attention by a window display showing a locomotive and tender made of tinware, as follows: The cab is a gasoline stove oven, the cab roof is one sheet of galvanized iron, the wheels are two registers with tin covers as centres of same, the piston rod is one long oiler, a rule serving as driving rod, the head light is a cycle lantern, the somke stack is one quart measure inverted and two pans one over the other. A small hand bell serves as a bell. The steam chest is one large oiler with neck detached, the small wheels are pulley wheels and the side steam chambers are represented by supporting bread pans, the cow catcher is made of rules alternatively arranged in V shape; the boiler and fire box are represented by a milk can, the tender couplings by a pick axe, tender wheels by pully wheels, tender springs by large springs and tender top by one savory roaster filled with pump plunges to represent fuel, also hammer and pick for tools. Inside the cab two small dolls are used to represent the engineer and firemen, while rails and ties are laid in gravel, the whole making a realistic display.

DELIVERY BY AUTOMOBILE.

Delivering stoves by automobile is the latest innovation. The past century has brought us so many surprises that we are almost prepared for anything. Only a couple of years ago the man who owned an automobile was looked upon as a freak who had more cash than brains, and the store which used the horseless carriages did so more as a method of advertising than as a means of cheap delivery. But we reproduce a picture taken of H. J. Flock, a hardware merchant of Sterling, Illinois, using the plaything of the rich for practical use in delivering a stove to one of his customers, having rigged up a box work in which to set the stove—a Round Oak Chief Steel Range, made by the estate of P. D. Beckwith, Diwagiac, Michigan. To hardware men doing business in small places, where a large radius of territory is covered, these machines ought to prove especially useful in traveling about the country. An automobile will allow a dealer to visit many times more customers in a day than as though he traveled by horse power. Again, the



Delivering Stoves by Automobile.

people like to see signs of prosperity; of the adopting of modern methods, and those who are the first to use autos in their respective localities are going to secure a great deal of advertising as wide-awake merchants.

THE DISPLAY OF TINWARE.

In the illustrations of the tinware department of Henry Morgan & Co., Montreal; an idea is given of the methods adopted by department stores to display their goods so that the women who use these goods can easily inspect them. It will be seen that tables and shelves are used to good advantage, and while an enormous quantity and variety is shown it is done in such an orderly manner that plenty of floor space is available for the use of customers. No doubt fully fifty per cent. of the sales are a result of customers being attracted by seeing some article which they realize they need, but which they had no intention of buying until they saw the article displayed and the price plainly marked upon it.



Display of Tinware, Henry Morgan & Co.'s Store, Montreal.

Hardware merchants can learn much from the departmentals in matters of display, and the illustrations should suggest many money making ideas to our readers, some of whom undoubtedly have a corner of the store or an upstairs or well-lighted basement which could be utilized as a display room for tinware and the other small household articles.

FREQUENT CHANGE OF DISPLAY.

No matter how good a display may be, it should not be allowed to stand for more than a few days. Frequent changes prevent the damaging of goods by exposure, and they make the effort far more profitable. Timeliness is another important feature. The display should have direct bearing upon the needs of the public at the time it is shown. The judgment of the merchant himself and the trade conditions prevailing in his locality make the best criterion for determining the nature of the showing.

THE DISPLAY OF GOODS.

Department stores work up a big business on some lines of hardware because the women go there, and also because they have the goods on display where the women can get at them. The success of the hardware department in a department store is as much due to the tables used in display as anything else. Women like to inspect the goods. With the goods displayed on the tables the inspection is easy. As long as that has proven successful in a department store it is plain that hardware merchants should use the same plan.



Tinware Department, Henry Morgan & Co., Montreal.

TRY A CAMPING WINDOW.

Make a camping window trim for variety. Put in a small tent and rig up a miniature camp. A fire with a kettle suspended over, a pile of firewood, an axe stuck into a log, several rods leaning against a tree, a gun or two, a tackle box, etc., should be introduced. One such window noted last year had a man seated on a log. He had his open tackle box beside him and was fitting a trolling hook on the line at one time. Twice a day his position was changed. He would be fitting on a troller, then he would be leaning over looking into the tackle box. The next time he was winding the line on the reel; the next putting a frog on the hook, and finally he was placed just at the edge of the window headed for the lake—apparently—with his rod in one hand and tackle box in the other.—Hardware Trade.

SUGGESTIONS.

Make a window display directed at the women once in a while. "Wash Day" might be selected as the theme and the window would then contain tubs, wringers, clothes pins, cloths driers, lines, buckets, boilers, scrubbing brushes, washing machines, etc. Then a house-cleaning window would have all the necessary paraphernalia for that important duty.

Flies mean trouble for the window trimmer, especially if he is using light colored goods and nickel fixtures. One trimmer commends the use of saucers of heated ammonia in the window. They will drive the flies out, it is said. Oil of pepperment is also distasteful to the flies, and used in the water in which the inside of the window is washed will help to eradicate them.

With the coming of the flowers the trimmer has more material to aid him in his work. And the flowers furnish a good guide for color combinations. Nature doesn't make mistakes in mixing her tints and by following her example you cannot go wrong.

Look after the upper part of the window. Often the eye will follow an excellent trim towards the top until it reaches a large unutilized space vacant but for cobwebs or dust. If the window is not boxed in care should be taken to see that the upper portion is clean and that it is in keeping with the rest of the window.

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

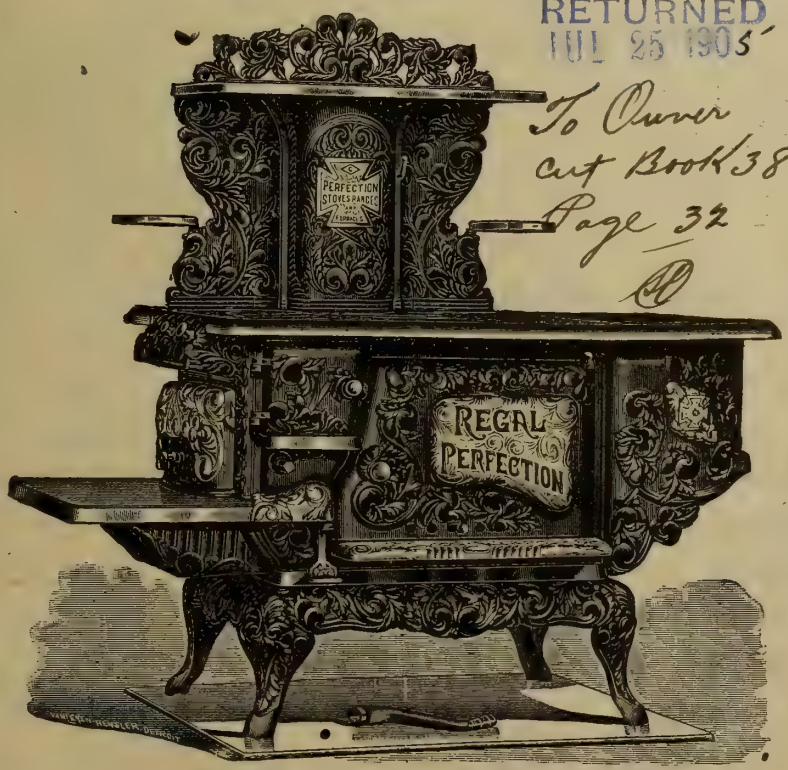
Sales Branches and Warehouses:

172 Granville St., Halifax, N.S.	Imperial Bank Building, Montreal, Que.	Front and Yonge Sts., Toronto, Ont.	89 Princess St., Winnipeg, Man.	403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co. OF MONTREAL.

LIMITED

"PERFECTION" Stoves and Ranges



"REGAL PERFECTION" made with 4 or 6 Cooking Holes.

RETURNED
JUL 25 1905
To Owner
cut Book 38
Page 32

We Manufacture a most complete line of Cooking, Heating and Air-Tight Stoves for all kinds of fuel.

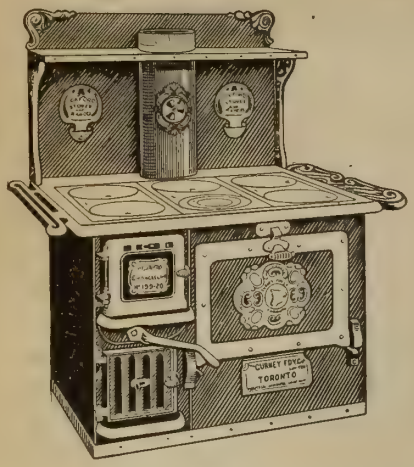
☞ Our complete catalogue and present price list will interest you. Write for them.

The James Smart Mfg. Co.

Limited

Winnipeg, Man.

Brockville, Ont.



What's the use of trying to push a line of ranges that people know little or nothing about when there is just as much profit and far less trouble in it for you if you handle the famous

Oxford Chancellor Range

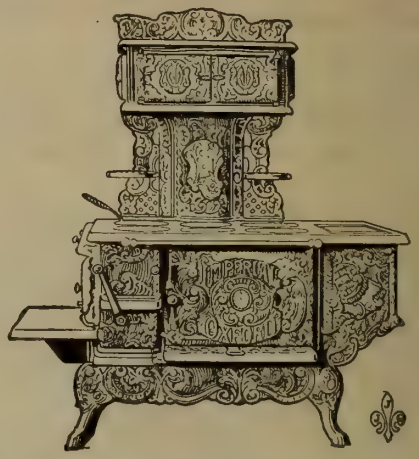
A Steel Plate Range—Burns Wood, Soft Coal or Hard Coal.

We have already done the hardest part of the selling for you. Range buyers come to your store nine-tenths convinced because of our strong advertising and the personal recommendations of friends that the Oxford Chancellor is "THE" Range. When they see it, it looks the part and almost sells itself.

Better handle only sure trade winners. The Oxford Chancellor should be on your floor.

You can't put "ginger" into your store talk if you lack faith in the basic merits of your goods.

If you have been selling a line of Ranges that have proved troublesome from the number of complaints that followed sales; if you have felt the loss of trade in other lines because of this, why don't you handle the one range that never fails to satisfy—the



Imperial Oxford Range

The Handsomest Cast Iron Range Made.

Sixty years of range building perfected it, forty thousand Imperial Oxfords in actual use demonstrate the present day demand, and words of praise from thrifty housewives everywhere tell of its acknowledged superiority and unfailing satisfaction.

Can you afford to refrain from handling the Imperial Oxford Range?

WRITE FOR PARTICULARS

THE GURNEY FOUNDRY CO., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal
The Gurney Standard Metal Co., Limited, Calgary

STOVES AND TINWARE

THE EVOLUTION OF THE STOVE BUSINESS.*

EVOLUTION of the stove business may include a history of the industry, its growth, and its constant westward trend since stove-making began in the United States. It is not my intention to go into that feature of the business to any extent. Evolution of selling methods and methods of distribution interest the retail hardwareman more. In the memory of all of us, we have seen many changes in this particular. Right now we are confronted with two important problems. What will be the effect of catalogue-house competition on the retail hardwareman's stove business in the near future? Where is the jobber, with his peculiar methods of stove selling, taking us?

Has Its Limitations.

I once thought the mail-order business in stoves would grow to menacing proportions. I have changed my mind on that score to a certain extent. I still think there will be some growth in that direction, but I believe it has its limitations. Tremendous efforts are being made by advertising agencies to get stove manufacturers to embark in the mail-order trade, and I assure you that it is not without some attractions. One of the advertisements from one of these agencies came to me a few days since, and while it was intended to stimulate the thought of mail-order business, it had the contrary effect. It read:

"Tell your story where it will be heard. Don't try to sell mail-order goods to people who get into a big city department store every day. Get out into the country; country people have plenty of time to read papers. Country folks have just as many wants as city folks. Everything they buy, except the bare necessities of life, must come by mail from some mail-order house."

As I said, this advertisement had the opposite effect on me than the one intended. In the first place the country folks are not the large consumers of stoves. I think you will all agree with me that your sales are larger in your towns than in the country; I mean in proportion to the population. So there is still a field for profitable stove business.

The fact that the farmer is reading will add very materially to the downfall of the mail-order stove man. Neither does he buy all but the necessities of life by mail. You will continue to see him in your towns, as his social side must be developed, and when you see him talk to him, asking him if he liked his mail-order stove. He will eventually tell you the truth and come to see you the next time he wants a stove.

Reached Its Limit.

Another fact we must keep in mind is that although the mail-order man has been making a lot of noise he has not distributed anywhere near the percentage of the total output of stoves that many people think he has. In fact, up to the present time but a very small percentage has been distributed by the mail-order method. This is the result after years of pounding by numerous mail-order concerns, some of them ranking among the largest retail institutions of the country. It seems to me that the mail-order stove business has about reached its limit.

There has, however, what I consider a more dangerous factor recently come into the distribution of stoves, and that is the hardware jobber. This jobber reaches farther than the mail-order man. He goes to all the country stores, or to-called general stores, not only in small villages, but to the crossroads, where there is nothing but one small store. So far as the stove trade is concerned I think this competition far more demoralizing and a much greater profit destroyer than the mail-order man.

If a customer comes to you and says he can buy a stove for a certain price from a mail-order house, you know just what argument to use with him, and just what you have to contend with; while, on the other hand, if he says that Jones at the crossroads three miles out will sell him a stove for so much you do not know where you are at. You do know, however, that Jones will sell this stove at a much less profit than you will or can, so you have to let him sell it and fatten the jobber. Jones doesn't need any fat, and wouldn't know what to do with it if he had it. This jobber is bending every effort to get an outlet for his goods by the above methods, and by doing all he can to encourage new stocks in the already overstocked towns. I have an advertisement, cut from one of the leading trade papers last Summer, which will bear me out in this. In it a leading hardware jobbing house gives a list of towns where it believes hardware retailers can profitably locate. Of this list of about 30 towns 6 have 15 to 80 population, 15 have from 100 to 300 population. All of these towns have from one to two hardware stocks now. The balance of the list ranges from 300 to 3,000 population. From the testimony of mercantile reports these are already overstocked from a retail hardware standpoint.

I think you can all see plainly that the jobber in the stove business is more to be feared as a demoralizer than the mail-order men. The jobber will continue to grow as the wants of the country grow, but your stove business will not continue to grow in proportion, although the aggregate of the stove business is larger every year. The evolution of the business is in the methods of distribution.

I do not see any reason why the west should not be producing a large percentage of its own consumption of stoves within comparatively few years. I believe the industry has a big future in the west. I believe that western retailers and western users of stoves will have a preference for western made stoves. I hope that this big increase in output will be marketed through the hardware stores and that influences which tend to cut up the stove business until it means very little to the hardware retailer can be counteracted.

* Paper read at the annual convention of the North Dakota Retail Hardware Association, Fargo, February 1-3, 1905, by G. L. Nye, Shakopee, Minn.

QUESTIONS IN HEATING AND VENTILATION.

AT the annual meeting of the American Society of Heating and Ventilating Engineers, held in New York City in January, President Wm. Kent, Frank K. Chew and C. E. Oldacre were appointed a committee to collect data on furnace heating, and report on their investigation at the next meeting. They have accordingly formulated the following questions, which have been sent to the members of the society with the request that the members furnish information on the different questions so far as their experience will enable them to do:

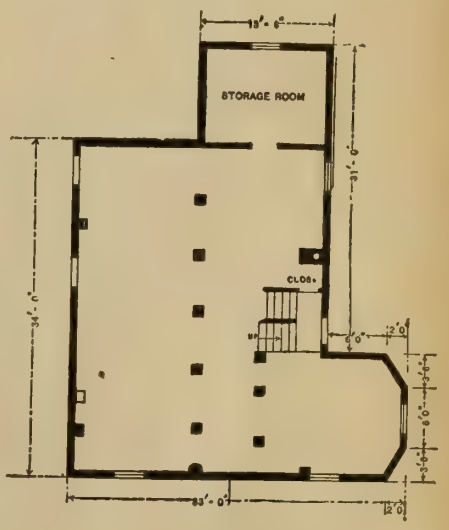


Fig. 1.—Basement Plan

There is no doubt that many who read this have opinions and experience on the subject that would help others and add to the comparatively low fund of knowledge at present available. A few moments of valuable time thus taken are well spent if they only serve to excite a wider interest in meritorious investigations like the present one.

1. What rule or formula would you use for obtaining the following: Heat lost by conduction and radiation from buildings through walls, windows, roofs, etc.? Heat lost by warm air escaping from the building?

2. The sum of these two losses is the total heat that must be supplied to the circulating air by the furnace. What quantity of air should be passed over the furnace in order to absorb this amount

of heat? Have you a formula or rule for obtaining this?

3. Suppose the outdoor temperature is zero and the temperature of the hall or other part of the house from which air may be drawn into the cold air box is 60 degrees, what proportion of the air



Fig. 2.—First-Floor Plan.

would you draw from the outside and what from inside in an ordinary dwelling house of 8 to 12 rooms?

4. How would you calculate what would be the maximum temperature of the air passing over the furnace? Do you consider this the most advisable temperature of the air at the outlet?

5. What rule or formula have you for proportioning the extent of the heating surface to the maximum quantity of heat to be given to the air by the furnace?

6. What rule have you for diameter of fire pot, depth of fire pot, diameter of grate and for maximum rate of combustion per square foot of grate surface per hour?

7. What rule have you for determining area of pipe admitting cold air from outdoors? If pipe is used for inside circulation, what then?

8. What rule have you for area of heater pipes leading from furnace to first, second and third floors?

9. What rule have you for the sum of the areas of all the air outlets of the furnace?

10. What rule have you for the area of the registers?

11. What preference have you as to the location of registers in different rooms?

12. What is your rule for area of foul air outlet from the house?

13. What method have you for insuring entrance and circulation of warm air in every room, particularly those on the side of the house exposed to the strongest cold winds?

14. What is your opinion of warm air heating where a positive means of circulation is used, including both inlet and exit pipes for every room? Do you know of any examples and where?

15. Design a system of heating by warm air for the accompanying floor plans under the following conditions: The house fronts to the north and the prevailing cold winds are northwest; the lowest outside temperature is 20 degrees below zero. The library has a grate for a wood or coal fire. The house is well built; the windows in the north and the northwest rooms are double. All windows and doors are provided with weather strips and are as air tight as they can be. Show the location of furnace and location and sizes of all pipes for fresh air, warm air, air circulation out of rooms and foul air exits, size and location of registers. The kitchen and laundry and the two unfinished rooms on the third floor are not supposed to be heated. Give a rule, a reason or formula for the adoption of every detail.

16. Do you live in a furnace-heated house? If so, can you furnish any experimental data obtained from the heating system, such as the following:

In extreme cold weather what is the temperature of air outdoors, temperature indoors in different rooms. Size of building. Cubic contents of rooms. Exposure. Number of pounds of coal burned in 12 hours daytime and 12 hours night. Number of pounds of coal burned per season. Temperature of air entering

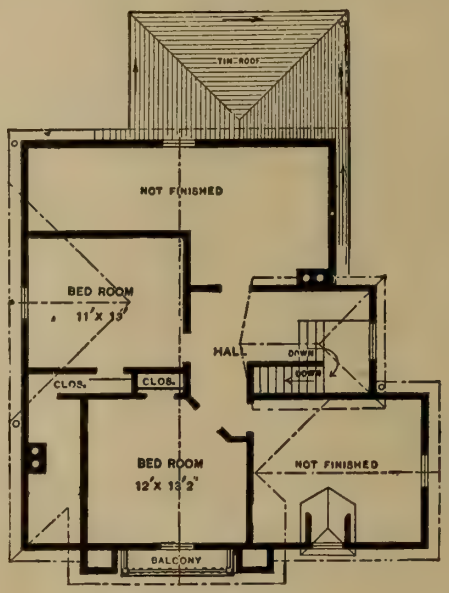


Fig. 4.—Attic Plan.

furnace. Temperature of warm air at several registers. Velocity of air in flues and through the registers. Area of inlet and cold air from outdoors. Area of inlet from hall or other parts of the house.

17. What are the principal faults that you have found in warm air heating installations when they have been incorrectly installed?

18. Please suggest any other questions or any modification of the above questions which would tend to bring out useful data in regard to warm air heating.

CHIMNEYS AND DRAFT.

THE top of the chimney should be higher than the house and everything that surrounds the house. See that it is. A boiler has no draft in itself—you've got to create it—can't do it if the height of the flue won't permit. But don't go to extremes—too "strong" a draft is as bad as one too "weak." See that the flue is perfectly clear, don't guess—look and see.

Close up all openings, except the one to which the boiler is connected. Look below the chimney connection—perhaps there's an "air-pocket"—such would cause down-currents in the flue. When flue runs lower than necessary, run a sheet-iron plate across it six inches below smoke-pipe connection—cement it over to make it air-tight. In case of fire-place or closet built in front of chimney, see that flue has not been reduced in size at that point, even though it shows full size at top and bottom, it may be narrowed in the middle. Always have the flue open up to full size all the way. Inspect the chimney, and, if it's an old one, see that no mortar has fallen out between bricks—this allows air to leak through and spoil the draft. Fill up all holes in flue and plaster them over. If chimney is new, it will take a week or two to dry it out—don't hurry the drying.

Sometimes smoke pipes are run too far into the flue and the draft cut partially or entirely off—a little care and a tight-fitting collar will avoid all this.

It's a good plan to place an upturned elbow (mouth upwards) at the flue-end of the pipe just inside the flue when other simple remedies don't improve a stubborn draft. This can be done by cutting a tooth-pick joint in a pipe length.

Get it out of your customer's head that he must make a boiler fairly "eat coal" to give heat—a fire can be kept from 8 to 12 hours economically and efficiently by a little practice and common sense. Stir a fire up thoroughly twice a day—night and morning—and remove the ashes. Keep the ash-pit closed—it rushes the fire and wastes the heat. If clinkers give trouble, the draft is probably too strong—or the coal poor—turn the grate over and break them up; rake if necessary to break up the mess—then shake grate enough to loosen the fine ashes which stick to the sides of partly-burned fuel.

Fill the coal chamber full to the top of the fire-pot—good "stove" coal gives best results for ordinary use. Open up

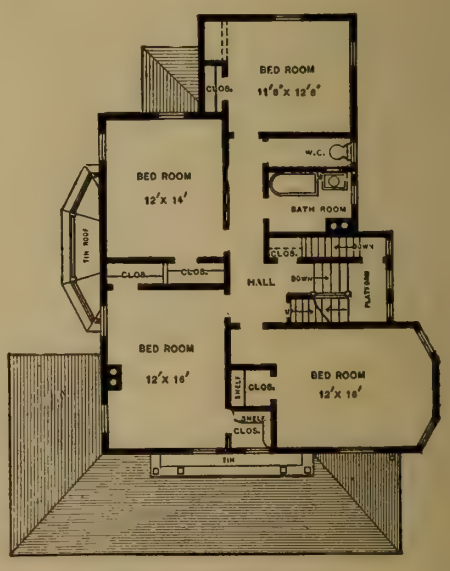


Fig. 3.—Second-Floor Plan.

draft long enough for the whole body of coal to ignite. Turn off draft after body of coal has started to burn—if necessary, open smoke-pipe check—this will permit the natural draft of burning fuel

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"TREASURE"

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Stoves and Ranges

ARE
BUSINESS
STIMULATORS.

A Trio That's Hard to Beat

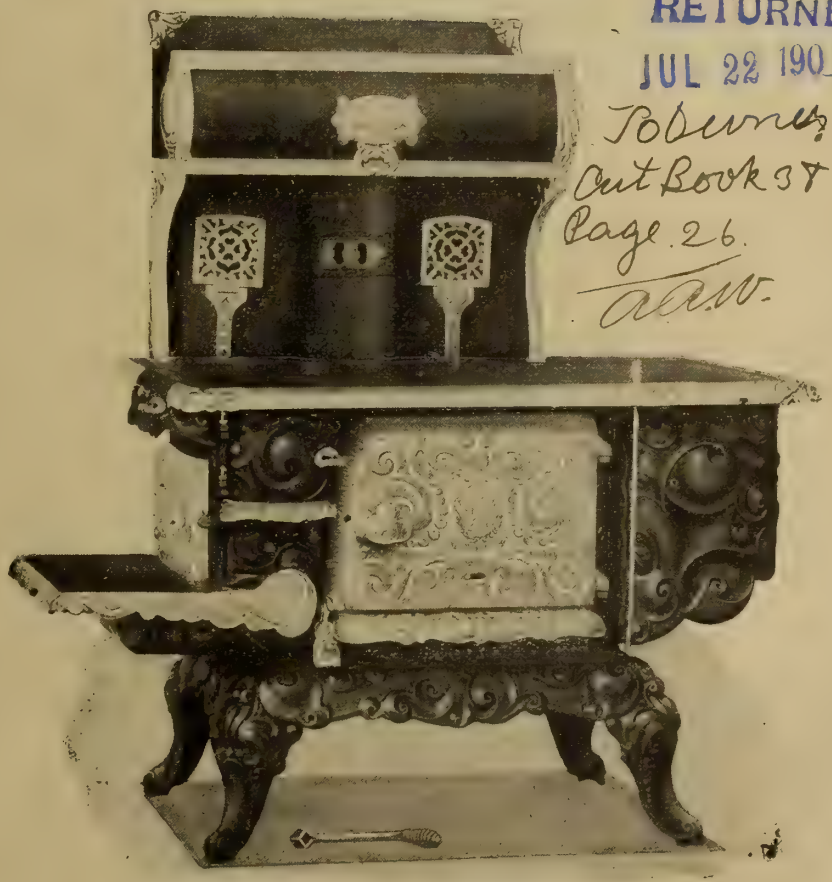


ART TREASURE



TREASURE DOUBLE HEATER

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A.W.



HOME TREASURE

TREASURE

Stoves and Ranges are not made with a view of meeting competition (considering price only) but are made on **scientific** and **practical principles** (the result of over **half a century's experience**) possessing the important requisites of **Durability** and **Economy.**

Dealers don't have to meet their competitors' figures on inferior lines, but in nine cases out of ten secure a **Special Preference** when selling **Treasures.**

They combine **Weight, Style, Finish** and **Superior Workmanship.**

Every sale made means a satisfied customer.

It pays to ask questions.

A postal card will secure full information.

Write to-day and get in line.

☞WE ARE IN A POSITION TO SHIP PROMPTLY

The D. MOORE COMPANY, Limited, = HAMILTON, ONT.

Manitoba Depot—MERRICK, ANDERSON & CO., WINNIPEG. British Columbia Agency—JOHN BURNS, VANCOUVER.

to continue to furnish the oxygen necessary for perfect combustion.

If, through defects in the chimney, draft is poor, close the smoke-pipe check and leave the draft-inlet door partly open, especially if cold weather. Opening the feed-door will check and cool the fire rapidly—keep it closed if you want to keep the fire.



New Foundry Addition, Gurney-Tilden Co.'s Works, Hamilton.

THE GURNEY-TILDEN CO.'S STOVE WORKS.

THE present firm of the Gurney, Tilden Co., Limited, Hamilton, was founded in 1843 by E. & C. Gurney, and the business was carried on under that name until 1893, when it was incorporated under the present name. The officers of the company are: John H. Tilden, president; O. G. Carscallen, vice-president; E. D. Cahill, treasurer; J. J. Conway, secretary. The Northwest and British Columbia business is looked after by the Winnipeg branch of the firm, known as the Tilden, Gurney Co., Limited, the management of which is under I. W. Martin. The firm also has warehouses in Calgary and Vancouver. The Ontario representatives are as follows: Robt. Porterfield, who has charge of the territory north and west of London; C. E. Marks, from Hamilton to London and south to Lake Erie, including Niagara Peninsula; R. M. Stuart, north of Toronto to Sault Ste. Marie; J. E. Bennett, Toronto and east as far as Montreal. Quebec and the Maritime Provinces are under the supervision of Chas. Nicoll, 85 St. Peter street, Montreal. Their foreign representatives are: England, the Thames Bank Iron Co., London, E. C.; Australia, Chas. Dobson Franks & Co., Sydney. The representatives for Western Canada are: J. C. Thompson, Winnipeg, main line west to Medicine Hat; H. W. Thompson, Winnipeg, main line east to Port Arthur and northern and southern Manitoba; the Western Hardware Co., north of Regina; and C. A. Godfrey, Vancouver, British Columbia.

At present the firm employ 360 hands. The works cover a space of nearly four acres, and the power consumed, including electrical for lighting, etc., is about 140 horse-power. Plans are at present being prepared for the construction of new buildings, including hardware manufacturing departments, storage departments and japanning ovens, which when completed will occupy all available space. An accompanying illustration shows the new section of the moulding department, which has just been completed. The building of this addition was occasioned by the large demand for base burners last Fall, when the moulding department was taxed to its greatest capacity.

The lines manufactured by this firm are: "Souvenir" stoves and ranges for coal and wood; "New Idea" hot air furnaces for coal and wood; "Hamilton" radiators for hot water or steam; builders' hardware and general castings, including locks of all kinds, door sets of very varied designs, including escutcheons, push buttons, bell turns, letter-box plates, etc., sash lifts, drawer pulls, door bolts, cupboard catches, sash pulleys, hinges, etc. Of the various departments in which these are made, including the brass moulding shop, machine shop and japanning departments, nothing will be said.

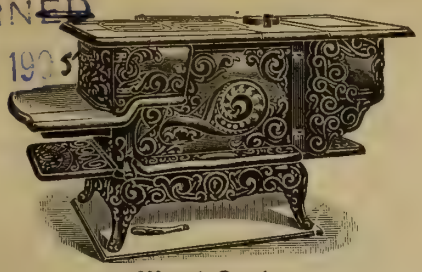
In connection with the manufacturing of the radiators the core department, the moulding departments and what is called the radiator department are of interest. In the core department the cores for the radiator moulds are formed and baked. In the radiator room the parts are assembled and put together, the finishing touches put on them; and finally they are crated and sent to the stores department or to the shipping room. The manufacture of the furnaces starts in the carpenter shop, where the patterns for the castings are made, and progresses through the moulding shops, the scratch house, where the castings are chipped and cleaned, the furnace department, where the steel parts are cut and formed and the furnaces are put together to the stores department or shipping room. The trimming department is in close connection with the furnace department, where furnace pipes and hot air conduits, etc., are made.

The manufacture of the stoves starts in the pattern or carpenter shop. The patterns are taken to the moulding shops; from thence the castings are taken to the scratch house, where they are chipped and cleaned; some parts then go direct to the mounting departments, while others go up to the nickel-plating room, and on to the mounting rooms. The sheet steel parts are made in the furnace department and go from there to the mounting rooms. From the mounting rooms the erected stoves are taken to the finishing department where they are polished and crated; from there

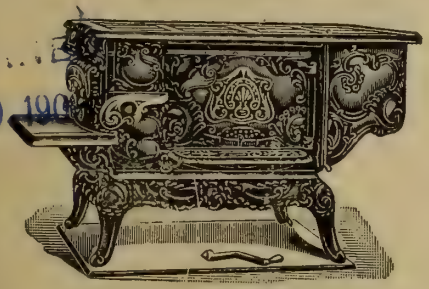


Offices of Gurney-Tilden Co., Ltd., Hamilton, Ont.

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Wood Cooks



Coal and Wood Cooks



Cast Ranges



Steel Ranges



Base Burners



Oak Stoves



Hot Blast Heaters



Concentration

is the Spirit of the Time

Its advantages every man knows.

"Favorite" Stoves and Ranges offer you the opportunity to concentrate your trade on a line that is strong at all points.

We give our whole attention to the making of Stoves and Ranges only, and you have our guarantee that they are correct to the smallest detail, and that they look well, work well and sell well.



We make from the cheapest Cook Stove to the most highly finished Family Steel Range. From the cheapest Box Stove to the most elaborately finished **Base Burner.**

FINDLAY BROS., Carleton Place, Ont.

Coltart & Cameron Co., Limited, Winnipeg, Man., Selling Agents for Manitoba and Northwest Territories

being taken to the storerooms, to the shipping department or perhaps to the showroom.

In the carpenter shop are made, besides patterns, boxes for the moulding department and crates, etc., for the shipping department.

The foundry consists of four departments, one of which is shown in the accompanying illustration. The addition of the new moulding shop brings the capacity of the foundry up to about 32 tons per day. At present modern appliances are being installed in the foundry for the convenient and speedy handling of coke and iron for the cupola.

One illustration shows one of a group of four mounting shops, each shop being devoted to different styles of stoves. As can be seen in the illustration, large racks run down one side of the shop to receive the parts as they come from the scratch house or from the nickel-plating room. Running down the other side of the room is the bench, which is equipped with vices, grinders, etc., necessary for the fitting together of parts. There are also drills on the floor.



Assembling Room, Gurney-Tilden Co.'s Works, Hamilton.

The power house is centrally situated. The exhaust steam from the engines is used for heating the buildings during the Winter, and in the Summer the engines exhaust into the atmosphere.

The offices, which are shown in one of the illustrations, have recently been remodelled, and are constructed with a view to the latest improvements in heating and ventilating. They are spacious and handsome.

Sporting goods make a very attractive window display. At this season of the year, when so many are considering the vacation proposition, a line of fishing tackle and the accompaniments will stop nine men out of ten every time.

FIRELESS COOK STOVES.

A REPORT to the bureau of commerce and labor from United States Consular Clerk Murphy, Frankfort, Germany, gives some information about the "fireless cook stove." It makes interesting reading, but cook stove manufacturers need not throw away all their patterns and start anew on the strength of this discovery just yet. The following is the report:

"In a recent address to an audience consisting largely of working people, Mrs. Back, wife of the director of the industrial school at Frankfort, brought to the attention of her hearers the following interesting information in regard to a new article of kitchen furniture—the hay box, or fireless stove.

"Every housewife knows that a pot of coffee can be kept hot for a considerable length of time, without the aid of fire, simply by wrapping it securely in a dry towel in order to hinder the escape of heat. It now seems very strange that the world has been so slow to make a practical and more extended use of this idea.

"At the Paris exposition of 1867 much attention was attracted by a wooden box lined with wool and felt, which was called 'the Norwegian automatic kitchen.' In this box food which had been boiled for only a very few minutes continued to cook slowly, and in two or three hours was found to be ready for the table. For some unexplained reason all efforts to bring this useful novelty into general use proved unsuccessful until the matter was recently taken up systematically and with more enthusiasm in Baden. The propaganda is now being successfully pushed in Berlin, Munich, Frankfort, and other cities by means of popular lectures and public demonstrations of the convenience and practical value of this method of cooking.

Called a "Hay Box."

"Mrs. Back stated that she has now been using the hay box for thirteen years, and that it has greatly reduced for her the cares and annoyances of housekeeping. At first she used the box merely for the purpose of keeping finished food warm, but it was not long before she discovered that the process of cooking continued in the box. She thereupon extended its use, making a series of experiments which resulted in pleasant surprises. She soon found that she could finish in the box all boiled and roasted meats, sauces, fish, soup, vegetables, fruit, puddings, etc. Of course the box can not be used for beef steaks, cutlets, pancakes, and the like, articles whose chief attraction lies in the crispness resulting from rapid cooking on a hot fire, but when food of this kind is being prepared it is a great comfort to the housewife to know that the rest of the meal is ready and hot in the box.

"In any household such a box will be found of great advantage, lessening the worries of the housewife and cook, and leaving much more time for other duties and recreations, but for working women it is more than this—it is almost indispensable.

"A little patience and interest will secure all the experience that is needed and remove all doubts. A few experiments will teach how much preliminary cooking on the gas stove is required for different substances. In general, it will be found that two or three minutes of actual boiling on the fire is amply sufficient for vegetables, while roasted meat requires twenty to thirty minutes. Most articles should remain tightly closed in the box for two or three hours, though they can be left there to keep hot for ten or twelve hours, if necessary.

"Cooks Everything."

"Rice, dried beans, lentils, dried fruit, etc., should first be well soaked in cold water. After being allowed to boil for from two to five minutes, one to two hours in the box will prepare them thoroughly for the table. Cabbage should be prepared the evening before it is to be used. It should be placed in the pot with very little water, cooked well in its own juice, and put overnight in the hay box. Just before dinner on the following day it should be warmed on the stove. Cauliflower and other soft vegetables should be merely brought to a boil and then placed for an hour or two in the box. It will be found that soups are greatly improved by being allowed to develop for two or three hours in the hay box. The covers of the pots should, of course, not be lifted when the pots are being transferred to the box. By the old method of cook-

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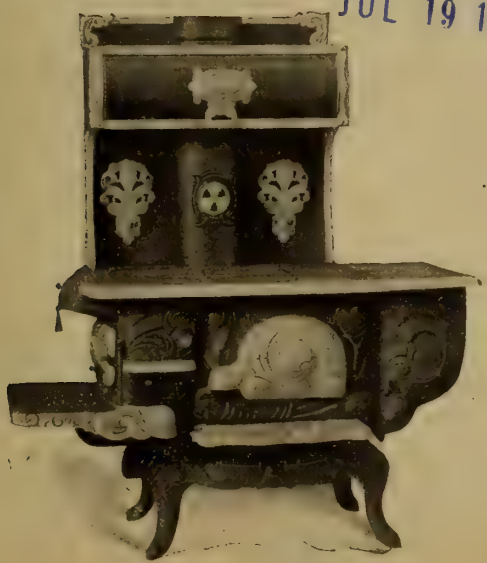
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PENINSULAR RANGES

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CLARE BROS. & CO., Limited

PRESTON, ONT.

WESTERN BRANCH :

CLARE & BROCKEST

WINNIPEG, MAN.

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"Kitchen" Steel Range.

ENTIRELY NEW

Supplied with both coal and wood linings.

Water-front can be supplied if desired.

Has large 20 x 20 inch oven bottom.

Made with 4-8 inch or 4-9 inch pot covers.

Fire-box will take a 24 inch wood.

Duplex grates, drop oven door with **Enameled Steel Lining.** Steel body and steel leg base. Extra large ash pan. Steel high shelf or closet.

The "Kitchen" has already made itself popular with the trade, and is sure to be a fast seller.



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"McClary" Elbow

MOST POPULAR ELBOW ON THE MARKET

Made in Blue Polished Iron, Galvanized Iron and Tin.

THE McCLARY

Head Office and Works: London, Ont. Branch Factories: Montreal, Winnipeg, Vancouver,

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A.A.N.



"Famous" Base Burner

No. 113 SERIES

Made in two sizes for parlor and in one size with oven.

Has 12½ and 14 inch fire-pots. Large Oven and Duplex Grates.

The fire-pot can be taken out through the front doors and the operation is a very simple one.

The "Famous" has a full nickel dress very artistically arranged, and is equal, if not superior, to any other stove in its class.

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Coal Hods

Made in 12 sizes and styles.

Stove Boards

Made in 30 sizes and styles.

MANUFACTURING CO.

Montreal and Hamilton. Branch Warehouses: Toronto, St. John, N. B., Hamilton, Ont.

ing, it is necessary to boil dried beans two and one-half to three hours. When the hay box is used, boiling for five minutes will be found sufficient. This will give a clear idea of the amount of fuel saved.

"Science teaches that many substances become ready for use as food at temperatures below the boiling point; and that, unless the pots are hermetically closed, a temperature exceeding 212 degrees F. can not be attained, no matter how much fuel is consumed nor how long the boiling is continued. Accordingly, the object to be kept chiefly in view is



Method of Cleaning.

to retain the heat as long as possible when it has once been developed.

"One of the first things for a novice to learn is how much water to use. It will soon be found that too much is better than too little, and that if beans, peas, lentils, oatmeal, etc., have less water than they can absorb, they can not become properly cooked, no matter how many hours the process is continued. No water should be poured from the pots, not even from potatoes, as it always contains valuable salts derived from the cooking substances, whose loss must lessen the alimentary value of the vegetables or meat.

How They Are Made.

"The hay boxes now being offered for sale in German stores are usually lined and partitioned with hay, felt, etc., and the receptacles are furnished with covers which can be securely locked. Such boxes are no doubt useful when food is to be transported—for instance, from restaurants; but there is one serious objection to them—their immovable felt and upholstery may become moist and moldy. A home-made hay box will usually be found cheaper and more practical. Almost any box will do which has a tightly-fitting cover. The wood of which it is made should not be too thin, and, of course, there should be no knot holes or cracks. Old trunks and valises may sometimes be successfully utilized in this way.

"The box should be loosely filled with shavings, paper, or hay—the last mentioned being probably the most satisfactory. The hay should be renewed every two or three weeks. Before the pots are ready the requisite number of nests in the hay should be prepared, and when the pots are placed in these holes the hay should be packed under and around them tightly. Any kind of pots can be used, although, of course, earthen ones hold the heat best. The tighter the tops fit the better, but if the food is to be used within six or eight hours, it is not necessary that they should be of a kind which can be hermetically closed. Ordinary tops will be found perfectly satisfactory. When the pots have been placed in the box carefully and without lifting the lids, they should be covered with a pillow and the lid at once securely closed.

"When not in use, the box should always be left open and the hay loosened, the pillow being hung in the air to dry thoroughly.

"The chief advantages of the hay box may be summarized as follows:

Advantages.

"1. The cost of fuel can be reduced four-fifths, or even nine-tenths. 2. The pots are not made difficult to wash; they are not blackened, and they will last for an almost indefinite period of time. 3. The food is better cooked, more tasty, more nutritious, and more digestible. 4. Kitchen odors are obviated. 5. Time and labor are saved. 6. There is no need of stirring or fear of scorching or burning. 7. The cares of the housewife are lessened, and her health and happiness are thus protected. 8. The kitchen need not be in disorder half of the day. 9. Warm water can always be had when there is illness in the house and during the Summer when fires are not kept up. 10. Milk for the baby can be kept warm all night in a pot of water. 11. Where workmen's families live crowded in one or two rooms the additional suffering caused by kitchen heat is obviated by the hay box, for the preliminary cooking can all be done in the cool of the morning. 12. At picnics the appetites of young people are only half satisfied by sandwiches and other cold food. The hay box can furnish a hot meal anywhere and at any time. 13. Similarly, men and women working in the fields or having night employment can take with them hot coffee, soup, or an entire meal, thus avoiding the necessity of returning home at a fixed hour or having it brought to them by another member of the family. 14. When different employments make it necessary for the various members of a family to take their meals at different hours, this can be arranged without a multiplication of work with the assistance of the hay box. Of course it is necessary that the box be kept perfectly clean, as otherwise it may become sour or musty."

The Greener iron area at Barrasois, C.B., consisting of half a square mile, has been bonded to the Londonderry Iron Company for three months. The price to buy is said to be $75,000.

FUEL IN ALBERTA.

THE great future of the economic outlook in the new Province of Alberta, next to its agricultural possibilities, is the coal fields which underlie so large a part of its area. There are said to be 65,000 square miles of these coal fields, and active mining is being carried on at whatever points a market can be found. An indication of the amazing extent of the distribution of fuel wealth may be best obtained by a mere enumeration of the places within the new province where mining is being carried on: Steam and domestic coal at Coleman, Frank, Lille, Cowley, Lethbridge, Medicine Hat, Canmore, Red Deer and Knee Hill. Lignite at Lethbridge and anthracite at Bankhead and Anthracite, while on the reserve of the Crowfoot band of Indians there is a quarry of coal which the Indians shovel out and sell to the settlers.

At Edmonton and along the banks of the Saskatchewan River at many points the settlers have made openings and mine their own coal. It is also carried on as a business. There are thirty mines in Edmonton and immediate vicinity. Farmers' banks, where the settler drives up and mines a cartload of coal, may be come upon at various points in Alberta from Edmonton to Pincher Creek.

It would be difficult to exaggerate the importance of this wide distribution of one of the necessities of life, especially in a country where fuel of any other kind is scarce or non-existent. When these plains are teeming with settlers there will be an enormous traffic in the transportation of coal.

WIRE CUSHIONED OIL CAN.

THE one-gallon cushioned glass oil can shown herewith is provided with heavy indestructible beaded tin rings clinched tight to the coiled wire jacket. One ring is clinched to the



Wire Cushioned Oil Can.

bottom part and the other to the top of the wire jacket, this construction enabling the coiled cover to be removed from the can to facilitate the cleaning of either the glass or the jacket. Corrugated tin protects the bottom. The wire coils are all linked together and form an endless woven fabric. The cans are packed either one-half or one dozen per box, and are put on the market by Ohio Lantern Co., Tiffin, Ohio.

PERFECT IDEA!

Absolutely the Most Up-to-date and Perfect-working Range on the Canadian Market.



Greater and Grander Than Ever

RETURNED
AUG 14 1905
To. Owen
Cut Book
Page. 97

FEATURES

Loose Nickel Bands, Medallion and Shelves may be removed instantly for cleaning or when blacking Range.

Direct Draft Damper is operated from the front; the Damper Rod is not exposed to fire, and cannot burn out or warp.

The Main Bottom is corrugated and cemented, preventing unnecessary loss of heat through the bottom of Range and insuring quick baking by the reflection of heat against oven bottom.

Sliding Check Damper gives perfect control of draft.

Double Draft Duplex Grates.

Extension Fire Box.

Cemented Oven Top. Large Ash Pan.

Reliable Oven Thermometer.

Can be fitted with special Gas Attachment, so that back two lids serve as gas burners.

Grate Bars may be removed without disturbing linings.

NO.	HOLES	OVEN	WEIGHT
6284	6 8-inch	19x19x11	400
4294	4 9-inch	19x19x11	400
6384	6 8-inch	21x21x11	500
6394	6 9-inch	21x21x11	500

Guelph Foundry Co., Limited, - Guelph, Ont.

Branch Houses: Winnipeg, Toronto, Montreal.

PIONEER TRAVELING IN THE WEST

A DRUMMER'S lot in the west is, even at this late day in western development, no easy task. Difficulties of overcoming distances and transporting luggage and samples, on muddy roads or overloaded railway trains, are sufficient to drive to distraction any knight of the road who



T. Tweed, Medicine Hat, N.W.T.
President N.W. Boards of Trade.

hasn't accepted as a motto the oft repeated words, "Don't Worry." And the cost of covering this country of magnificent distances is such as can only be financed by strong wholesalers and manufacturers whose goods have merit, and whose business methods are such as to win and retain a good connection with the enterprising men who have staked their future on the mercantile prospects of the great and growing west.

But if these are problems of to-day, with a transcontinental line having two lines across the territories, and with two other transcontinentals working their way across the prairies, what must have been the problems of the drummer of twenty or thirty years ago? Hardware and Metal was fortunate this week in having an opportunity of gleaning some reminiscences of the experiences of Mr. A. D. Kennelly, who made many trips between the Great Lakes and the Rockies between 1881 and 1895, on behalf of the McClary Mfg. Co., Limited. Mr. Kennelly is now manager of the important branch of this company at 177 King street west, Toronto.

Prior to 1879 the territories were controlled by the Hudson's Bay Co., and for many years afterwards the Hudson's Bay Posts were the centres of merchandising. Gradually, however, the country became settled and private merchants secured a foothold. The country became more than a fur-bearing district, and all classes of merchandise were sent westward to be sold to the Indians, halfbreeds, and the white pioneers, whose love of freedom and nature was greater than their fear of the dangers of frontier life.

The early means of transportation were rough and travelers were unable to spend their nights on Pullman sleepers. Boats could be taken from Winnipeg up the lake and via the Saskatchewan River to Prince Albert, Battleford and Edmonton, while stage lines ran southward along the foothills to Calgary and Fort MacLeod. Away from the rivers and on the prairies pack trains were used largely, and many an adventure occurred by those whose inability to throw a diamond hitch caused the pack to work around under the cayuse's belly rather than to rest securely across the animal's back. The old carts of Hudson's Bay days will also be remembered by any who heard them. Constructed almost entirely of wood, with wooden wheels and axles, their creaking could be heard for miles across the prairies.

The first railroads west of Winnipeg were constructed by laying the ties on the prairie without grading, the work of filling in with gravel being done afterwards. As the road was built out to Stonewall, Portage la Prairie, Emerson or Nelson, these places became great trading centres, and large quantities of stoves and cooking utensils were sold to incoming settlers. At first all the stoves sent to the west were light,



R. J. Hutchings, Calgary
First Vice-President North-West Boards of Trade.

cheap sheet iron affairs, the heavy weight of the cast iron stoves preventing their transportation to distant points. On the prairies the absence of wood for fuel also required cheap stoves which would burn anything, buffalo chips being a popular substitute for wood.

Mr. Kennelly sold the first carload of cast iron stoves to go to Prince Albert in the Fall of 1882, they not arriving there until 1883, owing to the boat having to lighten itself to make the last trip, the water being low. The stoves laid all Winter on the river bank, covered with snow in the Winter and rust in the Spring. Low water and rapids were great obstacles to river navigation. All these difficulties necessarily increased the cost of the stoves, and the prices paid on the frontier in the early days would seem fabulous at the present time.

The Indians were considered harmless and no troubles were met with on that score by travelers, they being a respectable and manly race prior to the days of railway construction. Then, however, they were debauched, and there was nothing, not even their women, that the redskins would not sell for the white man's fire-water. Mr. Kennelly was in Regina when Louis Reil was brought in a prisoner in 1885. Quite a thriving trade was done by the Indians in collecting buffalo bones, hundreds of carloads being gathered from the prairies and used as fertilizer.

Amongst those met with in the early eighties many are now prominent merchants and public men, a large percentage of the successful hardware and stove men in Manitoba and the territories being former Ontario men. Hon. Robert Rogers, at present a member of the Manitoba Government, was an old customer of the McClary Co.'s at Clearwater, Man., while Hon. James Smart, of the Department of the Interior, Ottawa, was a traveler for the Smart Co., of Brockville, and later a hardware merchant at Brandon. Mr. George Merrick, now of Merrick & Anderson, Winnipeg, used to travel for D. Moore & Co., Hamilton, in the early days.

The picture of Smith & Ferguson's fine hardware store at Regina in last week's Hardware and Metal brought to Mr. Kennelly's mind that he had traveled west from Winnipeg with Mr. Smith in 1883. Mr. Smith chose to locate in Regina in spite of keen competition, and later became head of the present firm, taking in Messrs. Smith and Ferguson as his partners. Their building was the finest in the west when erected a decade ago, and even now is thoroughly up-to-date.

Ross Bros., Edmonton, brothers of Mr. J. F. Ross, can manufacturer, Toronto, were also remembered as going overland to Edmonton in 1882, with little besides their tinsmithing tools. To-day they have a splendid wholesale and retail hardware and stove business, and are rated high in commercial reports. Others who were spoken of as old-timers were: Alex. McBride, of Calgary, formerly of London; J. O. Cadam,



Hon. T. H. McGuire, Ex-Chief Justice, N.W.T.
2nd Vice-President N.W. Boards of Trade.

of Carberry, formerly of Port Dalhousie, and McPhail Bros., of Prince Albert, one of whom was killed during the rebellion in 1885. Thomas Tweed, recently elected as president of the Associated Boards of Trade of the North-



MADE IN CANADA

Made the right way—the "selling" way.

Sterne's Asbestos Stove and Furnace Cement

We will send from 2½ lbs. to 1 bbl. on approval. The quality will suit you.

Write direct for prices to

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

Fire Bricks, Furnace and Stove Cement and Stove Castings

High-class goods at low prices. We have 300 styles of bricks made from the best fire-clay, and all accurate fitting. Our cement and stove castings will stand comparison with any. Catalogue on application.

JONES BROS., - Bracondale P.O., Ont.

THE

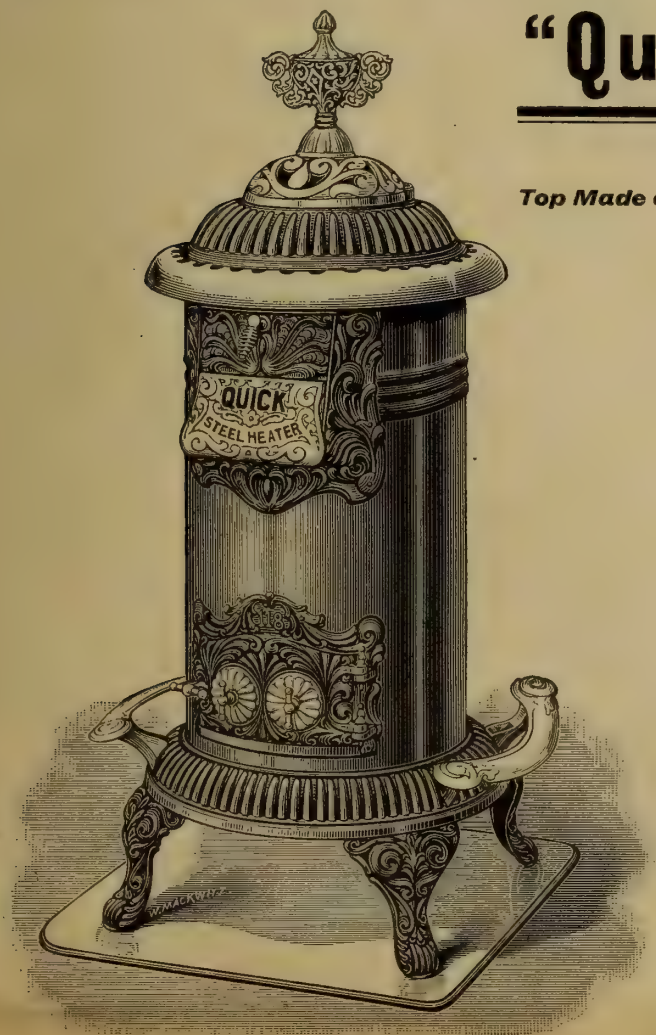
Walker Pilot Steel Range



Among the many points of merit of this range is a solid cast iron reservoir with enamelled ware tank. This is attached at the proper end of the range, and rolling damper blade gives absolute control of it at all times. It is worth several dollars more than the contact reservoir, and yet our range sells at prices to compete with the ordinary kind.

SEND FOR CATALOGUE AND PRICES

THE WALKER STEEL RANGE CO., LIMITED
GRIMSBY, Ont.



"Quick Steel Heaters"

FOR COAL

Top Made of Steel ***Bottom Made of Steel*** ***Body Made of Steel***

It is lighter and stronger than stoves having these large parts made of cast iron. It saves breakage. It saves in freight charges.

All steel parts are made by machinery and dies. They are absolutely alike and interchangeable. A damaged or worn-out part is quickly replaced.

Steel Top and Bottom are of the same material as the body. Their expansion and contraction are alike; therefore they fit air-tight and remain so.

"Quick Steel Heaters" heat quicker because there is less metal to heat through than if they had cast iron top and bottom.

The Fire Pot, with air-slots running up inside, acts to keep the live fire on the OUTSIDE of the coal, thus radiating the heat rapidly.

The line is new, only one of its kind, and a good seller which pays the dealer a profit.

FOUR SIZES ***EXCLUSIVE AGENCIES***

WE ALSO MAKE AN ENTIRELY NEW AND COMPLETE LINE OF

"AIR-TIGHT WOOD HEATERS"

The Prettiest, Air-Tightest, Smoothest and Most Solid Line Ever Brought out—Prices are right.

Oil Heaters ***Gas Heaters***

Write for Catalogs, Prices and Particulars.

DANCLER STOVE CO. DIV., CLEVELAND, O. U.S.A.

west Territories, was also spoken of as a successful hardware merchant at Medicine Hat.

Mr. Kennelly's early connection with the west makes him an interested observer of the wonderful progress being made by those who are aiding in the development of Canada's land of promise—the country of big things, of enterprise, and of golden wealth of grain.

TROUBLES MET IN SELLING STOVES.

THE following interesting paper was read by Mr. F. P. Hans, of Iberia, at the 1905 convention of the Missouri Retail Hardware Dealers' Association:

No stove or range ever made has of itself what is called a draft; that must be furnished by the chimney or flue, and even when the draft in chimney or flue is perfect, that is not all that is wanted to insure good work or good bread or biscuits; the other things necessary being proper setting up, good fuel, good material—and last, but not least, a good cook. I had a customer years ago who would never guarantee a stove to bake well, and when the lady would ask "Why won't you guarantee the stove to bake well, after saying that you know the stove is a good baker?" his answer would be: "I know the stove is a good baker, but I do not know if you know how to bake or not." And there is a lot that hinges on knowing how, in baking as in everything else.

High-Grade Stoves Made Most Trouble.

An old-timer told me that when a lady bought a cheap cook stove the chances were that she was going to use it herself, and if the top part of the oven got too hot, would place a paper over the bread or biscuit until enough ashes had gathered on the top oven plate or if the bottom of the oven got too hot, she would put a stove cover under the pan. On the other hand, when a lady bought a high-priced stove the chances were she would have a servant to run it, and if breakfast was late because she had been late in getting up to start the fire, her excuse would be that the stove would not draw. If, on the other hand, she got the oven too hot, or forgot to take out the bread or biscuit in time and they were burnt, the excuse would be the stove could not be regulated and at times I have found these excuses used under conditions mentioned.

Unreasonable Guarantees.

So, in making a sale, do not make any unreasonable guarantees or promises; do not say this stove or range, as the case may be, will do good work set up to any kind of an old chimney and with any kind of fuel; because you know it will not, no matter what may be its name or who may be its maker. To obtain the best results there is needed a good flue or chimney, proper setting up with pipe full size of collar on the stove or range and good fuel, and as stated before, a good cook to run it.

Stoves Should Be Set Up.

When possible, the dealer should set up every stove or range he sells and the man doing this work should not be the cub or the poorest workman about the place or shop. He should know enough about the business to know if the flue he is going to use has a good draft or not, and if not, should so tell the party buying the stove or range and if possible correct the trouble before leaving the job. If this were always done there would be fewer kicks afterwards.

Literature.

When the stove or range goes into the country where a man cannot well be sent to set it up, instruct them as far as possible how to set it up and what faults to avoid. Many of the manufacturers have booklets or circulars on this subject that they would be glad to furnish if they knew they would be used.

Good Chimneys.

A good chimney should be 8 x 8 inches inside, and the top of it should be a little higher than the highest part of the comb of the house, and should not have a tree overhanging the chimney, as is sometimes the case, and flue should end from 4 to 6 inches below the opening into which the stove pipe runs, and



William Trant.
Secretary N.W Boards of Trade.

should not run down to the floor or into the cellar where perhaps there is an opening into said flue without a cover or stopper of any kind; and remember putting up two or three stoves to one flue is like hitching up two or three wagons to a single team just large enough to handle one wagon easily.

Complaints.

I suppose as long as stoves and ranges are sold there will at times be complaints made and when they come in they should be looked after at once, and it is well to go yourself or send a man who knows the business. The first thing I do in such cases is to fire up the stove or range to see for myself how it burns.

If you find the fire does not burn well, examine the flue and see if that has a good draft. If not, locate the trouble and remedy it if possible, because a good draft is absolutely necessary to good work. Next, look to the fuel and remember you cannot get a hot fire from wet or rotten wood, as the heat used in evaporating the water in green or wet wood is lost to the oven; nor can you get a hot fire from poor coal, especially when mixed with dirt. Then see that the ashes are kept away from the bottom of the fire and from under the grate, allowing the air to pass freely through the fuel, as air is as necessary to a fire as is the wood or coal, and a fire can no more burn without any air than you can live without air. All air entering into the fire box should pass under and through the fuel, as any air that passes over the fire checks it and at the same time cools the oven, so I would say always keep the damper slide in the front fire door closed, and it would be better (in my opinion) if no damper slide was put in the front fire door.

Fire Box Needs Air.

Get all the air necessary into the fire box by drawing out the hearth slide, as in so doing the air is put to the bottom of the fire where it belongs. But while air is necessary to combustion, like in everything else, there may be too much of a good thing. Only one-fourth of the air entering the fire box is oxygen, the only thing that counts, while the other three-fourths is made up of neutral gases that contribute nothing towards combustion but have to be heated at the expense of the oven; so that while it is necessary to admit all the air into the fire box that is needed to make the fire burn well, no more than is necessary should be admitted to keep the fire burning well. And as no two flues draw exactly, nor the same flue draws alike every day, but changes as does the weather, the amount of air to be admitted to do the best work can only be learned by experience, as any good cook will tell you, and that is why an oven will get hotter one day than another, using the same kind and same amount of fuel.

PROGRESSIVE STOVE FOUNDRY.

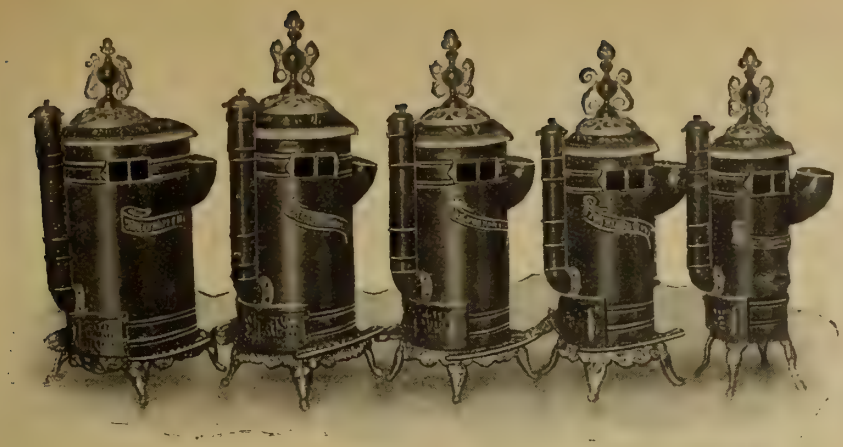
The D. Moore Co., Limited, stove and range manufacturers, with head office and works at Hamilton, Ont., and agencies at Winnipeg, Man., and Vancouver, B.C., have just completed the installation of modern and expensive machinery for the manufacture of steel ranges. The "Premier Treasurer" steel range will make a great addition to their already extensive line and will be received with favor by the stove dealers. This range is built to last. The body is made of heavy polished and heavy Superior steel, is riveted every 2 inches with steeple head rivets and strongly braced to prevent warping. All parts coming into contact with the fire are reinforced with asbestos millboard. The device for removing the duplex grates and linings is very simple, as is also the method for raising and lowering the front section of top.

This firm also manufacture a complete line of cast ranges, coal and wood cooks, base burners, oak stoves, etc., etc. Their advertisement will be found on another page.

Work has commenced on the New Manitoba Medical College at Winnipeg. Brick and cut stone will be used, the size being 95 x 115 feet, and two storeys in height. The contracts have been secured by: Mason work, Phil. Burnett; carpentering, S. B. Ritchie; plumbing, Standard Plumbing Co.; electric fittings, Mitchell & Co.

Keep the catalogues for future reference. You may need them any day.

Weed pullers should sell well these days.



"SIXTY" SERIES

"TELEPHONE CITY"

TOP DRAFT COAL HEATERS

(Shown in Cut)

"FIFTY" SERIES

Made in the same sizes but with sheet iron top.

They are marvelous heaters, with less fuel than any.

"TELEPHONE CITY"

Air Tight, Top Draft

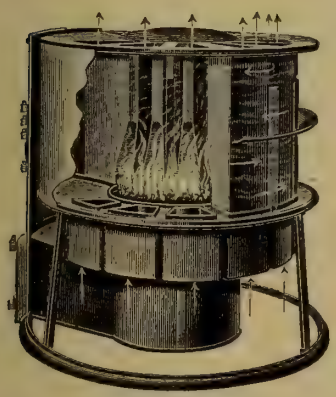
WOOD HEATERS

These are a great success and dealers who have tried them always renew their contracts

Write for prices now.



TELEPHONE CITY STOVES, LIMITED, = = = BRANTFORD, CANADA.



FOR OVER FIFTY YEARS

We Have Been Making

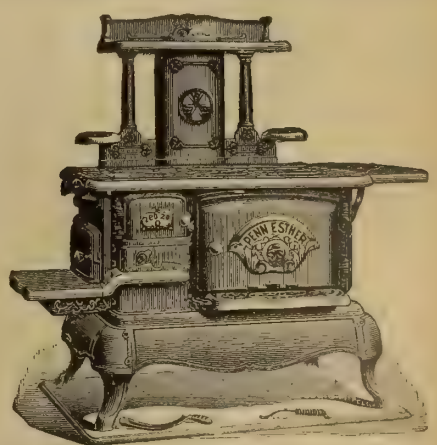
HIGH GRADE STOVES AND FURNACES

and consequently

The name **"RECORD"** has become known throughout Canada as representing a high standard of quality and finish.

WE MAKE

51 Styles and sizes of Furnaces.
90 " " " Heating Stoves.
230 " " " Ranges and Cook Stoves.



RECORD FOUNDRY AND MACHINE CO.

Moncton and Montreal

For further information apply to Head Office at Moncton, or Sales Branches as follows: MONTREAL, 417 St Paul Street, A. Dussault & Co., Managers; TORONTO, 54 Colborne Street, W. W. Ingram, Manager; WINNIPEG, 134 Princess Street, R. R. Kinread, Manager; CALGARY, 203 Eight Ave., H. F. Peters, Manager; VANCOUVER, 873 Granville Street, Geo. F. Burpee, Manager.

DAISY

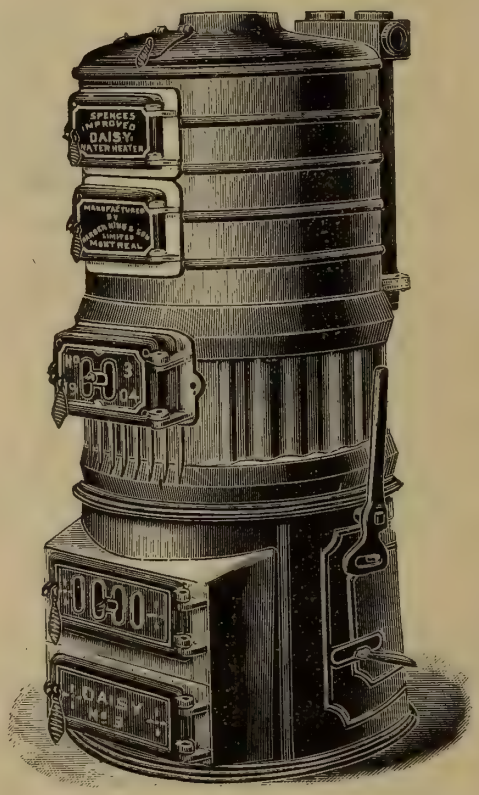
IMPROVED HOT WATER

BOILERS

Give Your Customers the Best.

It Costs No More.

Every Boiler Guaranteed



Simplest in Construction

Economical Efficient

Sales Exceed All Others

Our large stock of **Daisy Boilers**, Iron Pipe, Cast and Malleable Iron Fittings, Brass Goods, etc., insures prompt shipment.
Send us your Rush Orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard St., - TORONTO, ONT.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL

——Here is the——

"GOOD CHEER" RANGE

You Will Want

A FIRST-CLASS RANGE FOR COAL AND WOOD

At a Very Moderate Price



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a.a.w.

It has a Full Sized

20-INCH OVEN

Capable of Taking in Four 10-Inch Pie Plates on Oven Bottom Comfortably.

THIS IS WHAT WILL SUIT YOUR COUNTRY TRADE

Made with both four and six hole top, square or reservoir, and with or without High Shelf or High Closet.

Duplex Grates can be removed without disturbing linings or waterfront.

Fully Warranted

THE JAMES STEWART M'F'G CO. Limited

Winnipeg, Man. ***Woodstock, Ont.***

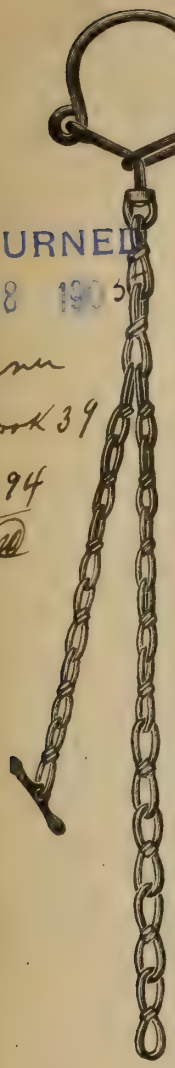
GREENING'S

IMPROVED

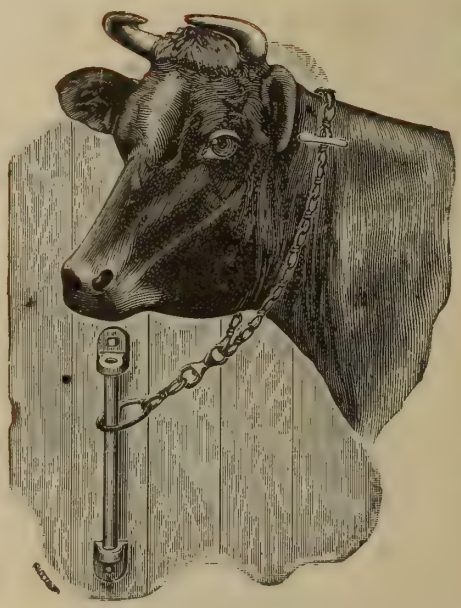
CATTLE CHAINS

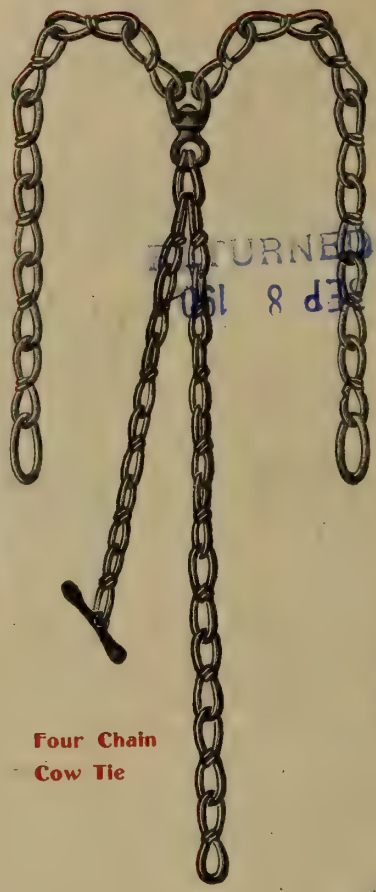
Strongest and Best on the market.

Have stood the test for years.

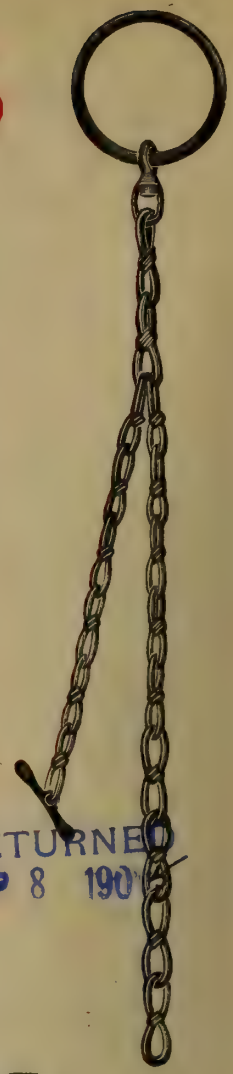


Open Ring. Made in Six Sizes.

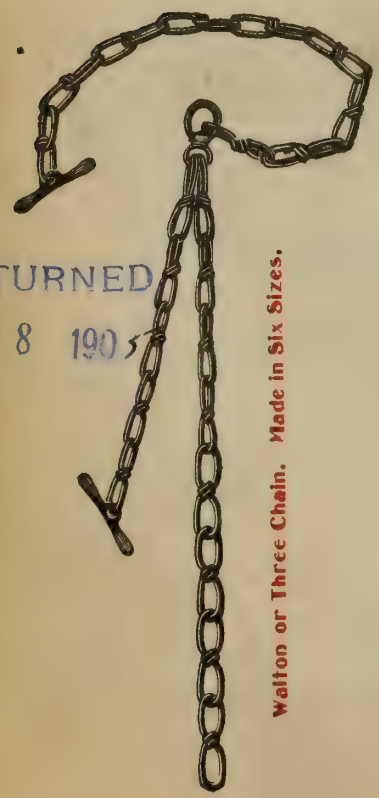




Four Chain Cow Tie



Small Close Ring. Large Close Ring. Made in Six Sizes.



Walton or Three Chain. Made in Six Sizes.

THE STRENGTH of a Tie is that of its weakest part. Ours are of uniform strength throughout. It will pay to handle only the best.

Our Ties are numbered from 1 to 5/0, and may be described as follows: No. 1, Calf Tie; No. 0, Light Cow Tie; No. 2/0, Cow Tie; No. 3/0, Stock Cattle Tie; No. 4/0, Light Bull Tie; No. 5/0, Extra Heavy Bull Tie.

A complete line of all sizes ready for shipment.

Manufactured under Patent No. 50925.

FOR SALE BY ALL JOBBERS.

A good stock of **CINDER SIFTERS, FRUIT DRYING CLOTH** and small **MESH NETTING** in stock.



Patent Stall Fixture.

We make a special Tie, in five sizes, adapted for the above.

THE . . .

B. GREENING WIRE CO.

Limited

HAMILTON AND MONTREAL

SHERBROOKE'S ADVANTAGES.

LAST week the statement was published in various papers throughout the country that the Jenckes Machine Co., of Sherbrooke, Que., were to remove their plant and factory to St. Catharines, Ont., owing to special inducements being offered them by the last-named city. The item contained a mis-statement, as the company had merely decided to establish a branch at St. Catharines, retaining their main factory at Sherbrooke. Many of the papers publishing the original despatch from St. Catharines also published the correction as it appears in our department of Industrial Gossip this week.

The original item was so misleading that residents of Sherbrooke, which is one of the most progressive cities in Canada, took steps to correct the report emanating from St. Catharines, a prominent member of the Sherbrooke Board of Trade writing to Hardware and Metal as follows:

"The Jenckes Machine Co. decided several months ago that it would be expedient in the interests of their business to establish a small branch works at a western point to manufacture for their western trade only and have selected St. Catharines as a desirable location. Their Sherbrooke works will not only be continued up to their full capacity, but will in all probability be enlarged in the near future. There is no city in Canada possessing better general facilities for manufacturing than Sherbrooke. Excellent water-powers, splendid railway connections in all directions, six lines of railway centring here, a steady and reliable labor market, free from strikes and disturbances, where artisans have the combined advantages of city life with the delights of our beautiful surrounding country. The best evidences to offer in favor of Sherbrooke being an advantageous point for manufacturers is the fact that the Jenckes Machine Co. have been eminently successful here. Not many years ago they commenced in a small way, having received liberal municipal aid, and have enlarged their works from time to time, being now an important factor in the Canadian machinery supply market. Sherbrooke's industries, some of which are the largest of their kind in the Dominion, have been remarkably successful, and this fact alone would indicate that her industrial conditions are advantageous. Sherbrooke is the third city in the Province of Quebec, Montreal and Quebec only leading her. We have abundant room here for expansion and we are expanding. Our last annual increase, according to recent census, will compare favorably with any of the older cities in Canada, the increase being over twenty per cent."

OUTLOOK FOR LEAD.

There is plenty of hope for the future of the big silver-lead deposits of British Columbia, says the Vancouver World. Lead is yearly growing in value, its consumption being very heavy and widespread. At present there is a prohibitive duty on lead imported into the United States, but the Canadian market is rapidly developing, and the British Columbia industry will not always require a bonus to make it pay. The world's production of pig lead is annually about 880,000 tons, of which the United States produces 284,000 tons. About 35 per cent. of the lead produced in the United States comes from the Coeur d'Alene district, its production being about 86,800 tons per annum. The silver-leads are about the only fluxing mediums that will stand transportation costs to those points which require them as the vehicle for carrying down the silver and gold values of the dry ores. There is a brisk demand in Europe for lead ores at present. The chief value lies in the fact of their being the vehicle-carrying medium to the lead residues from the zinc smelters.

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Heavy Wagon, Sleigh, Buggy, and Cutter Stock.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

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For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

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Can be used on any stove

Best radiator at half the cost of inferior goods.

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Size pipe collar 5, 6 and 7 inches.

These radiators give the best satisfaction, and have yet to receive a single complaint.

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Mr. Dealer, do your customers think of these facts? Tell them.

Catalogue upon application.

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182 Adelaide St. West, - - TORONTO.

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JUL 18 1905
To Owner
Out Book 38/1905

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 98)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street.
Montreal, July 14, 1905

A GENERAL slackness in the trade is noticeable, but as it is prevalent each year at this time no anxiety is being attached to the change in conditions. During the past week wire nails have declined from 5 to 15 cents per keg. For some time concessions have been given in large sales, and in view of this natural quietness in trade a decided decline in price has been adopted. Orders are now being booked for such goods as sleigh bells, skates, Winter sporting goods, heavy horse blankets, etc. The booking of orders for barb wire, fence staples, axes, handles and lanterns has now subsided. Remaining shipments are now going forward, and in a very short time this part of the business will have concluded also.

A good trade is being transacted in all lines of sporting goods. Large orders are being booked daily for several patterns of rifles. Local wholesale dealers have been expecting a good trade in this line of firearm, and as a result a large stock is being held.

No change is noted in the strong demand for building paper, and manufacturers are of the opinion that sales this year will be considerably larger than those of the previous season. The season for poultry netting, spring hinges and green wire cloth has almost ended, and although a few orders are arriving, the trade is quiet comparatively speaking.

Axes—All orders have been booked, and it now remains for a few shipments to be forwarded, when the trade will assume a much quieter appearance. Our quotations are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Trade on this market has become much quieter, although some wholesale merchants expect to book a few orders late this Fall in connection with the lumbering trade. Prices are steady and remain unchanged. We quote as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—Certain brands of machines continue to have a popular demand. The season is, however, growing late, and dealers are looking forward to a falling off of this demand. We quote as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—The majority of orders have now been booked. A few shipments have still to go forward. Prices are firm at the prices quoted below. We quote the following prices: Cold blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—Booking orders has now concluded, and wholesale dealers are paying more attention to the shipping forward of orders, which will occupy some little time. Prices continue unchanged. Our quotation sare as follows: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Orders still continue to be booked, and trade in general has a bright appearance for this period of the season. We quote: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—No new feature has arisen in this market within the past few days. Prices are firm and continue unchanged. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Although reports state that the trade has a tendency to be quiet, manufacturers are shipping forward large orders. Manufacturers are keeping well up with the demand, except in the case where special sizes are ordered. We quote the following: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent.; brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Machine shops are creating a good demand, and this, added to the demand originating from other natural sources, causes the trade to have a very bright appearance. Trade conditions are being fully maintained with the following discounts: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5. Activity rules.

Wire Nails—Demand has become somewhat quieter, and in consequence the price has declined from 5 to 15 cents per keg. We quote the following: $2.10 to $2.20 a keg f.o.b. Montreal.

Cut Nails—Trade on this market can only be termed as being fair. A few orders are being received, but these are easily filled, as the stock held by wholesale dealers is large. Prices continue unchanged. Our quotations are: $2.20 a keg f.o.b. Montreal.

Horseshoes—Business continues to be light, and is expected to remain so until the cold weather sets in. Our quotations are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4, $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—No change has occurred on this market during the week.

Sporting Goods—Large shipments of rifles of several patterns are going forward freely. Other goods still continue to have a good demand. Winter sporting goods are beginning to come into prominence, and it is expected that good trade will follow within a few weeks. Our quotations are as follows: Canadian-made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Although the carpenters' strike is still in progress, contractors, by some means known to themselves, have been fortunate in securing labor, and the building trade is progressing very favorably under the circumstances. The demand still continues to be good, and prospects are of good color.

Cordage—No change worthy of mention has occurred on this market within the past few days. Orders, similar in size to those of previous years, are arriving, and everything points to transacting a trade equal in volume to previous years.

Cement and Firebrick—The recent change in the tariff leads many local dealers to believe that the change in price, so long talked about, is at last about to occur. Prices have become much firmer, and reports state that Canadian producers are seriously considering the advisability of an advance. Orders are arriving freely, and the principal feature is the marked increase in the demand from the country. Our quotations are as follows: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90

per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $1.90 to $2.00. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—Trade conditions remain the same. Prices are firm. We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth—The season is now becoming well advanced, and as a result trade has become somewhat quieter.

Poultry Netting—There is still a scarcity in certain sizes, but as the demand has decreased to a great extent, not much attention is being paid to this condition. Our quotations are as follows: Discounts for two inch nineteen gauge standard, and sixteen gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges—Orders have nearly all been booked, and nothing is left except the shipping forward of a few which yet remain. Prices continue unchanged. We quote as follows: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—A better demand is becoming evident, and this is expected to again increase as the season advances. No change has occurred on the price list. Our quotations are as follows: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east.
Toronto, July 14, 1905.

NO falling off is noted as yet, and the lateness in gathering the hay may stave off the annual dog days, when the staffs of the jobbing houses take a rest from the strenuous life. The travelers representing the various houses will take their holidays during the next two or three weeks. Haying is reported to be on in earnest, the season having been favorable to a bumper crop—probably the greatest on record. The sales of mowers, scythes, etc., have been very large, and orders are still being filled.

Sporting goods are in demand, the call for ammunition beginning to pick up. Fishing tackle and camping outfits have met with a large sale.

Building supplies continue in strong demand, and this line will be the backbone of the trade during the balance of the Summer. Wire nails, screws, bolts, nuts, etc., are all having a large sale, the call for cut nails not being so great. Cement and other lines continue firm at the same prices.

Samples of "Bull dog" shovels, manufactured at Hamilton, are being displayed at jobbing houses and are meeting with favorable comment.

No changes in quotations are noted.

Lawn Mowers—Trade is falling off somewhat.

Sporting Goods—Guns and ammunition are in stronger demand, while fishing requirements are meeting with a large sale.

Washing Machines—Trade is reported very good for wringers and machines

Chain—Trade is in its normal state. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Business is considered very satisfactory. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Large orders are reported by the jobbers. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—A strong demand is reported at unchanged prices. Poultry netting is also meeting with a strong sale.

Barb Wire—Sales continue very large, and farmers are buying large quantities.

Wire Nails—Prices are unchanged. Demand is active. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—In some districts large sales are being made. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—A slackening off is reported owing to the warm weather. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horsenails—Demand during the Summer season is less active. Prices are the same.

Screws—Large sales are reported, but the supply is large.

Rivets and Burrs—Demand is reported good at unchanged prices.

Bolts and Nuts—A satisfactory trade is reported at unchanged prices.

Cordage—Binder twine and hay fork rope are in strong demand, and shipments are large. Prices are well maintained. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—No change in prices is reported owing to the tariff changes. The increase in duty on packages has a tendency to strengthen prices, however, and we look for an advance shortly. Our quotations are as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is steady, with fair sales being made. Prices are firm. Our quotations are as follows: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—Demand for goods is active. Prices are steady.

Hides, Skins, Tallow and Wool—The general advance in wool has been reflected in the local market. All wools have remained firm, with an increase of 2 cents in wool-washed fleeces. Lamb skins have advanced ten cents during the week. The market is devoid of special features apart from these changes. We quote as follows:

Hides, No. 1 green steers, per lb		0 10
" " 2 " " "		0 09
" No. 1 green, per lb		0 09½
" " 2 " " "		0 08½
Country hides, flats, per lb	0 08½	0 08¾
Calf skins, No. 1, selected		0 10
" " No. 2		0 08
Deacons (dairies), each		0 80
Sheep skins		1 25
Lamb skins, each		0 55
Shorn pelts "		0 45
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb		0 15
Wool-washed fleece		0 25
Pulled wools, super, per lb	0 21	0 23
" " extra "	0 22	0 24

For Manitoba, British Columbia and Maritime Province markets see following pages.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, July 14, 1905.

A MUCH firmer state of affairs is prevalent on the market at this point. Numerous metals have had a marked advance during the past few days. Antimony has advanced from 1 3-4 to 2 cents per pound. Conjectures are numerous, but the best reason for this continued advance is probably due to the fact that since the beginning of the war Japan has been unable to work her mines. The war has also had some effect upon the exporting from the Chinese mines. This leaves almost the whole demand centred upon the output of Cooksons, in Great Britain, and probably the output has failed to compete favorably with the demand, which has resulted in the advancement in the price.

Galvanized iron is used for so many purposes that the demand has increased to proportions which have never been reached before in the history of the trade. The demand for Canada plates and tin plates is increasing again, and some large orders have been booked. The output of tin is so limited that many local business men interested in the trade are beginning to believe that a few investors have gained control of the market. At any rate, the market price has advanced during the week, and there is still good prospects for another advance.

Ingot zinc has also advanced, while pig lead has become much firmer. Large orders have been absent from the market during the past few weeks. Small orders have been numerous, and a great number have been booked for pig iron. A large percentage of these

orders have been received from Ontario, while the rest are local.

Pig Iron—A large number of small orders have been booked recently. These orders have been received from foundries, and owing to the low price many foundry men are using pig iron where they otherwise would use scrap. Prices are steady, and no change is expected. Our quotations are:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	"	"
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—The market still shows a tendency to be easy. Although no decline has as yet occurred it would not be surprising if one took place shortly. Our quotations are as follows: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—The recent awakening in the trade has worked wonders, and the trade is making better progress now than it has done for some time. The demand at the present time is greater than it has been for some time, and the prospects regarding future trade are very bright. Our quotations are as follows: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—Only a fair trade exists on this market. Prices continue unchanged. Our quotations are as follows: Sleigh shoes, $1.97 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold-Rolled Shafting—The demand originating from the machine shops throughout the Dominion is something well nigh marvellous. Everything points to a good demand, and the prices, accordng to some reports, are expected to advance. We quote: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—Some large orders have been received from the manufacturers of galvanized and enamelled ware. The demand is increasing, and as far as can be learned is likely to continue so for some time. We qoute as follows: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—The sales of galvanized iron are much more greater this year than in any year previous, owing to the fact that it is being used for many purposes hitherto unknown to the mechanical world. Prices are very firm, and it would not be surprising if an advance in price took place any moment. Our quotations are as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra.

Black Sheets—Good prices are maintained in the majority of sales, and conditions in general are very active. Prices are firm. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—During the week the price of antimony has advanced from 1 3-4 to 2 cents per lb. Since the opening of the war nothing has been exported from either the Japanese or Chinese mines, and probably the demand has been too great for the output in England, resulting, as it has done, in an advance. Our quotations are: 13 1-2 to 14 cents.

Sheet Zinc—The market has become very firm, and although no change has as yet occurred, an advance may take place. We quote the following: Cask lots, $7; small lots, $7.25.

Tin Plates—A stronger demand has originated with the manufacturers of tinware, and conditions to-day are much more active than they have been for some time. Our quotations are as follows: Cokes, $3.75; charcoal, $4.

Ingot Tin—It is believed, owing to the limited output of this metal, that the market is well controlled by a few investors, which probably results from the recent advance of 1-2c. per lb. We quote: 33 1-2 to 34c. per lb.

Ingot Copper—The market still remains firm, in fact so firm that it is impossible to receive a concession when purchasing. Present indications point to the continuation of a strong market. Prices remain unchanged. Our quotations are: 16 to 16 1-4c.

Ingot Zinc—The market, which was easy last week, has firmed up again, and to such an extent that prices have advanced 1-4c. per lb. The market is strong and active, and prices are expected to remain firm and steady. We quote the following: 6 1-4 to 6 1-2c.

Pig Lead—Conditions have not broken in any way, in fact, if there is any change conditions are firmer. Some dealers are asking as high as $3.75 for a ton of lead, but the majority still cling to the old figure, namely, $3.50 to $3.60 per ton.

Boiler Tubes—The demand for boiler tubes continues to be of a good variety. Prices are firm, but no advance is anticipated. Our quotations are as follows: British and American tube, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—This market, unlike other metal markets, has become very quiet, and judging from the general decline in prices, trade has become dull. This dullness is more particularly noticeable in the case of scrap iron, which is hard to place owing to the large amount of pig iron that is being used where the scrap material was previously used. Machinery cast scrap, wrought scrap and stove plate scrap have each declined 1-2c. per lb. Old rubbers have become much firmer and have advanced 1-4c. per lb. We quote as follows: Heavy copper and wire, 12 3-4c.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, July 14, 1905.

THE market exhibits no very important changes this week. Business in all lines is very fair. Tin still continues on the advance, and the high price is causing a good deal of hesitation on the part of buyers in placing anything but small orders. For lead there is an active demand, and there is an upward tendency to the market. The demand for copper is good, but prices are running pretty close. Antimony is still on the advance, but no changes in prices are noted on the local market. The price of antimony is twice what it was at this time last year, caused, of course, by the increased demand from Russia and Japan.

Pig Iron—Prices remain firm and unchanged. The ordinary business is being done. We quote:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Sales are very fair, and prices are being maintained. Our quotations are as follows: $1.85 f.o.b. Toronto, with discount of 2 per cent.; for extras as cut to length, while rolling, 2 feet and over, 10c. per 100 lbs., 1 foot and under 2 feet, 15c.; under 1 foot, 20c.; over 20 feet, by special agreement according to length and size.

Tin—The advancing price is causing hesitancy in buying, except in small quantities. There has been no further advance this week on the local market. We quote: 34 to 35c. per lb.

Tin—An advance of 30c. per hundred is reported during the week. Buying is active and prices very firm. We quote: 34 to 35c. per lb.

Galvanized Sheets—Conditions are unchanged, the demand being heavy.

Tin Plates—Firmer prices are reported with the demand strong.

Canada Plates—Goods are being called

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
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Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

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Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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For all purposes requiring the best quality.
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Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc. etc

for in fair quantity. Prices are the same.

Brass—Trade continues active and prices firm. Discounts are 10 per cent.

Lead—There is a very active demand, and an upward tendency to the market. We quote: Pig lead, $3.80 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter — Conditions are unchanged. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—The demand is good, but prices are being run pretty close. We quote: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—There has been no further advance on the local market this week, but the existing price holds firm. The price of antimony is twice what it was at this time last year. Our quotation is 14c.

Old Material—There is a distinct improvement in the market generally this week, but prices remain unchanged. Dealers buying prices are: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Dealers are booking orders for Fall delivery, their stocks being fairly large. We quote: Anthracite in cars at bridges: Grate, $5.05 per gross ton; egg, stove and nut, $5.30 per gross ton; pea, $3.70 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, July 13, 1905.

THE monthly statistics of pig iron collected by the Iron Age show some interesting facts. Production of coke and anthracite pig fell off from the record of 1,964,000 tons in May, a month of 31 days, to 1,793,000 tons in June, a short month. The greater part was due to the restriction of the operations of the steel companies, whose product declined 136,000 tons, while the output of the merchant furnaces fell off only 35,000 tons.

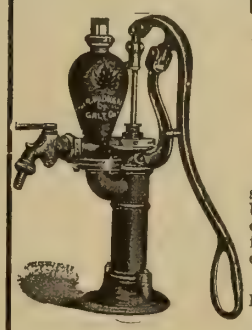
The active capacity has undergone a sharp decline, having receded from 443,092 tons on June 1 to 408,617 tons on July 1.

The statement of stock of the merchant furnaces, which refers to a monthly product ranging from 650,000 to 675,000 tons per month, shows a further accumulation of 70,000 tons in June,

Tinplates

"Dominion" B.B. Charcoal
"Alloway's" Best Charcoal.
"Trym" and "Lydbrook" Best Coke.
Standard brands, best value.

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NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

added to 63,500 tons in May and 17,400 tons in April. During the last quarter, therefore, the stocks in the hands of merchant furnaces have accumulated to the extent of 151,000 tons, against a reduction in stocks during the first quarter of 83,800 tons. As an offset there must be considered the undoubtedly considerable decline in the unknown stocks in the yards of consumers, of the foundries and of the mills.

The records of the past few months show that while the iron industry possesses a wonderful capacity for adjusting itself to changing conditions it was not possible to check the headway gained during the extraordinary demand which developed in anticipation of Spring. The industry is well in hand now, and consumption is proceeding at a wonderful rate, which the contemplation of the spurt in the Spring should not obscure.

There are many inquiries for foundry and forge pig iron in the market, but the amount of tonnage booked continues small. There are reports of moderate lots of low phosphorus pig iron, gray forge and foundry iron being placed, but the volume has not been large enough to take weak sellers out of the market, and southern iron has sold on the basis of $10.75 at Birmingham for No. 2, with reports of even lower prices.

The run of business to the structural mills is very heavy, the American Bridge Co. alone having taken 25,000 tons during the past week, the largest order being one of 6,500 tons for the new building of the United States Express Co. in this city.

The pressure for deliveries of structural material is so heavy that according to some reports orders have already been sent abroad. Premiums are being paid for prompt delivery and there is a disposition in some quarters to agitate for an advance in the base prices.

After a lull extending over some time car orders are again appearing in the market. Two western roads are calling for steel cars, which would require about 100,000 tons of material.

The eastern skelp trade is showing some signs of revival. In the west an order for 600 miles of pipe for an oil line from Kansas to the Gulf is looming up.

In the bar trade an interesting transaction is the sale of 2,000 tons of twisted bars, taken by a Pittsburg mill, for reinforced concrete.

Additional business is in sight for the steel rail mills, and in the wire trade the first indications of a revival of buying have been noted.

LONDON METAL MARKETS.

From Metal Market Report, July 12, 1905.

Pig Iron—Middlesboro No. 3 foundry is quoted at 45s. 4 1-2d, and Scotch warrants at 49s. 4d, making prices as compared with last week 1 1-2d lower for Middesboro and unchanged for Scotch warrants.

Spot Tin opened strong at £142 15s., futures at £141 5s., and after sales of 140 tons of spot and 240 tons of futures closed strong at £143 for spot and £141 10s. for futures, making price as compared with last week £2 12s. 6d higher on spot and £2 2s. 6d higher on futures.

Spot Copper opened quiet at £66 2s. 6d, futures £66 5s., and after sales of 25 tons of spot and 50 tons of futures closed quiet at £66 for spot and £66 5s. for futures, making price as compared with last week 2s. 6d higher on spot and 1s. 3d lower on futures.

The market closed at £13 11s. 3d, making price as compared with last week 2s. 6d higher.

The market closed at £24 2s. 6d, making price as compared with last week 5s. higher.

Nova Scotia Trade News

Halifax, N.S., July 10, 1905.

THE attention of the hardware trade is now centered on metals. The market is very firm and prices are advancing. Sheet zinc and ingot tin are attracting the most attention, as they were advanced in price during the week. Sheet zinc is now quoted at 7¼c. by the cask, and 7¾c. for smaller quantities. The advance is brought about by the manufacturers, who nave put up the price. Ingot tin is quoted at 35 to 36c., which is said to be the highest price here for a long period.

White lead has advanced 75c. per 100 pounds. This is due to the change in the tariff on raw material. These prices have been advanced by the manufacturers, but not locally.

Business continues up to expectations. Haying tools are selling freely, and collections continue fair. So far the advance looked for in nails has not taken place. Turpentine is firm at former quotations, also oils. Some good sales of bar iron are reported. Sheet lead is selling freely at $4.75 in rolls, and $5.75 for lesser quantities. Builders' materials continue in good demand, and prices are steady.

LAST MINUTE PAINT MARKETS

Office of
HARDWARE AND METAL
Toronto, July 15, 1905.

Turpentine has been reduced to 90c. for single barrels, and 89c. in four barrel lots.

Linseed oil has also dropped 1 cent from the standing quotations.

On Thursday of this week the annual meeting of the Maritime Hardware Association will be held at Digby, N.S., when it is expected that a general revision of the price list will be made. The retiring president is H. H. Sterns, of the firm of H. H. Fuller & Co., Halifax. It is expected that the new president will be a St. John man.

The Londonderry Iron & Mining Co.'s blast furnace, at Acadia Mines, is running in first-class order, and is turning out about one hundred and ten tons of No. 1 iron daily. Representative English capitalists have made a proposition to the City Council of Sydney to establish a shipbuilding plant and other works, involving an expenditure of twenty millions, if given a free site, exemption from taxation for 20 years, free water and running rights over the I.C.R. from Coxheath to the terminal pier.

For the past several days operations have been going on at the Sydney Cement Co.'s works with a view of adjusting the mechanical details. Some cement has been produced, and the experiments so far have been eminently satisfactory. A New York cement expert is expected shortly, when the final tests will be made, after which the works will proceed with the manufacture of the marketable material. It is expected that these tests will occupy a fortnight.

Great activity prevails around the colleries of the Nova Scotia Steel Co. at Sydney Mines. The general superintendent estimates the output for 1905 at one million tons. During every working day last month more coal was mined at Sydney Mines than in any single day last year. Two large new steaming boilers are being placed in No. 3 colliery and also a new Walker compressor, which will, when installed, more than double its present output.

The Cumberland Copper Co. will, it is expected, soon commence work on their property at Wentworth, N.S. The company, which is composed principally of American capitalists, owns ten square miles of property.

THE C.M.A. AT BIRMINGHAM.

(By Our Own Correspondent.)

Birmingham, 29th June, 1905.

THE visit of the Canadian Manufacturers' Association to Birmingham excited the keenest interest, and both our visitors and the large number of leading citizens that gathered to entertain them seemed to be most favorably impressed with one another. The visitors were formally welcomed by the Lord Mayor (Alderman Beale) in the Council House, but the great event of the day was the luncheon given by the Birmingham Chamber of Commerce at the Grand Hotel, in the course of which Mr. Chamberlain delivered a most inspiring forty minutes' speech upon Imperial interests and obligations. The right hon. member for the western division of the city was in his happiest mood. While pre-eminently a business address, urging, as few like Mr. Chamberlain can urge, the duty of Imperial commercial intercourse and mutual concessions for the general weal, it was interspersed with the happiest banter as to British parochialism, and the need for thinking imperially upon international questions affecting the commercial relations of Canada and England. "Let us buy of one another" was the phrase Mr. Chamberlain submitted as an appropriate motto for his hearers, and the great British commercial communities on either side the water. Mr. McNaught made an admirable response, and his aspiration that the day was not far distant when trade would be reciprocal as well as preferential between Great Britain and the colonies, was received with great applause.

* * *

Mr. W. Kerr George, as president of the Canadian Manufacturers' Association, made a most spirited reply in response to the Lord Mayor's words of welcome in the Council House, and almost created a furore by the statement that those in whose name he spoke would co-operate in trying to work out some plan which might strengthen and make permanent for all time the bonds of

sentiment that bound the widely-scattered portions of the Empire together, rather than build up and develop commercially antagonistic countries. That, he believed, was Mr. Chamberlain's policy, and if that was his aim, he thought he was safe in saying that he could offer to Mr. Chamberlain the practically unanimous support of the Canadian people.

* * *

When your countrymen return I think their visit to Birmingham will be found to be not the least pleasing of their recollections of their visit to the Motherland. Birmingham was certainly delighted with her Canadian guests.

* * *

The gradual absorption of the unemployed into the ranks of the workers shows that gradually, and it must be confessed only very gradually, is the trade of the district recovering itself. The memorable feature of this year's trading in the Midlands is certainly so far the expansion of the bicycle industry. The reduction of the standard price of good machines to eight pounds has been followed by an enormous demand, and it is anticipated that the balance sheets of the leading firms in Coventry, Birmingham, Redditch and Wolverhampton will prove most satisfactory reading for their very numerous and very patient shareholders.

To-day's iron market displays no new features.

PERSONAL MENTION.

Mr. Hadden, of the Hartney Hardware Co., Hartney, Man., was in Winnipeg last week.

Work on the new Wells hardware store at Fort Francis is progressing rapidly. A large warehouse is also being built.

Canadian Rubber Co., of Montreal, purpose running a picnic for the benefit of their employes on Saturday, July 15.

Mr. J. M. Taylor, of the Taylor-Forbes Co., Guelph, was in Toronto on Tuesday inspecting their new temporary offices.

Col. Pellatt, Toronto, has been elected a director of the Dominion Iron & Steel Co., in place of Mr. B. F. Pearson, of Halifax.

Craig Bros. & Co. have sold their hardware store at Franklin, Man., to R. B. Hamilton. Mr. W. N. Halpenny is manager.

The partnership existing between Joseph Ash and W. C. Mack, Sarnia, as painters and decorators, has recently been dissolved.

Mr. Henry Clucas, Toronto, representative of the Canada Paint Co., is making a holiday trip to Goderich and upper lake points.

S. T. Kempthorn, of Oliver & Kempthorn, Saskatoon, is making a holiday trip to the east, and will spend a month at Whitby, where he formerly resided.

The Francis Frost Co., paint manufacturers, are looking for a site at Toronto Junction, where they may locate their factory and erect a $10 000 building.

Mr. Samuel Schwanz, of Schwanz Bros., retail hardware dealers of Rocanville, N.W.T., was in Winnipeg this week on business with the wholesale trade.

Mr. M. R. Summerfelt, Mount Albert, and W. Kirkland, traveling representative of the Kennedy Hardware Co., took part in a successful fishing expedition last week.

The Crescent Bicycle Co. of Winnipeg, have purchased the entire stock of bicycle sundries and parts kept by the Marshall—Wells Hardware Co., who are giving up that line.

Mr. E. M. Smith, of the railroad department of the Canadian Fairbanks Co., Montreal, is spending this week in Cleveland and Detroit, transacting business in the interests of his firm.

Mr. J. Laporte, a traveler for the wholesale hardware firm of Sybold, Son & Co., Montreal, intends on July 17 to take unto himself another half. We wish Mr. Laporte much joy and happiness.

Mr. J. P. Sybold, of the wholesale hardware firm of Sybold, Son & Co., Montreal, is spending his vacation at Pronts Neck, in the State of Maine. Mr. Sybold reports having a very good time.

Mr. W. G. Jones, treasurer of the Pease Foundry Co., Limited, Toronto, visited Winnipeg last week, consulting with the management of the affiliated firm Pease-Waldon Co., Limited, of Winnipeg.

Mr. H. L. De Wolfe, formerly manager of the Vincent Valve Co., Boston, is now connected with the Canadian Fairbanks Co., Limited, as manager of their valve and steam specialty department, and will be located in Montreal.

Mr. J. A. Burns, of Munderloh & Co., of Montreal, is spending his vacation at Old Orchard Beach, and in Portland City, Maine. Mr. Burns, who has been absent from the city for about a week, is expected back in a few days.

Mr. F. J. Irwin, who for the past number of years has been closely connected with the office staff of the Massey-Harris Co., Limited, at Winnipeg, has resigned to accept a position with the Munro Wire Works Limited.

Charles Fergie, general manager of the International Coal Co., a well-known coal-mining engineer, has accepted the position of superintendent of mines for the Dominion Coal Co., succeeding Mr. Austin King, who recently resigned.

Last Saturday the employes of the London Bolt & Hinge Works, and their friends, to the number of about 150, held their annual picnic, the party going by 'buses to the beautiful summer residence of their employer, Mr. John White.

Mr. J. W. Richardson, of Caverhill, Learmont & Co., Montreal, is touring the eastern part of the Province of Quebec on a pleasure trip. Mr. Richardson, who has been on his vacation for some few days, is expected to return early next week.

Mr. Jas. M. Robertson, a director and manager of the Thos. Robertson & Co., wholesale plumbing supply house, of Montreal, is in Chicago this week on business. Mr. Robertson will return via Detroit and Toronto, remaining at each of these two points for a short time.

Mr. Paul R. Hanson, who has been with the Canadian Rubber Co., of Montreal, but a short time, was on July 1st appointed sales manager over their sales department in the branch office on St. James street, Montreal. Mr. Hanson was formerly with the J. C. McLaren Belting Co., and joined the first mentioned company but a short time ago.

Mr. P. D. McConnell, formerly of the Hobbs Hardware Co., of London, has engaged himself with Frothingham & Workman, Limited, of Montreal, as one of their western travelers. Mr. McConnell's territory reaches from Toronto westward and as far north as Georgian Bay.

Mr. A. E. Peters, president of the Record Foundry & Machinery Co., Limited, of Moncton, N.B., left on June 28 on an extended tour through the Southern and Western States, and will return by way of Vancouver, Calgary, Winnipeg and Toronto. Mr. Peters intends being absent about six weeks.

George Kast, a plumber and gasfitter, who had been working in Hamilton, suicided by taking carbolic acid at Niagara Falls on July 10. He asked his wife to get him a glass of water, and as she turned to get it, he said, "Goodbye, Jessie," and drank the acid from a bottle. He was about 25 years old.

British Columbia Trade News

Vancouver, July 15, 1905.

An increase of capital stock from $150,000 to $500,000 has been determined upon by the big hardware firm of McLennan, McFeely & Co., Limited. The announcement appears in the current issue of the Provincial Gazette. The large interests now represented in the trade of the firm has made this step necessary. In the north the company has always been a leader in the trade of the Yukon, and the senior member of the concern, Mr. R. P. McLennan, has spent most of his time for several years giving his personal attention to the Dawson business.

Quite recently the contract for supplying all hardware for the construction of the new Spence's Bridge, Nicola Lake branch of railway, has fallen to the company, and that, with the general increase of business, has decided the step announced. Some additional capital has been interested in the company, but otherwise there will be little change. On a fine block of property 175 x 125 feet, on the corner of Cordova street and Columbia avenue, which the company has held for some time, it is the intention to erect very large wholesale premises, at a cost totalling $125,000 or more. Trackage facilities on the C.P.R. and central location will make it an ideal site. It is 20 years since the business of McLennan, McFeely & Co. was established.

J. A. Flett, one of the old hardware merchants of Vancouver, has taken new premises in a block recently completed on Hastings street, not far from his former location, which he has occupied for years. In the new place Mr. Flett has fitted up the handsomest retail hardware store in the west. Seldom are shop fixtures and fittings quite as tasteful seen in a hardware store indeed. The arrangement of the new store is largely the idea of Mr. R. A. Ogilvie, manager for Mr. Flett, and the results reflect great credit on Mr. Ogilvie's originality and taste in matters of attractive display and decoration. To give all the floor space possible, the counters are arranged at the back, while extra wide counter ledges below the shelving on the sides gives room for showing goods. Attractive showcases are ranged along the side. The large stock so attractively displayed is very complete, and the selection is excellent. In builders' hard-

ware and metal work the firm is equipped especially, paying particular attention to that branch, and keeping a large staff of men employed on roof and building metal work.

It took two years to find or secure a block of stone large enough to top the mausoleum of a California millionaire, but the order has been filled at last from the Newcastle quarries, Vancouver Island. The piece of stone is 14¼ ft. x 8¾ x 2½ ft. and weighs 17½ tons. A fifty-ton crane has been set up to lift the stone, which is to be shipped at once. Thirty years ago the stone for the San Francisco mint was taken from these quarries, which have been idle nearly ever since. They have now been re-opened.

Record shipment of heavy machinery is claimed for the speed with which a big steam shovel for the Northern Mines Co., Limited, of Spruce Creek, Atlin, traveled from Toledo, Ohio, to the coast. On June 2 it was shipped from Toledo, where it had been made to order. On June 19 it was in the C.P.R. yards here, and on the same day it was shipped on the steamer Amur, which luckily was in port bound north.

The Atlin company which is going to use the shovel are anxious to get it in for the short Summer season's work, and no wonder, for advices received the day the big shovel went north stated that the pay-dirt, which was in the meantime being shovelled out by hand, was running $5 to the cubic yard. Naturally they could not wait.

The city has too many skilled artisans in various branches of the building trade, say the Trades and Labor Council. This body has sent a circular to the Toronto Trades and Labor Council. The action is asserted to be as an offset to advertisements alleged to have been put in eastern papers by certain Vancouver employers who wish to see wages reduced. The labor men say that many men are out of work, because of the influx of newcomers. At Labor Hall many of these new arrivals inquire for work, and all seem to have a wrong impression as to the demand for men.

The carpenters' and joiners' union has notified the builders that hereafter they will expect to be paid in cash instead of cheque, urging that many men have to go to saloons and bars to get their weekly pay-cheque cashed, and are thus placed in temptation or forced to spend money they do not wish to. The notice also stipulates that the payments must be made on or before Saturday noon each week. The carpenters observe a Saturday half-holiday here.

Building conditions are very active at present in the city, a large amount of new work going on, and quite a percentage of it being business blocks of substantial proportions. Material, especially lumber, is hard to get in sorted orders, owing to the activity of shipments to the Northwest, this, of course, being the heavy shipping season for lumber to that market.

The announcement has been made that the contract for the new Dominion building for Vancouver has been awarded to Messrs. Kelly Bros., contractors at Winnipeg, at a sum approximating $400,000. The building is to be located on a prominent corner close to the C.P.R. depot and overlooking the water front. Construction is expected to commence at once.

This week has been marked by several very important events in trade circles. The larger in point of public attention attracted is, of course, the visit of the members of the American Institute of Mining Engineers, who are touring the mining areas of the west, and visited Victoria and Vancouver en route to Dawson and the Klondike. They were entertained early in the week at Victoria, and yesterday spent a pleasant holiday in Vancouver, being received at luncheon by the Vancouver branch of the Provincial Mining Association, which organization also had in hand the entertainment at Victoria. The Provincial Government granted a sum of money to assist in the expenses of entertainment, and leading business men in both cities also joined in generously. For the expenses of the entertainment in Dawson and on the creeks of the Klondike district, the Dominion Government has made a special appropriation of $5,000.

Mr. Colin F. Jackson, president of the Vancouver branch of the Provincial Mining Association, presided at yesterday's function, and in extending the hearty welcome the association wished to give the visitors he pointed out the opportunities which existed in this province for safe, profitable and satisfactory investment in mining enterprises. He emphasized the advantages possessed by British Columbia in having such large quantities of all sorts of mineral wealth, and of the necessary auxiliary products that the conditions were very promising and would be permanent as well as increasing in importance. He felt sure that great direct benefit to mining in British Columbia would result from the visit of such an important body of mining men.

Mayor Buscombe proffered the freedom of the city to the visitors and expressed his gratification that it should fall to his lot to make the address of official welcome. He felt sure they had recognized the premier advantages of Vancouver commercially and industrially, and he, too, thought that the visit was an epoch-marking incident.

Mr. R. P. McLennan, former mayor of Dawson City, where he is still largely interested, on behalf of the northern capital presented the invitation to the members of the Institute to visit the world-famous gold camp of the Arctics. He had just returned from Dawson, where he had had the pleasure of presiding as chairman over the first meeting held a few weeks ago to consider the form of entertainment to be tendered the Institute when they should arrive. He told of the list of unique attractions on the programme it was proposed to present. One of these was a baseball match scheduled to commence at 12 p.m.

Dr. Raymond, for 25 years secretary of the Institute, replied to the various addresses in a speech which bristled with good things. Not only is the veteran a mining man, but a born orator. Referring humorously to the old-time movement for the union of Canada and the U. S. under one flag, he said that was now a dead issue, but he had a much better proposition—the union of the two countries under two flags. At 10 o'clock last night the touring engineers left Vancouver for Skagway on the first stage of their northern trip, by the C.P.R. steamer Princess May, the top-liner of the northern fleet, which has no rivals in the struggle for speed supremacy. Returning the party will reach Vancouver on the 23rd inst., and will leave for the east the same day.

The other important occurrence in trade circles was the arrival on Wednesday night from Australia of Mr. J. S. Larke, Canada's trade commissioner to the sister commonwealth. This is Mr. Larke's first return to his own country since his appointment ten years ago, and, as he himself expresses it, he is coming in great measure to get in touch with the wonderful progress the Dominion has made in the decade of his absence.

Naturally, striking first, Mr. Larke was astonished at the strides the terminal city has made in advancing to her destined position as a great emporium of trade and industry. By special request the Vancouver Board of Trade this morning held a meeting for the purpose of receiving Mr. Larke and hearing some valuable suggestions from him with regard to building up and extending trade with the Australian commonwealth. Many matters of interest and importance were touched on in the conference, and the merchants and others present derived great benefit from the practical suggestions of the commissioner.

There are many ways in which trade can be extended, but Mr. Larke in particular points out what has been accomplished, as indicating what can be done. He exampled the Massey-Harris Co., which controls 50 per cent. of the implement trade of Australia, and of the bicycle trade also. This company, however, first undertook the Australian trade in the year 1895, when they sent their first representative to the Antipodes. A systematic campaign has ever since been kept up.

One point Mr. Larke makes, that trade should not be solicited and orders received unless the manufacturers are prepared to maintain a supply after demand has been created, and perhaps a trial order or two has been received. The opposite course has a very bad effect on the whole proposition of promoting trade, for disappointment in one line begets aversion to making other experiments. Australia is an enormous consumer of manufactured goods, and imports almost altogether at present, especially in machinery and similar lines. Special care and effort on the part of manufacturers will be amply repaid in the business to be obtained. In lumber, especially, the market is open for greatly increased exportation from this province. Mr. Larke leaves for the east this afternoon.

The troubles of the miners of Nanaimo, in which the whole business interests of the coal city are involved, remain in an unsettled state yet, as the miners have turned down, by overwhelming majority, the company's proposal of compromise. It is said that the present difference between the men and the company does not amount to more than three or four cents per ton on the cost of mining the coal. The business situation in Nanaimo is very correctly described as critical. The past two weeks over 800 men have left the place, most of them coming to Vancouver and proceeding up-country to seek work on the new C.P.R. short line being built from Spence's Bridge to Nicola Lake.

The Mountain Mills, as the lumber concerns in the interior of the province are known, in contra-distinction to the Coast Mills, have formed a selling company to handle their output in the Northwest. This is to prevent price-cutting. Two similar concerns handle large part of the coast shingle output

and some lumber, now. It does not mean that there is any danger or likelihood of prices being raised, but that uniform prices are more likely to obtain.

* * *

Very large water propositions are being exploited in the Yukon, where many districts are suffering from want of water to get the dumps washed in the season, and thus produce their results. The Dominion Government has sent an engineer, W. Thibaudeau, to investigate sources of supply and report on methods of transmission. He will gather data from big hydraulic companies now working and will make exhaustive surveys.

The Acklen-McKenzie Co. has in hand a big flume or ditch which will bring water round Moosehide mountain, opposite Dawson, and will ultimately have 40 miles of ditches or flumes. The system will cross the mountain and bring water from Twelve-mile creek. Other concerns are also engaged in enterprises to bring the necessary water on to large areas of mining claims. It is the one important problem to-day in the north.

* * *

Disposal of sawmill refuse is a problem with many mills in the City of Vancouver. Ald. Heaps, head of E. H. Heaps & Co., says his company is building a burner which will cost $20,000. It will have an automatic sprinkling device which will assist in keeping down the dust and cinder portion of the nuisance inevitable with a refuse burner.

* * *

General Manager Buntzen, of the Vancouver Power Co., has addressed the City Council and Board of Trade, asking co-operation in attracting industries to this city and vicinity now that 30,500 h.p. of electric energy generated by water power is available at low rates. The matter is to be systematically advertised.

* * *

Commercial men are greatly interested in the proposition of the Vancouver Board of Trade to remove the tax imposed by the Provincial Government of $50 on all travelers whose houses do not carry stock in the province, provided the Dominion Government will, in return, impose a duty on lumber imported into Canada. The resolution, adopted at a meeting this week, is to be sent to other boards of trade for endorsement. The point was brought up in connection with the telegraphic report from Ottawa that the Dominion Government was likely to ask the Provincial Government to voluntarily withdraw the obnoxious tax.

* * *

Northern freight is moving rapidly now, as a result of the coming into effect of the special commodity rates on goods shipped north to Dawson, Atlin, and other points, in the six weeks between July 1 and Aug. 15. This plan of giving a special rate, which is a ten per cent. cut from regular freight tariff to Dawson, on the White Pass Railway and river steamers, is working so well that the northern railway has made it an institution. It has the effect of getting much better service for all concerned, and shippers get their goods forward surer, as they have to make the stipulation in buying that they be given the chance to secure the special freight rate, which in itself is an item of considerable importance. Ten per cent. off the big rates applying in the north means a large sum total.

"Eastlake" Metallic Shingles will surely interest your neighbor who has just had the wood shingles on his roof ripped off by lightning.

No wise man would ever want to use wood shingles again when the lightning, fire, rust, and storm-resisting qualities of "Eastlake" Metallic Shingles are once made evident to him.

All around you new buildings are going up and old ones being repaired. Why let other dealers supply the shingles, etc., when the trade, at a good profit, is yours if you will go after it and show people who have given the matter little thought the advantage of "Metallic" building materials over wood?

OUR NEW $10,000 CATALOGUE

We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada
303

We also manufacture:
"Metallic" Ceiling and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (Stone, Brick, Etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, July 14, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

HARDWARE AND METAL is authorized by the management of the Vulcan Iron Works, Limited, to deny the newspaper rumor that they intend starting a branch in Calgary. Manager Barrett spent a few days in that western city not long ago, and his presence there occasioned the rumor referred to.

* * *

Vice-president C. N. Rudel, from the Montreal headquarters of the Canadian Fairbanks Co., was in Winnipeg early in the week consulting with the management of the Winnipeg business.

* * *

Everything points to a highly successful convention of the Retail Hardware Association, to be held in Winnipeg July 26 and 27. As the convention is held during the exhibition week, hardwaremen attending the meetings will have the advantages of cheap railway rates.

* * *

Values throughout are steady this week, and business in all lines of general hardware is very brisk. Warm weather has given an added impetus to building operations in city and country, and building supplies are moving in very large quantities. Owing to the duty on white lead announced in the budget speech last week there has been a local advance.

* * *

Screen Wire Cloth—Price, as before, is $1.55 per 100 square feet.

Poultry Netting — The demand is slackening now, but sales this season have been larger than ever before. We quote:

24-inch roll, perroll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Wire—Prices continue as follows:

Barbed wire, 100 lb.		$2 85
Plain galvanized	6 to 8	3 39
"	9 2 50	2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
"	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Trade is very quiet, as is usual in midsummer. Quotations continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40, 10 and 7 1-2 per cent., "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Moving in very large quantities. Base price: $2.85 per keg.

Cut Nails—Base price $3 per keg. Very few selling.

WALL COVERINGS

We always have a large and well assorted stock of

BURLAPS

on hand, and are agents for the celebrated

FAB-RI-KO-NA

Dyed Tapestry Burlaps.

Write for samples and prices.

Orders filled same day as received.

G. F. STEPHENS & CO., Limited

PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Screws—In very brisk demand. Discounts continue as follows:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—In brisk demand at unchanged discounts. We quote as before:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 5-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Selling in very large quantities. Prices are nominally as follows:

Anchor, plain	55c.
" tarred	70c
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—Orders are coming in now for Fall delivery of arms and ammunition. Prices and discounts are still quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—Price is 20 cents per lb. for small quantities.

Iron and Steel—There is no special activity in the local iron and steel market. Quotations continue as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—The market is reported very active at following prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Prices are still quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Sidings—There is an active demand from all parts of the west for corrugated roofing and sidings. Prices are quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17½ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins. 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto. 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—Owing to the tariff changes announced last week there has been a pronounced stiffening of the white lead market. An advance to $6 has been announced, but is not yet general. Turpentine and oil are steady. We quote:

White lead (pure)	$6 00
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure, in barrels	$ 1 00
Less than barrel lots	1 05
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
96 to 100 "	

LOOK THROUGH OTHERS' EYES.

Did you ever think of standing on the other side of the street and viewing your place of business from the standpoint of a customer? These days are the time to get outside your store and yourself and take a critical look at both. Suppose you came to town from the country would the appearance of the store fronts appeal to you? Don't you think the store with the clean, newly-painted front would catch your eye first? Of course it would, and after you got inside, if everything looked clean and worthy, you'd probably decide to make the store your trading place.

Foundations are now being laid for a new building for the Northern Electric Co., at Winnipeg. The property, covering an area of 550 feet by 50 feet, has been secured by the company for a two-storey building. A factory, machine shop, stores department and offices will be included in the new structure, which will be erected this Summer, it is expected.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

WIRED GLASS

The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

ASK FOR VEST POCKET MAP O MANITOBA

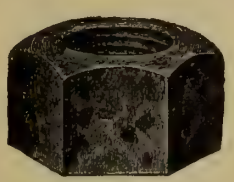
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



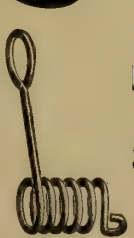
THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

SPRINGS



AND



SPECIALTIES IN TEMPERED STEEL



SEND SAMPLES OR SPECIFICATIONS FOR PRICES.

THE WALLACE-BARNES CO., BRISTOL, CONN.

SUCCESSFUL HARDWARE STORES

WESTERN CANADA'S hardware stores are well up to the standard set by the progressive stores in the east and, indeed, according to the reports of observing commercial men, and, judging by the two stores illustrated in the three photos reproduced herewith, the west is not content with merely following, but, with true border spirit, is aiming to lead the rest of Canada in artistically and serviceably arranged hardware store interiors.

Wells & Emmerson's store at Port Arthur has been occupied since 1901, although the firm were established about 20 years ago when Port Arthur was still in its swaddling clothes. The strong faith in the west shown by the members of the firm has been justified,



S. A. Clark's Hardware Store, Saskatoon.

the development of the twin towns having been remarkable and the future looking exceptionally bright just now.

Their business has kept pace with the development of the town, and it is only a couple of months since that Hardware and Metal noted the branching out of the firm into a plumbing supply business in addition to their already large wholesale and retail trade in hardware, stoves and tinware, as well as plumbing contracting. The Emmerson Block is centrally located and constructed of sandstone and pressed brick, being thoroughly modern in all its appointments. It is heated by hot water and an Erickson hot-air pump supplies water to the lavatories, the floors and walls of which are tiled, as are also the hallways and main entrance.

Port Arthur's Handsome Store.

It is of the interior, however, that we desire to write, the illustrations showing the two sides of the store, which is 34x87 in size. The ceiling, as will be seen, is of metal, painted white and blending into a blue tint, fancy electric lights providing illumination. On the left side is shown a magnificent display of stoves and tinware, the ranges, stoves, heaters, gas stoves, etc., being tastily arranged and being mounted on trucks allowing their easy moving in order to show to customers. The shelves allow the carrying of an immense stock of tin and enamel-ware and show the various lines off to good advantage. In the foreground, hockey sticks and curling stones remind one of Winter, while in the rear, brooms, whips, brushes, pulleys, tools and scales are conveniently arranged. Handsome business offices will also be seen in the rear of the store.

The right side is devoted to general hardware, and it would be hard to find a better arrangement of shelving, counters and general display than illustrated here. The shelving is known as the Warren Patent Glass Front Cabinet Sectional Shelving, being purchased from the manufacturers in Chicago. The shelving is interchangeable and so arranged that any part can be taken out and fitted into another part of the store. Wells & Emmerson were the first hardware firm in Canada to introduce this shelving.

A prominent position is given to cutlery and silverware, the carving sets and flatware being well displayed along with a line of revolvers in the glass showcase, while on top and in the glass shelving behind, safety razors, fancy lead pencils, hollow silverware, lamps, gas and electric fixtures and fancy globes aid in giving the customer a good impression upon his entry into the store. The neat display of samples of shelf hardware on the boxes and the orderly display of boxed goods, saws and rifles also provide a background which does not deteriorate from the first impression. The prominence given to door knobs and builders' hardware indicates the attention given to the building development of the growing towns, while the display of small tools, paints and oils, axe handles, etc., in the rear, and the method of showing samples of rope, carries out the general up-to-date appearance of the store and does credit to Mr. J. T. Emmerson, the partner who has control of the store, Mr. Wells, the senior member of the firm, residing in Winnipeg.

Pioneer Store at Saskatoon.

Mr. S. A. Clark's hardware store at Saskatoon, shown in the accompanying illustration, also does credit to the proprietor, the general appearance being very orderly and tasty, and the ceiling, ornamented by metal roofing, being kept clear of unnecessary goods. In addition to the ordinary lines carried in stock, Mr. Clark shows his progressiveness by carrying silverware and cream separators and giving these lines prominent positions where they will be seen by all visitors to the store. Equally important also is the line of washers, etc., shown in the centre of the floor.

The arrangement of the counters and display of shelf hardware on the right and of stoves and tinware on the left is very creditable, while the plan of bringing the rope up from the cellar through auger holes in the floor, and the method of showing the lamps, paints, tools, etc., in the rear, carries out the general effect of orderlyness. That Mr. Clark also employs system in his bookkeeping can be taken for granted when it is seen that he has set aside and partitioned off an office which has a commanding view of the store interior.

Some Straight Store Suggestions.

Seek to lead, not to follow. Don't let your excuse for having something antiquated be that "Jones has it." Formulate ideas that others will envy. Don't copy those of a moss-back. He may be a man of letters, but his methods are those of the past.

Read the advertisements of others. Notice what your neighbor says of his goods, and how he says it. Then model your own ads. a little differently and make them distinctive of you and your store. If they're not a success, solicit the aid of some one and lend your ears

to the experience of your fellow-man, raze old fogy traditions, eschew ancient methods whose death-knell has long since been tolled, and wake up to the times.

Read your trade journals. Question the drummer before he departs. He's just the one to give you some happy suggestion or bit of timely news. Ask him what merchants are doing in other towns. Build on the ideas of others. Pay your respects to your contemporary on the corner below. Don't just borrow his goods.

Leave the store for an hour to-day and take a turn about town. Go through the shops, peer into the windows, see what is going on around you, and keep conversant with the progress of the times.

Have system in all things. From the store room over-head to the cellar under-foot. A place for everything and everything in its place. Put style and life into your window displays. Make radical changes in their get-up. Don't be loth to part with the old schemes when they become old and time-worn. Give your fixtures a periodical coat of varnish. Sweep the cobwebs from the lofty corners. Down with the spiders, and out with the flies. Make your store look cheerful. Keep up with the times.

The counter may hide your shoes, but it doesn't screen your linen. So if you rob Peter, pay Paul; keep a polish on your linen and a smile upon your face. Don't let petty trials be pictured there. Keep all the common wants, and never be "just out" of any of them.

Don't cover your floor space with boxes of merchandise and various impediments to comfort. That's not indicative of an up-to-date store. Let there be an open passage. Give your patrons freedom of movement and yourself a chance to clean the floor daily.

Be liberal with your clerk. When he forwards a suggestion listen. Don't taboo it as unworthy a trial. It may seem a little mythical, but let him see you appreciate his care. Encourage him to take an interest in the store. If he wants to try an experiment, help him. Assist him to build a mite to the advancement of the times.

Wire cloth and fly killers are selling fast. Are you getting your share of the business?



Stoves and Tinware Department Wells & Emmerson's Store, Port Arthur.



Hardware Department Wells & Emmerson's Store, Port Arthur.

BUSINESS CHANGES.

Ontario.

Thorpe & Whitehead, contractors, Petrolea, have dissolved partnership.

Arthur Snazel, painter, etc., Goderich, has assigned to Geo. A. J. Fraser.

The Dennis Wire & Iron Works Co., Limited, London, have obtained charter.

Sand-Lime Pressed Brick Co., Limited, Toronto Junction, have obtained charter.

Quebec.

John Quinlan and Hermenegilde Dufort have registered under the style of the Canadian Stone Co., contractors, Montreal.

Richard Parkes has registered under the style of the E. K. Watson Co., wholesale hardware and commission merchants, Montreal.

Jos. Chabot and Francois Tousignant have registered under the style of F. Tousignant & Co., blacksmiths and carriagemakers, St. Hyacinthe.

Manitoba and N.W.T.

M. T. Greenway, blacksmith, Yellow Grass, has sold out.

J. A. Mitchell, hardware dealer, Weyburn, has sold to Thompson & Axworthy.

The Western Mfg. Co., Limited, planing mill, Indian Head, have removed to Regina.

British Columbia.

R. B. Seabrook Machinery & Supply Co., Victoria, are giving up business.

New Brunswick.

J. W. Addison, hardware merchant, St. John, is offering business for sale.

CONDENSED OR "WANT" ADVERTISEMENTS.

YEARLY CONTRACT RATES.

100 words each insertion,	1 year		$30 00
" " "	6 months		17 00
" " "	3 months		10 00
50 " "	1 year		17 00
" " "	6 months		10 00
25 " "	1 year		10 00

WANTED.

WANTED—First-class tinsmith at once; state salary and experience. J. J. Cain, Box 5, Alliston, Ont. (28)

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

BUSINESS FOR SALE.

HARDWARE and tinsmithing business on Main Line C.P.R. in Manitoba. Stock and fixtures $9,000. Solid stone store $3,500. Terms: Half cash, balance on easy payments. Purchaser can lease store if preferred. This is an old and well established business, paying handsome profits. Good reason for selling. For full particulars apply P.O. Box 32, Oak Lake, Man. (29)

TRAVELER WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

PITCH FOR SALE.

ONE carload hard carbon pitch now in our warehouse. Canadian General Electric Co., Limited, Peterboro'. (28)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for additions, &c., Post Office, Calgary," will be received at this office until Monday, August 7, 1905, inclusively, for additions and alterations to the Post Office, Customs, &c., building at Calgary, N.W.T., according to plans and specifications to be seen at the Department of Public Works, Ottawa, Ont., and at the office of Paul Paradis, Esq., Resident Engineer, Calgary, Alta.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent (10 p.c.,) of the amount of the tender, must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, July 5, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (29)

REGINA HEATING CONTRACT.

The Regina School Board have accepted the heating and ventilating specifications submitted by the Pease-Waldon Co., of Winnipeg, for the Victoria School, which will be a 12-room building similar to the Alexandra School in Winnipeg. The Smith & Ferguson Hardware Co. will instal the system, the specifications calling for two Pease Economy steam heaters and ventilators, two ranges of flushing closets and one range of glass urinals.

Potato bugs are getting busy. Are you pushing Paris green?

It won't pay to carry over any screen doors or windows. Now is the time to dispose of them. Merchants having a large stock on hand should ginger up.

Hammock time is here. Jobbers report a large call for the medium-priced goods and a fair demand for the fancy lines. Cheap ones are slow sellers in most places. They don't last.

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Vitrified Clay Conduit for Postal Pneumatic Tube System of Canada," will be received at this Department until Thursday, July 20, 1905, inclusively, for furnishing 22,000 lineal feet of vitrified clay 4 duct multiple conduit, as per specifications of John Galt, Chief Engineer.

Specifications can be seen and forms of tender obtained at this Department, and at the office of the Chief Engineer, Toronto.

Tenders will not be considered unles made on the printed form supplied and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, for five hundred dollars ($500,00), must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By Order,

FRED GELINAS,
Secretary,

Dept. of Public Works,
Ottawa, July, 8, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it. (28)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for Armoury at Guelph, Ont.," will be received at this office until Monday, July, 17, 1905, inclusively, for the construction of an Armoury at Guelph, Ont.

Plans and specification can be seen and forms of tender obtained at this Department or on application to the caretaker of Public Building, Guelph, Ont.

Persons tendering are notified that tenders will not be considered unless made on the printed form supplied, and signed with their actual signatures.

Each tender must be accompanied by an accepted cheque on a chartered bank, made payable to the order of the Honourable the Minister of Public Works, equal to ten per cent (10 p. c) of the amount of the tender, which will be forfeited if the party tendering decline to enter into a contract when called upon to do so, or if he fail to complete the work contracted for. If the tender be not accepted the cheque will be returned.

The Department does not bind itself to accept the lowest or any tender.

By Order,

FRED. GELINAS,
Secretary.

Department of Public Works.

Ottawa, June 24, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (28)



STEEL FEED TROUGHS?

If not we can make you an interesting proposition as our NEW TROUGH CATALOGUE and other literature are now ready to assist him trade. We supply you liberally with them and give exclusive agency. Let us hear from you.

STEEL TROUGH & MACHINE Co., Limited
TWEED, Ontario



COVERT MFG. CO.
Troy, N.Y.

Auto Screw Jack

Harness Snaps, Chain, Rope and Web Goods, etc.

FOR SALE BY JOBBERS AT MFRS. PRICE

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
elling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3893

SIGNS AND SHOW CARDS

Have you ever realized the advertising value in your Show Windows, and that you could talk to the thousands of people passing your Store with bright, attractive Show Cards? We can supply Show Cards and Price Tickets at low prices. Write for our Catalogue, which shows you as well hundreds of other styles of Signs.

The Martel-Stewart Co., Ltd.
681, 683, 685 Craig Street - Montreal, Canada

THE M.B. PUDDING STEAMER

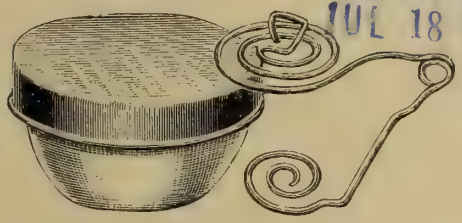
RETURNED JUL 18 1905

(MACFARLANE'S PATENT No. 20339)

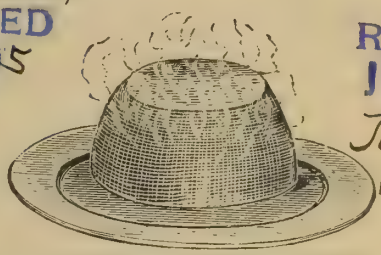
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WITH COVER COMPLETE



REMOVING COVER



A PERFECTLY COOKED PUDDING

THE ONLY RATIONAL METHOD OF COOKING A PUDDING

Simplicity, Durability, Utility. ***No Burning, No Disappointment.***

Excellent for Fish and Meats ***Produces Perfect Puddings.***

The **M.B.** Steamer consists of an enamelled bowl with retinned cover held by patent wire clasp. As its name implies it is a "Steamer," not a "Boiler." When it is used the Steamer should be put in a saucepan with a close-fitting cover. Do not cover the steamer with the water, all it wants is a little in the bottom of the saucepan to generate steam. The Bowl is made of Best Quality Enamelled Steel and is practically indestructible.

SIZE OF BOWL—No. 1, 5½; No. 2, 6½; No. 3, 7½; No. 4, 8 in. Diameter

EACH SIZE PACKED IN CARDBOARD BOX. Dainty Book of 22 Original and Economical Recipes Enclosed with Each Steamer

——TO BE OBTAINED FROM——

F. W. LAMPLOUGH & CO., 9 De Bresoles St., MONTREAL



Stove Excellence

We believe the

Empire Queen Range

stands for more stove excellence than any other stove on the market at the price. The flues of this range are constructed on the most modern principles, the heat being spread uniformly on all sides of the oven, making perfect baking possible. The Fire Box is perfectly proportioned to the size of the oven and fitted with separate grates for wood and coal, which can be changed with little effort. The Ash Pan has effective chutes to prevent ashes from falling other than into the pan. The

Empire Queen Range

is endorsed everywhere. The symmetry of the various parts, the smooth castings and elegant trimmings, and the fact that the Range is easy to keep clean, are features which would make any buyer endorse it. Send for illustrated booklet ***to-day.***

The **Canadian Heating and Ventilating Co.** Limited

OWEN SOUND, - Ontario

PAINT, OIL AND BRUSH TRADES

PAINTS IN THE HARDWARE STORE*

By J. H. Sayward, Haverhill, Mass.

PAINT is one of the composite parts of the hardware business instead of, what a great many people have thought and still think, merely a side line. We necessarily go after the house owner for his finishings in the line of hardware throughout, and in doing this we necessarily have a splendid opportunity to sell, or at least try to, the paint. I presume that you do not expect me to spend very much time on the topic of paint and its divers divisions, but more particularly on the most important division, prepared paint for inside and outside painting.

Confidence in the Goods.

Confidence is a very essential requisite in making a thorough success of the paint business as well as anything else; that is, confidence in the manufacturer from whom you purchase and in his ability to make good goods, and confidence in your own ability to instill into your customer your own thorough belief in the advantageous qualities of prepared paint over the much-mooted lead and oil.

I appreciate the fact that many of you here sell paint and my entire line of talk will be along the supposition that lead and oil is the competition with which we meet. Ability to thoroughly instill into your clerks your confidence in the product you purchase is a very important factor and, furthermore, they should be thoroughly competent to instill that same degree of confidence into the prospective customer. I fully realize that this is a pretty stiff problem for us all, yet we are very dependent on our clerks, and, as a matter of fact, from my own point of view, their thorough familiarity with the product is of even greater importance than my own.

Practical Experience.

I do not know of any better way of demonstrating to you the advisability of paying attention to the paint end of the business than by giving you a brief outline of my own experience. As you all know, I have been in business for a great many years, and up to 1898, although I had handled paint for a number of years previous to that time, my paint purchases, aside from lead and oil, were very small.

In 1898 my lead sales were probably from 12 to 14 tons per year. In 1904 I possibly sold 4 tons. From a profit point of view, without my entering into it, you will note that the returns from lead sales were extremely small and, in fact, it has been contended, and rightfully so, for a good many years that you practically roll 15 per cent. out of your store with each keg of lead, and oil and turpentine would appear in the same category.

The Follow-up System.

In 1898 I had an opportunity to take the agency of a reputable paint manufacturer, a concern who not only manufactured first-class goods, but also firmly believed in effective advertising and system in following up. I first visited the factory and spent some time in satisfying myself that the paint was what they claimed it to be. Instead of using my own methods I adopted theirs to a very great extent, and with the advertising which I have always done have reaped the reward not only in increased sales but in increased profits as well. From this concern I purchased in 1898 $496 worth of goods, increasing my purchases year by year, until in 1904 I bought 842 per cent. more paint than in 1898, while there had been a decrease of 71 per cent. in my lead purchases.

Figuring my gross profit on lead in 1898 at 16 per cent., I made $230, whereas, figuring 33 1-3 per cent. on paint, my net returns were $1,560 in 1904. Therefore, you will readily see that attention to this important branch of our business pays.

Advantages of Prepared Paint.

I have always made it a point to use a pencil to a very great extent in demonstrating to the prospective customer why he should use prepared paint instead of lead and oil, pointing out very clearly the fact that he should acknowin using prepared paint, in case of any difficulty he has simply the dealer and the manufacturer to look to. In case of difficulty we find the reputable manufacturer ready to listen to his troubles through the dealer, whereas with lead and oil there is practically no redress and never has been.

Paint Mixed by Painters.

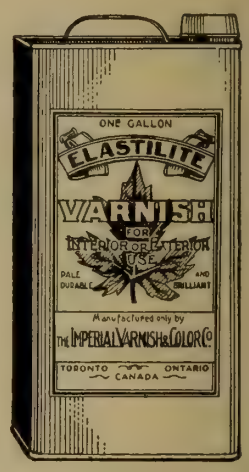
I have also pointed out the fact that the painter is obliged to go to the manufacturer and buy the several ingredients contained in the paint, and such being the case, why is it not feasible that the manufacturer of the several ingredients should be in a better position than the painter to incorporate these ingredients by machinery? A paint mixed by the painter from lead and oil is more expensive than a good paint purchased from the dealer, for the reason that although it costs more per gallon it costs less per quantity. In other words, it will take one-third less prepared paint to paint a house than a paint made from lead and oil; consequently you have appealed to the man's pocket, and your reputation as a mer-

(*Continued on page 82*)

* Paper read at the Convention of the New England Hardware Dealers' Association, Boston, Mass., March 15-16, 1905.

STOP BAD HABITS,

buying varnish without a reputation. Stock Elastilite Varnish, with the highest reputation, established on quality, that has always pleased the people. Equally good for inside or outside.



The Imperial Varnish & Color Company, Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.

TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

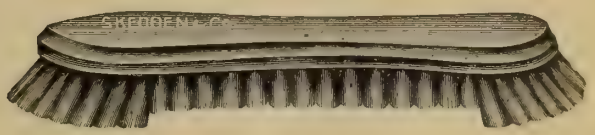
MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.



GET THEM

No dealer who prides himself on his stock should be without

Skedden Brushes

They are in demand because they are made in the ***SKEDDEN*** way.
Brushes made to order. Send for catalogue.

The Skedden Brush Co., Limited, Hamilton, Ont.

Toronto Office—57 Queen Street East.
Phone Main 3431. F. W. KNIGHT, Agent.

The....

Real Test

OF A LIQUID PAINT IS

How it Wears

Those who have used

"ANCHOR"
and
"ENGLISH"

LIQUID PAINTS

during the last

30 YEARS

tell us they have given perfect satisfaction.

If you handle these goods your customers will stay with you.

They are the only liquid paints in which the White Lead used is

Brandram's B.B. Genuine

BRANDRAM BROS. & CO. BRANDRAM'S B.B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 14, 1905

DRY weather has been an indirect cause for the increase in the sales of Paris green, and athough wholesale dealers were somewhat dubious a few days ago respecting the outlook, conditions have now changed, and this market has assumed a bright aspect. Stocks on hand are not excessive in any one house, but it is expected that the amount on hand will outlast the demand. Prices on account of these conditions may advance at any moment.

The sharp advance in the price of white lead, caused by change in the duty, has come as a surprise to the trade. A change of some sort has been expected for some time, but it was never entertained by the most pessimistic that the change would be so great. Orders have been somewhat less frequent in arriving, and it is supposed that retail merchants are holding off, waiting for a steadier condition on the market.

Turpentine still continues to fluctuate daily, and numerous reports are afloat regarding the cause. If prices do not decline before the end of the month it is highly probable they will remain firm during the rest of the season. Linseed oil, although fluctuating also, is showing a decided tendency to become firmer, and a slight advance is anticipated. The decline in price of both turpentine and linseed oil is only temporary, caused by recent fluctuations, and another advance is anticipated. Castor oil has been steadily advancing on the foreign market, and two distinct increases have occurred. No change has as yet taken place on this market, but one is expected any time. A general quietness, which is always prevalent in the months of July and August of each year, is now existing.

Canadian Paris Green — Barrels, 15 1-4c.; arsenic kegs, 15c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound packages, 17c.; half-pound packages, 19c.; one pound tins, 18c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Pure English Paris green, petroleum barrels, 15 1-4c.; arsenic kegs, 15 1-2c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound paper boxes, 17c., one pound tins, 18c.; one-half pound paper boxes, 19c.; one-half pound tins, 20c. Terms, 2 per cent. off thirty days, or ninety days net from date of shipment.

Turpentine—Single barrels 90c. per gallon; two to four barrels, 89c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels, 51c.; five to nine barrels, 50c.; boiled, one to four barrels, 54c.; five to nine barrels, 53c. f.o.b. Montreal. Net 30 days.

Ground White Lead — Best brands Government standards, $5.50 to $5.70; No. 1, $5.25 to $5.45; No. 2, $5 to $5.20; No. 3, $4.75 1-2 to $4.95; No. 4, $4.50 to $4.70, all f.o.b. Montreal.

Dry White Zinc—Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure. 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil—8 3-4c. to 9 1-4c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—No change has occurred on this market. Prices are steady. Our quotations are: American prime white 14 1-2c., American water white 16c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East.
Toronto, July 14, 1905.

WHITE lead has advanced 75 cents per hundred pounds, as announced last week, this advance being made by most dealers, some even quoting $1 of a rise. While some jobbers are understood to have good stocks, bought at low prices, none are known to be selling under the new quotations. Red lead and dry white lead have advanced in the same ratio to white lead, but no changes in the prices of paints are looked for at present, the matter being now in the hands of the tariff commission and the manufacturers having a fair quantity of goods in process of mixing.

Paris Green is being sold in enormous quantities, some of the wholesalers having been cleaned out more than once and having to secure additional stocks from the mills. Paints are also in surprising demand, increased business coming in place of the expected falling off in July. The call for glass is reducing stocks, while imports are small. The heaviest

We Solicit your Attention to BRANT-LAC

AND SOME OTHER EXCELLENT LINES OF VARNISHES, OILS, CEMENTS, ETC.

1. ***Brant-Lac.*** (A varnish and a stain in one coat.) Can be had in all sized packages and in the following colors: Light Mahogany, Dark Mahogany, Light Oak, Rosewood, Weathered Oak, Walnut, Cherry, Ground Color. One coat of Brant-Lac will make old furniture look as good as new. It can be used for wood work, floors, etc., to the same advantage.

2. ***Refined Hard Oil Finish.***

3. ***Flat Finish.*** This produces a rubbed hard oil finish with one coat.

4. ***Liquid Wood Fillers, Oil Shellac, Spirit Shellac.***

5. ***Furnace Cement and Stove Putty.*** In Barrels and Cans.

6. ***Linseed Oil, Turpentine, Miscellaneous Varnishes.*** For all known uses.



WRITE FOR PRICES

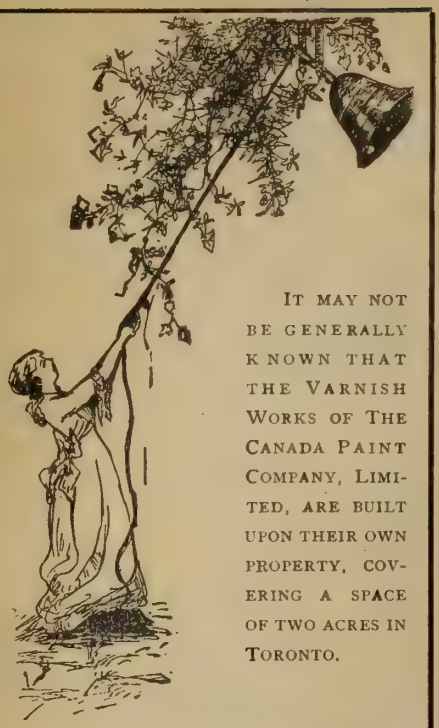
SCARFE & CO.

Manufacturers of Fine Varnishes, etc., etc.

BRANTFORD, - - CANADA

THOMAS BLACK

76 to 82 Lombard Street, - . WINNIPEG, Man.



IT MAY NOT BE GENERALLY KNOWN THAT THE VARNISH WORKS OF THE CANADA PAINT COMPANY, LIMITED, ARE BUILT UPON THEIR OWN PROPERTY, COVERING A SPACE OF TWO ACRES IN TORONTO.

"AS CLEAR AS A BELL"

The Varnishes made by the CANADA PAINT COMPANY are "AS CLEAR AS A BELL," and free from sediment.

They are fully matured and tested before being "put up" for shipment, and their uniformity may be relied upon for all classes of work.

THE CANADA PAINT COMPANY Limited

Varnish Makers

MONTREAL
TORONTO
WINNIPEG

demand is looked for in the Fall, when a larger supply will probably be available.

Turpentine and linseed oil continue unchanged, the market being bare of stock. A drop of 5 cents is looked for in turpentine any day, the advance to last week's figures, after the fluctuations of the past week, not being expected to hold strong.

White Lead—Ex Toronto, pure white $5.50 to $5.75; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.37 1-2; No. 4, $4.10 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $4.25.

Red Lead—Genuine in casks of 560 lbs., $5.25; ditto, in kegs of 100 lbs., $5.50; No. 1, in casks of 500 lbs., $4.75 to $5; ditto in kegs of 100 lbs., $5.25.

White Zinc—Genuine French V. M., in casks, $6.50 to $7; Lehigh, in casks, $6 to $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 56 to 57c.; boiled, 59 to 60c.; 5 to 9 barrels, raw, 55 to 56c.; boiled, 57 to 58c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrels, 95c. to $1; 2 to 4 barrels, open; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c. extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—A normal business is being done. We quote: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Crude Petroleum—Conditions are unchanged. We quote: Pennsylvania, $1.29; Ohio, 84c.; Somerset, 81c.; Indiana. 88c.; Canadian, $1.27.

Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

The unusual activity in building circles has not allowed the demand for window glass to abate during the months of July and August, as in former years, and the demand is still as strong as that of a few weeks ago. Arrivals of new glass are not as frequent as was expected a few days ago by some of the leading wholesale dealers. During the warm months in Belgium the glass workers generally quit operations until the cooler weather. Local dealers fear that this is the case, and that the more prominent markets have purchased up all the available stocks, leaving very little for this market. General conditions are beginning to assume a more serious color, and it is now a question of whether there will be enough stock on the Canadian market to supply the heavy demand which is bound to arise before the close of building operations this Fall. We quote: First break, 50 feet, $2.00; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

PRODUCTION OF STEEL IN JAPAN.

THE increasing production of steel in Japan is due to the Imperial Steel Works at Wakamatsu. These works are turning out rails, bars, plates and angles in quantities, and machinery is being ordered for the production of telegraph wire, rivets, bolts, nuts, etc. At present the whole of the production goes to meet Government requirements. It may be safely said that but for the war most of the rails imported during the past year would have been manufactured in Japan at the Imperial Steel Works. It is stated that about 18,000 tons of 60-lb. rails were manufactured there for use in building the military lines in Korea, besides many thousand tons of lighter rails. The United Kingdom's share of the rail import to Japan is reduced to 10 per cent., and as anticipated in that legation's report for 1903, the largest share in the trade has fallen to America. Imports of wire nails, however, have increased, probably because a native factory has practically ceased working.

A STRICTLY FIRST-CLASS ARTICLE

New Era House Paint

A high grade prepared house paint that is thoroughly reliable. Made from Pure White Lead, Oxide of Zinc, Pure Linseed Oil, Turpentine and Turpentine Japan Dryers. Put up in Imperial measure, all colors. Our catalogue will give you prices.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.
617-621 Austin Ave., CHICAGO, ILL.

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OIL AND COLOURMAN'S JOURNAL

for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.
Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.
19 LUDGATE HILL - LONDON, ENG.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.
THE QUEEN CITY OIL COMPANY, Limited
TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH GRADE FURNITURE and HOUSE VARNISHES
MONTREAL.

GLUES AGAIN

Our IMITATION FRENCH MEDAL GLUES are of such high class and are so suitable for Export that we would like to quote you. Export trade in this line is growing rapidly, and we pack in casks or cases as preferred. Quality unrivalled.

GROVE CHEMICAL CO., LTD., Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited
TORONTO MONTREAL LONDON
OTTAWA WINNIPEG



WE

believe in giving true

VALUE

Why sell a common paint when you can win the confidence of your customers by giving them a brand that is noted throughout the universe for its

QUALITY

P. D. DODS & CO., TORONTO, WINNIPEG VANCOUVER, MONTREAL

Globe Brand Files and Rasps

WARRANTED

Possess all the merits of the Best Hand-Cut Files. For sale by all prominent Hardware Dealers.



Thirty years' experience has taught us how to produce a Perfect File, consequently we are justified in giving our customers an absolute warranty with our product.

NICHOLSON FILE COMPANY

FACTORIES:

Providence, R.I., Paterson, N.J., Beaver Falls, Pa., Anderson, Ind., Port Hope, Canada.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.

Sole agents being appointed in each district. Write to-day.

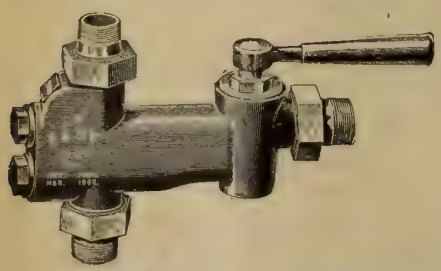
ASK YOUR JOBBER FOR

GILBERTSON'S COMET

Brand Galvanized Sheets

Will *double seam* either way of grain. High grade and low price. Every sheet guaranteed.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts.

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

---

A New Revolver!



MODEL 1904

H. & R. Double Action
Model 1904
38 Caliber
also 32 Caliber
6 Shot.

A solid frame revolver following the pleasing lines of our famous H. & R. Automatic, and which we are supplying in place of the American Double Action, as made by us for more than twenty years.

SPECIFICATIONS

32 caliber; 6 shot; 2½ inch barrel; weight 16 oz; C. F. S. & W. cartridge; also S. & W. Long and Colt New Police Cartridges.
38 Caliber; 5 shot; 2½ inch barrel; weight 15 oz.; C. F. S. & W. cartridge.
FINISH—Nickel or blue. We can also furnish with 4½ and 6 inch barrels.

Harrington and Richardson Arms Co.

Worcester, Mass., U. S. A.

Makers of H. & R. Single Guns. ***Catalog on Request***

(Continued from page 76.)

ledge the ability of the manufacturer to take lead, zinc, turpentine, dryer and tinting colors and thoroughly assemble same by formula and machinery much better than the average painter could take the same ingredients and mix them together by the rule of thumb and paddle. Furthermore, it has always been my contention that a painter in buying several different articles has the corresponding number of concerns to contend with in case of difficulty, whereas chant backed up by the reputable manufacturer's goods handled by you should clinch the argument.

A Complete Line.

I carry a complete line manufactured by this concern, and when a customer mentions paint I try to find out first what is to be painted and then proceed to sell the customer a special paint that is made for that particular purpose, and by doing so I show the customer I am interested in giving him what is right. When he finds out on using the goods that I was right and the job is even better than he expected that man is sure to come again for paint or anything else he may need in my line. I also display in a prominent place in my store all the different kinds of paint I have, and keep my windows talking paint nine months out of the 12. In many other ways I keep reminding the public that I sell paint, and long before the painting season opens I have sold paint for several houses. I keep a record of each color of the house paint as it comes in, and it helps me to a great extent in ordering a new supply, as I can determine very quickly just how much of that particular kind I have sold in any given time.

A Useful Record.

I keep a record, a card index, of all the paint sold for outside painting, entering the date, quantity, different shades, and weather conditions, and in that way am not only able to determine when the paint was applied and under what conditions, in case of difficulty, but also have a means of interesting the new customer, for by referring him to or showing him where I have sold paint to Bill Smith and John Brown, men with whom he in the majority of cases is well acquainted, I impress upon him the fact that there must be some virtue in it or these men would not use it, and in this way I am also able to refer to houses which in many instances have been painted for a number of years.

The works of Scarfe & Co., varnish manufacturers, Brantford, have just been greatly enlarged by the addition of a new warehouse with a capacity for storage of about 100,000 gallons. This will make these works amongst the most commodious and best appointed in the province, and the addition is a witness to their growing trade. The firm of Scarfe & Co. has now been in existence for thirty years, the business having been founded in the seventies by Mr. W. J. Scarfe and continued since 1891 by his sons. The lines the firm are making have long since secured the approval of the trade and are known to be of strictly reliable quality.

Safety razors ought to sell well during the Summer camping season. They are easy to carry and can be used where an ordinary razor can not.

WALL PAPER

A CANADIAN WALL PAPER LINE.

A REVIEW of the samples of the Staunton line of new wall papers for the season of 1905-'06 proved quite a treat, and Bookseller and Stationer was much pleased with the general excellence of the collection, which is comprehensive, attractive and artistic. The low priced styles are pleasing in design, bright and snappy in coloring, and show careful attention to an endeavor to make them acceptable and serviceable. For kitchen is



No. 1662.—An artistic stripe in beautiful color combinations; the handsome drapery design of frieze being emphasized by cutting edge to a scallop. Manufactnred by Stauntons Limited, Toronto.

shown a good granite in several natural colorings, and a tile pattern that will make a record in selling qualities, as the design and the superior colorings are very good.

For bedrooms are shown a number of very pretty styles, really remarkably attractive goods for the price, while in the next better grade is shown a number of extremely bright florals in natural colors. Several patterns deserve special mention. One, a design showing a



RETURNED
JUL 19 1905
To Owner
Cut Book
Page 94
Card

bunch of violets arranged in graceful freedom over a lace stripe, with a two-band border showing a festoon of violets on a drapery of lace. Another is a dainty floral in a stripe treatment, with a border so designed that it can be cut out or scalloped, which adds much to the beauty of the decoration. Another decorative paper shows sweet-pea blossoms carelessly yet artistically arranged; the colorings are particularly effective and enhanced by a water silk background. Each of these patterns is offered in several bright, cheerful colorings, every treatment being equally good, and in a variety to suit all tastes.

A novelty in frieze decoration is a graceful floral festoon so drawn that it may be scalloped, which adds materially to its effectiveness when used with plain stripe and stencil hangings. This frieze has a special silk moire ceiling, and is also produced in a range of colorings to match silks, velours and ingrains.

Halls and sitting-rooms are well provided for, even in the low priced goods, and the dealer certainly has a remarkably strong range of well proportioned hall designs with two-band borders in tapestry and textile effects to choose from, while for the sitting-room there is shown a collection of floral, classic or ornamental, patterns that are very complete. Many of the blanks are shown only in that grade, and the dealer can easily complete his general selection in better goods from exclusive patterns which are not repeated in the cheaper grades. Careful attention has apparently been given to make the offering of moderate priced papers adequate in variety and pattern, while the colorings include many of the novel treatments in background effects that heretofore have been brought out in high-class goods. The decorative value of a wall paper should determine its retail value, not the wholesale cost, and the showing of medium priced goods is really a leading feature.

DEPARTMENT OF ADVERTISING SUGGESTION AND CRITICISM

Edited by Our Ad. Expert, TORONTO.

NOTE—Herein are discussed the principles and practice of advertising. Subscribers are invited to send our Expert specimens of their newspaper and other advertising, for the purpose of review in this department. Address care of Department of Advertising, HARDWARE AND METAL.

STOVE ADS. IN CANADIAN PAPERS

A PERUSAL of Canadian papers convinces one that hardware merchants are advertising very liberally. Stoves get a goodly share of attention, and stove advertisements in Canadian papers are usually praisworthy in get up.

J. Brundrett & Son, Port Hope, run a snappy little "reminder" advertisement on the Imperial Oxford Range, which shows up prominently and appeals well for its size.

Garden & Co. occupy a fair-sized space in the Woodstock Review, which they devote principally to the Standard Oil Stove. Convincing statistics are given and an illustration, suitable in size and quality, employed.

Wells & Emmerson, Port Arthur, like J. Brundrett & Son, push the Imperial Oxford Range, though in a much larger space. Wells & Emmerson's advertisements are well written. These merchants evidently read up and cull from the maker's booklets.

The Moose Mountain Star is the medium John R. Mears, Arcola, takes to bring his steel ranges before the people. He handles the Monarch, Canada, Stewart and Happy Thought ranges, and employs liberal space in his talks. Mr. Mears knows the value of appealing to the farmer.

J. B. Hawkins, Goderich, is another hardware merchant who believes in publicity. He pays considerable attention to aluminum oven utensils, and is willing to pay newspapers to bring his wares before the public.

Some very attractive advertising is done by the Best Stove Co., Peterborough. The inauguration of a rebate check system in connection with their business is the nucleus of their advertising just at present.

"Well-displayed advertising" is what I would call the advertisements of Haney, Strathroy. He advertises the "Model" Wickless and "Boss" stoves, and gets down to the root of the matter in his details. These advertisements are ably assisted both by type and borders.

J. Moxon & Son, Picton, have a simple but effective plan of advertising oil stoves. No illustrations are used, but the datum is to the point, and "one thing at a time" is always kept in view. These advertisements are easily read.

"Telephone City Stoves, Limited," appears below advertisements on Jewel and Gas Ranges in the Brantford Expositor. The plan mainly adopted in these advertisements is that of making testimonials the argument. There is an individuality to this advertising.

J. H. E. Vrooman, Sunderland, in large type advertisements tells about "Boss" Stoves and Gurney-Tilden Souvenir Stoves and Ranges. These advertisements catch the eye quickly.

Conn, of Tilsonburg, keeps the public's attention on his stoves in advertisements distinguished for their straightforwardness.

Keys & Morrison, Lindsay, share the large type idea with Vrooman, of Sunderland, but their style of advertising is more general. Stoves play a big part in their advertisements.

The Grand Idea Range is the subject of advertisements written by Mahon, of Hintonburgh. Mr. Mahon wastes no time on preliminaries. He describes his stoves.

The Canadian Heating & Ventilating Co., Limited, Owen Sound, run some striking newspaper advertisements. The Empire Queen Range is described fully, and its merits brought out in strong terms and bold type. A good illustrations is used.

Allan J. Ross, also of Owen Sound, attempts to prove the Imperial Oxford the best gas stove on the market in what, typographically speaking, are finished advertisements. A balanced white-space effect is produced, and every word is clear.

Stove advertising is a class of publicity that well repays study. It is a good field for activity because there is a constant demand for stoves; but it is one thing to advertise and another to advertise in the most profitable way. Sometimes in preparing stove advertisements merchants overlook the salient points. There are quite a number of illustrations employed that are next to useless. The poor quality of the illustration is itself sufficient reason for its rejection, but the drawback in many cases is the plan of illustrating, not the quality of the illustration. What is the object in illustrating a whole stove? Most people know what stoves look like without giving them pictures on paper reduced in size. No merchant would now think of illustrating a spade in his advertisements, though there was a time when it was proper to do so. Spades are pretty much similar in design and pretty nearly uniform in dimensions, though there may be variations in quality. You cannot show the quality of wares by illustrations. That was never the intention. While stoves are approximately similar in size and style, there is a vast difference in interior constructions. These differences is what should be illustrated, not the doors and legs and lids, which, for all practical purposes, are the same to the buyer.

Some stoves have special attachments; illustrate these attachments. Other stoves have specially constructed ovens; illustrate these ovens. Other stoves, again, have fuel-saving grates; illustrate these grates, and so on. One thing illustrated, and illustrated well, with explanatory details lucid and complete, will have more selling force than a general illustration, which tells nothing, does nothing, but takes up space that has to be paid for.

Another point which merchants sometimes forget is that women (as a rule) not men, buy stoves. The argument which convinces a man will not necessarily convince a woman. A man, too, may drop into a store by chance and make a purchase. A woman generally plans the thing, figures it out to cents. It is obvious that advertisements to appeal to women must not only have facts, but facts that they can quickly revolve in their minds and quickly weigh. References to the names of the makers, general excellences, etc., are of secondary importance in these cases. If it is a coal range that is being advertised emphasis should be placed on the two most important things from a woman's standpoint — the oven, the grate. If it is a small gas stove, the number of burners, the space the stove occupies. Everything in connection with these particular parts should be laid bare in clear, simple terms.

When it comes to the kitchen women are just as close buyers, and as cute as horsetraders. No merchant would think of trying to sell a horse on the ground of its being chestnut in color and having a good mane. The merchant would know that the chief points would be those concerning the horse's teeth and feet. What teeth and feet are in a horse deal, when a man who "knows" is buying, ovens and grates are in a stove deal when a woman who "knows" is buying.

I like the booklet sent by Jas. S. Lockie, Newton, Ont., for review. There is an originality in the makeup, a method in the descriptions, that is praiseworthy. The subject of hardware is taken up in detail, and each page ornamented by a congruous headpiece which merits and retains your attention. The booklet in the main does the printers credit, but I see where it might have been arranged to a better advantage in one instance—I would not have placed my name on the front cover. A maxim, apt phrase, or some other catchy wording is much nicer. It carries the booklet up from mediocrity.

I would like to know if Mr. Lockie prepared this literature himself, or if he had it prepared and printed in one of the cities. I would like, also, to see any other literature issued by Mr. Lockie lately.

ESTABLISHED 1874

JOS. B. REED & SONS

Insurance, Toronto

ADVANCED METHODS

Our Insurer's Advice Sheet system.
" " Safe Deposit Vault.
" " Bond (guaranteeing our work).
Free of cost to our customers.

ABSOLUTE SECURITY

We represent the strongest and best companies in existence.

Write for our pamphlet illustrating the superior advantages of our office and methods.

WESTERN ASSURANCE COMPANY.

Incorporated 1851

FIRE AND MARINE

Head Office Toronto, Ont.

Capital	-	$1,500,000.00
Assets, over	- -	3,300,000.00
Annual Income	-	3,890,000.00

HON. GEO. A. COX, President.
J. J. KENNY, Vice-President and Man. Director.
C. C. FOSTER, Secretary.

THE CANADIAN BANK OF COMMERCE

Paid-up Capital, - - $8,700,000
Rest, - - - - - $3,500,000

HEAD OFFICE : TORONTO, CANADA

HON. GEO. A. COX, Pres. **B. E. WALKER,** General-Manager.

LONDON, ENG., 60 Lombard St., E.C. S. Cameron Alexander, Manager.
NEW YORK, N.Y., 16 Exchange Place, Wm. Gray and H. P. Walker, Agents.

TRAVELLERS' LETTERS OF CREDIT

The Travellers' Letters of Credit issued by this Bank are a great convenience to Travellers. They are available in all parts of the world, and the holder is enabled, without risk or difficulty, to obtain such sums as he requires at any point in his journey.

LEWIS & CLARK CENTENNIAL EXPOSITION

PORTLAND, ORE.

This Bank having its own branch at Portland, Ore., is able to offer special facilities to visitors to the Lewis & Clark Centennial Exposition. Branches at San Francisco, Seattle, Vancouver, Victoria and other points on the Pacific coast.

Money Orders, Drafts and Traveller's Letters of Credit issued payable at any of these places.

Money

CAN BE SAVED BY MEANS OF AN ENDOWMENT POLICY.

YOU CAN ONLY SECURE SUCH A POLICY WHILE YOU ARE IN GOOD HEALTH.

Pamphlets and Full Particulars regarding the New Accumulation Endowment Policy sent on application.

Confederation Life ASSOCIATION

W. H. BEATTY, President.
W. C. MACDONALD, ACTUARY. J. K. MACDONALD, MANAGING DIRECTOR.
HEAD OFFICE, - TORONTO, CANADA.

CAPITAL PAID UP, - - $1,000,000.
RESERVE FUND, - - 1,000,000

THE METROPOLITAN BANK.

DIRECTORS
R. H. WARDEN, D.D., President S. J. MOORE, Esq., Vice-President
D. E. THOMSON, Esq., K.C. His Honor W. MORTIMER CLARK, K.C.
THOS. BRADSHAW, Esq. JOHN FIRSTBROOK, Esq.,

HEAD OFFICE, - TORONTO.
W. D. ROSS, GENERAL MANAGER.

GENERAL BANKING BUSINESS TRANSACTED

SAVINGS DEPARTMENT
at all Branches.
ACCOUNTS SOLICITED
Drafts Bought and Sold.
Letters of Credit Issued.

BRITISH AMERICA ASSURANCE COMP'Y

FIRE AND MARINE.

Incorporated 1833

CASH CAPITAL, $850,000.00.
TOTAL ASSETS, $2,043,678.59.
LOSSES PAID SINCE ORGANIZATION, $25,868,544.80.

HEAD OFFICE, - BRITISH AMERICA BUILDING.
Cor. Front and Scott Sts., Toronto.

HON. GEO. A. COX, President. J. J. KENNY, Vice-President and Managing Director.
P. H. SIMS, Secretary.

REGISTERED SUPERIORITY PURITY TRADE MARK SUITABLE AS THE PYRAMIDS

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

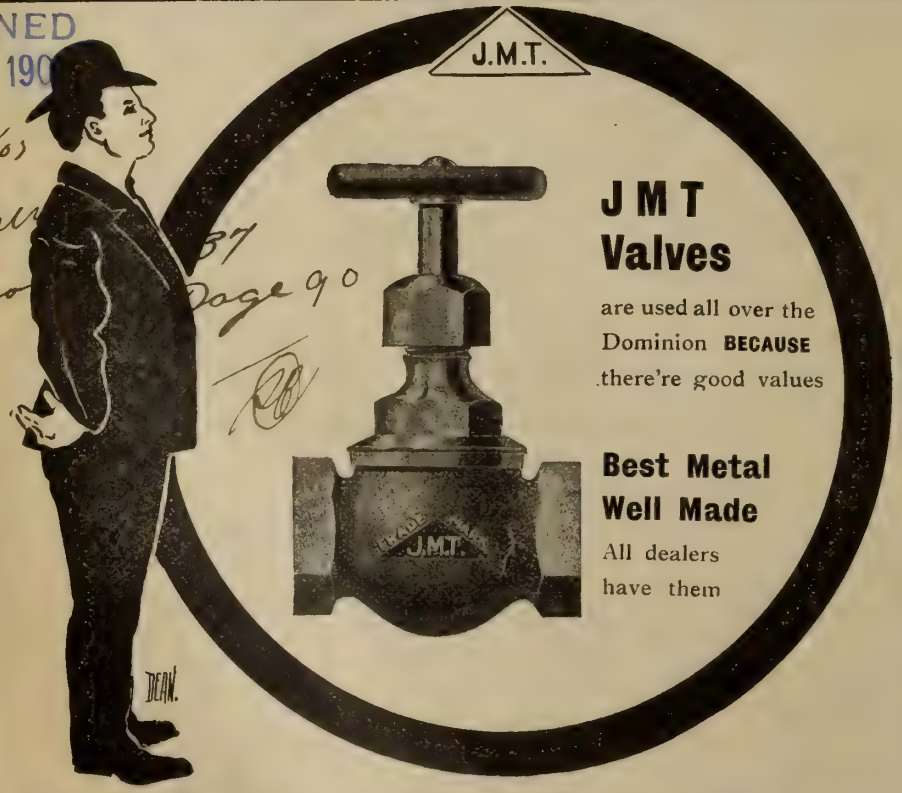
of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



J M T Valves

are used all over the Dominion **BECAUSE** there're good values

Best Metal Well Made

All dealers have them

Plumbers and Engineers Supplies

RETURNED July 17 05

J M T INJECTORS

Noted for their Efficiency and Durability.



IRON and BRASS PIPE and FITTINGS

Pipe Cutting to Sketch

The James Morrison Brass Mfg. Co. Limited

TORONTO.

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

Article IX.

HINTS ON HOT-WATER HEATING.

We have dealt with the subject of the proper placing of radiators, and have shown why they will prove efficient or inefficient in accordance with the manner in which they are installed. We propose now to discuss a few of the important features of good hot water piping, and with that subject in hand will begin at the boiler.

Nearly every one knows that, unlike steam pipes, hot water pipes must rise continuously from the time they leave the boiler until the highest point is reached, this being necessary, first, so that all air may be removed from the whole system, and, secondly, so that the lighter column of warm water may easily be displaced by the heavier column of colder water coming down the return pipe.

Respecting this latter point, it may be explained that, unlike steam, where any reasonable pressure may be used to force the heat to distant points or through badly balanced portions of the system, hot water has for its motive power only the difference in weight between the warm expanded water in the flow pipe, and the slightly cooler, somewhat contracted water in the return pipe.

In order to make this perfectly plain, it may be said that water is composed of numberless small molocules, each perfect in itself, and each capable ol expanding and contracting when exposed to heat or cold in exactly the same manner as metals will, and this being the case it will be obvious that if a tube is filled with water at a low temperature, and heat is applied, the molocules individually will expand to greater size, but still having the same weight. As the temperature is raised higher and higher, however, the expansion of the molocules will have the effect of crowding those on the top over the edge, when they will roll down the outside of the tube, and this having happened, it will be quite apparent that while the tube is still full, and the "bulk" is still there, that the contained water cannot possibly weigh as much as that contained in the tube before the heat was applied, and a further proof of this is afforded by allowing the water to cool to its original temperature when, of course, it will not occupy the space it formerly did.

The point is this, that the water in the flow pipes, while the same in bulk, being composed of expanded molocules, is slightly lighter in weight than the water in the return, which is composed of contracted molocules and therefore having more of them in a given space than is possible with warmer water; is a trifle heavier than the latter, and, coming in at the bottom of the boiler, presses the warm water out at the top, when it will in turn contract by loosing its heat, and return in the same way.

The point sought to be made in the foregoing is very well shown in Fig 1, which is a glass tube, both legs of which were filled to the "water line." As soon as heat was applied to leg "A" the water, expanding, rose to the higher level, and though its level is higher its weight remains the same, therefore the level in "B" remains unchanged.

Supposing, however, that fresh water of the original temperature was poured into "B" in order that the level in both legs of the tube may be made the same, it will be clear that if the original ammount in "B" was sufficient to counter-

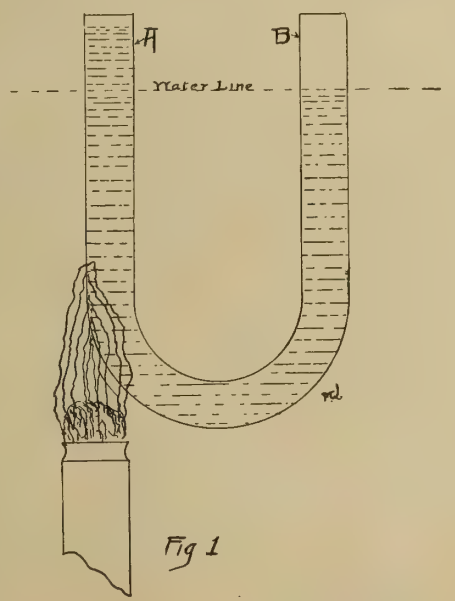


Fig 1

balance that in "A," even when expanded to the higher level, that, with the added weight to make the same "bulk" in both legs, the water in "A" will be compelled to move up, and as this is exactly the means of operation in a hot water system it will be seen at once that the motive power is at the best weak, and hence great care should be taken to properly grade all parts of the system, reduce friction by using large mains instead of more numerous smaller ones, and so distribute the water that the radiators on the upper floors where the difference in weight between the water in flow and return risers is greater than is the case with those on the ground floor, will not rob the latter.

Having discussed the motive power of a system let us now undertake to design one. The first thing for a fitter to do is to "size up" the character of building with which he is dealing, that is, to find out not only of what material it is built, but how it is put together, how the windows and doors are fitted, what sides of it are exposed, whether—if it be of brick, stone or cement—it is plastered on the walls, etc.

Having ascertained this he will—having read the previous article on the subject—be in a position to calculate the proper amount of radiating surface for each apartment, and if the building to be heated be a house, the temperatures required will be as follows: Dining room, sitting room, drawing room, halls and kitchen, 70 deg.; bed chambers 60 deg.; bath room, 75 deg. The radiators in each case to be located in the most exposed position, and to be provided with an air valve placed at highest point, and a quick opening valve which may be placed on either the floor or return pipe, but where twin connected radiators are used it is usual to place it on the outside pipe.

It is now necessary to lay out the piping system, and in doing so certain important points must be kept in mind, and among these is the size of connection which each size radiator requires, and the following will be found satisfactory for the ground floor, viz., a radiator containing fifty square feet and under, one inch pipe, over fifty and under one hundred square feet, one and one-quarter inch pipe; from one hundred to one hundred and fifty square feet 1½ inch pipe, and from the latter amount up to two hundred square feet, two inch pipe.

It will be found safe to allow 10 p.c. to 15 p.c. more heating surface to the various sizes of pipe on the upper floors.

Referring to Fig. 2, it will be observed that the plan of the basement, ground floor, and first floor of a house, are laid out side by side, and that the size of radiator necessary to fulfil its requirements having been determined in accordance with the instructions given in previous articles, is indicated in the position which it ought to occupy, viz., at the most exposed point, and it now becomes necessary to properly arrange the piping in the basement.

With this object in view the location of the chimney is ascertained, and the boiler placed as close to it as possible with the two-fold object of obtaining the best draft, and of having as short a run of smoke pipes to interfere with headroom as possible.

The next thing to do is to indicate by a dot or cross on the basement plan the places where the connections for the ground and first floor radiators respectively will come through the floor above. Having done this, draw your mains on the plan is such a manner as to give the most direct possible connection between the boiler and the various radiators, paying some attention, of course, to the appearance of the job when completed, and it may be mentioned here that it is customary to have one line only to indi-

cate both the main and return on a hot water job, because the piping for both must always be equal in size, and where two lines are shown in Fig. 2, one represents the main and return for the ground floor, and the other the main and return for the first floor.

It now becomes necessary to mark in the sizes of the mains, and the best place to start is at the ends farthest away from the boiler, and in this instance we will begin at the point where the main runs up to the bath room, which is marked one, because it supplies only eighteen feet of surface (as will be found by looking at the bath room) and ordinarily a one inch "riser" would supply fifty to sixty feet on that floor if the horizontal connection in the basement were a short one. The one running to the bath room is, however, of considerable length, as will be seen, and if there were fifty feet of radiation in the bath room it would have to be increased to one and one-quarter inches in diameter, and reduced to one inch just where it runs up through the floor.

Now, having arranged the size of main for bath room riser, mark down on a piece of paper the amount of radiation in the bath room, and being fed by the main, and pass along toward the boiler to the next connection, which is to chamber No. 1. Looking at the plan of the first floor we find that chamber No. 1 has twenty-eight square feet of radiation. Put this amount under the "18" on your paper and add the two amounts together, and the result, 46, is the number of square feet which the main has to supply at that point. This amount, if altogether, could be supplied by a one inch riser, but for horizontal mains must be one size larger, so that the main from that point back to the next connection must be one and one-quarter inches. At the next connection we have a riser supplying two radiators in chambers No. 2 and No. 3, which together total 46 square feet, and that amount added to the amounts on your paper already, viz., 46 square feet, would make a grand total of 92 square feet, which that particular main would have to supply, so that it would require to be 1½ inches in diameter from the last connection back to the boiler, and the other three mains are worked out in like manner.

Before work is begun on the plant it will be necessary to find out whether there is sufficient room between the floor and the ceiling of the basement for the height of the boiler and the necessary rise for the mains, which in no case should be less than one inch in every ten feet and, if possible, it should be a little more. In order to obtain the required information on this point it is only necessary to measure the distance from the boiler to the end of the longest run or main; allow one inch or more for every ten feet of that distance, and add the result to the total height of the boiler (which is given in all boiler catalogues) plus say one foot or more for pieces of the mains to rise vertically from the top of the boiler before they run horizontally. Having done this the fitter should, by looking at the pipe plan laid out on the basement plan, be able to take off a list of all the fittings required to put in the mains and connection in the basement, and he will not be far astray if he allows an additional five elbows for the connections for each radiator.

The method of making connections and "distributing" the water will be dealt with in a subsequent article.

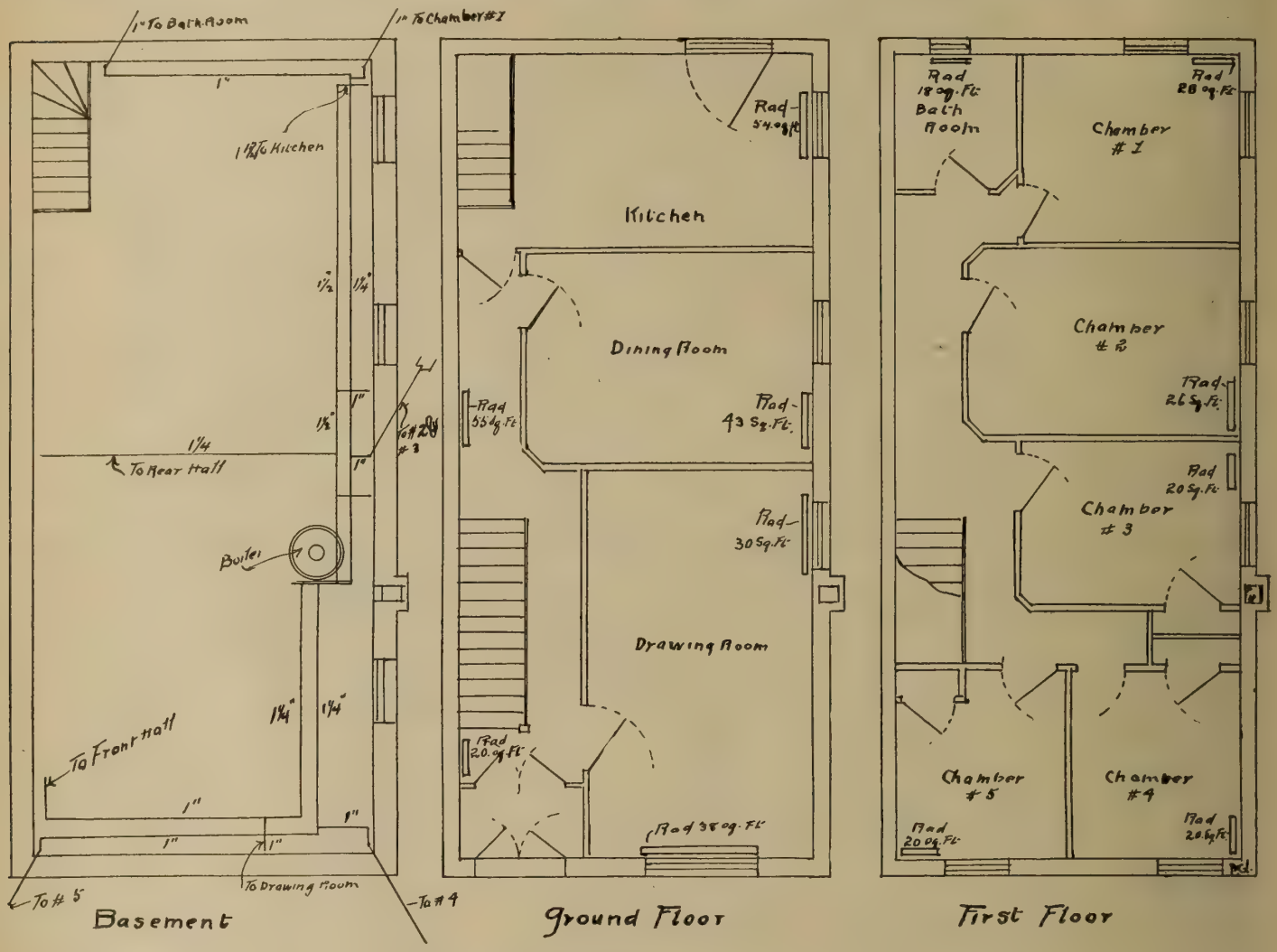


Fig 2.

A NEW WATER HEATER.

The Hoffman Heater Co., Lorain, Ohio, has recently put on the market a new water heater designed to furnish water for domestic supply. The heat is furnished by a powerful gas burner, having a valve which controls the supply automatically. The valve is so constructed that it cannot stick and the opening of any hot water faucet starts the heater. The supply of gas is automatically shut off when the water is raised to the desired temperature. Illustrated pamphlets showing the heater set in the basement and piping connections to several apartments in the building are issued by the company.

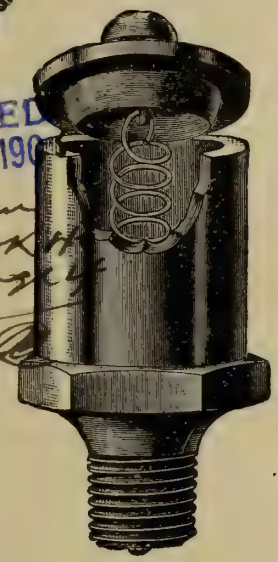
TRADE PENBERTHY MARK.

ECONOMICAL
AUTOMATIC



RELIABLE
INJECTOR

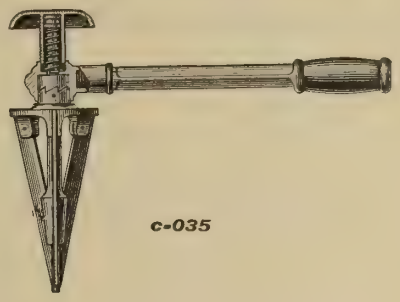
I.X.L. SPRING TOP BOILER



The cover is held by a strong spring. No amount of jarring loosens it. An excellent cup for movable bearings.

ASK YOUR JOBBER

MUELLER PIPE REAMERS
RATCHET HANDLE PATTERN



c-035

When the wire edge left by a pipe cutter is spread or flattened by a poor reamer circulation is obstructed as much as if the pipe hadn't been reamed at all.

Mueller Pipe Reamers have the cutting edges well relieved so that the blades won't drag over the wire edge and flatten it. It cuts burrs off clean so that circulation is not interfered with.

Mueller Pipe Reamers will ream any size of pipe from ⅜ to 3 inch. They are made in plain and rachet handle patterns. The reamer illustrated is the ratchet handle pattern.

Each reamer bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.
Decatur, Ill., U.S.A. New York, N.Y., U.S.A.

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

Plumbing Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 14, 1905.

FROM all sections of the country come reports that business is of such a volume that it has never been equalled. Small jobs are very rare, and even when they are brought to the notice of the master plumber he does not like to undertake them, so numerous are the larger and more costly contracts. The best reason for this condition is the extensive operations going on throughout the smaller towns and villages in the eastern provinces of the Dominion. A large number of the towns and villages in these provinces are also installing new water works systems, and this alone demands a large output of iron pipe. People in general are beginning to realize the advisability of installing high-priced articles, so that the master plumber is receiving much better prices for his work.

The carpenters' strike still continues. Other men in a great many cases have been obtained to fill their places, and as the plumbers' union has not supported the strike in any way the building trade in this city is progressing very favorably.

The lull in business which was so natural at this time in previous years has not yet put in an appearance, and local wholesale supply dealers believe that the present heavy demand will continue until the end of the present season.

Range Boilers—Demand remains unchanged. Prices are firm, but no advance is anticipated. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Beyond a slightly heavier demand, general conditions on this market remain the same. We quote the following: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—All prices are firm, and as the market has assumed a steady appearance more confidence is being displayed by the purchasers. Our quotations are as follows: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Some retail merchants are reporting that it is very difficult to secure iron pipe within a short time after the date of bnoking order. No doubt this is the case, and possibly some wholesale supply houses who have not much space for storage purposes must find it difficult to obtain pipe on short notice to fill their orders. The output of the mills must be inadequate under the present strain. Prices are firm, and there is some talk of an advance. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 1-2 per cent.; 3-8 inch, 62 1-2 per cent.; 1-2 inch, 72 1-2 per cent.; 3-4 inch, and upwards, 74 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—The market has become steady once more, and the probability of an advance in price has become very vague. We quote: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
Front street east,
Toronto, July 14, 1905.

FLUCTUATIONS in the prices of iron pipe and fittings have been the feature of the past week; the granting of larger discounts having been followed a couple of days later by an advance of 1c. on listed prices on most lines. The new prices are none too strong as yet, but are expected to stiffen. The new list on brass goods, etc., is not yet available for publication.

Activity continues in all lines, the large shipments of goods indicating that the volume of building being done in all sections of the country is enormous. This is practically so regarding the west, large orders being placed not only for general construction work, but also for waterworks requirements. The general outlook is very bright.

Lead Pipe—Sales are reported large, the demand being excellent. We quote as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—The heavy demand indicates general activity and accounts for the firmness in prices. Prices are unchanged. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Prices are strong after the fluctuations of the past week. Demand is active. We quote: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—No change is noted, demand continuing active. The discount of 15 per cent. continues.

Galvanized Iron Range Boilers—Volume of business being done is reported to be large, with prices the same. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—An advance of one cent is reported. Sales are fairly large. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Buying is active at the same quotations. We quote: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware—A large business is being done, the construction of dwelling and apartment houses calling for large quantities of material. Our quotations are: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

TENDERS WANTED.

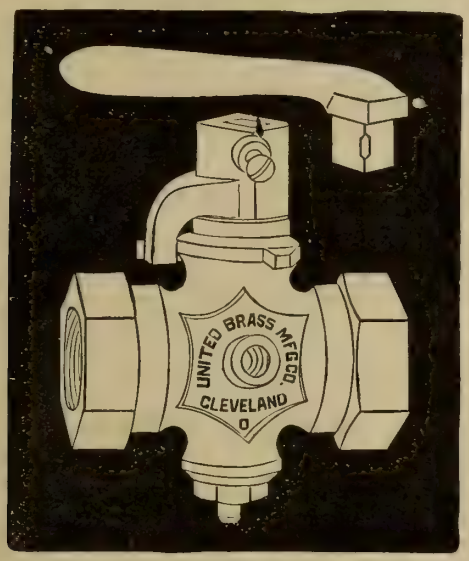
Tenders will be received until August 1 for the heating by steam of St. Carthagh's R.C. Church, Tweed. Tenders to be sent Rev. J. S. Quinn, Tweed, Ont.

Tenders for the steam heating of the Court House and Registry Office at Whitby will be received up to the 24th July instant. Plans and specifications can be seen at the County Clerk's office on and after July 13. The County Clerk is J. E. Farwell, Whitby.

England & Co., Winnipeg, have secured the contract for the plumbing and steamfitting for the Geo. Black Lumber Co.'s new building in that city.

UNITED COCKS

Are Installed by LEADING PLUMBERS everywhere because THEY ARE THE BEST.



We Manufacture a Complete Line of High Grade

STOPS and STOP and WASTE COCKS, COMPRESSION WORK, FULLER WORK, SOLDERING NIPPLES, UNIONS, VALVES, ETC.

WRITE FOR CATALOGUE AND DISCOUNTS.

United Brass Manufacturing Co.

CLEVELAND, OHIO, U.S.A.



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA



All Practical Heating Men

are agreed about

KELSEY CORRUGATED WARM AIR *GENERATORS* Pat'd

Being Wonderful { *Heat Makers* / *Fuel Savers*

There is always a satisfaction in selling the best.

THE KELSEY Agency puts any dealer right in the fore front of the procession.

THE KELSEY gives the dealer something to talk about besides **"How Cheap."**

THE KELSEY is particularly well adapted for the **Proper** and **Economical** warming and ventilating of schools, churches, or large residences where ordinarily steam or hot water **would be** required.

"There's only one Warm Air Generator."

"KELSEY"

In Six Sizes

Heating capacities 5,000 to 100,000 cubic feet.

THE JAMES SMART MFG. CO. LIMITED

Winnipeg, Man. **Brockville, Ont.**

Exclusive makers for Canada.



A Fair Proposition

YOU

place on exhibition in your showrooms a few samples of the NATURO Closet and seat; call the attention of your customers to them and explain to them why, in every respect, they are more desirable than the old style closets.

WE

will advertise you at our own expense; refer all local inquiries to you; assist you as far as in our power lies to effect a sale; furnish you with convincing descriptive literature for distribution in your community—in a word, will help you introduce the NATURO Closets.

Once started, you will be astonished at the demand.

Drop a line for our Book.
It will interest you.

THE NATURO COMPANY

Salem, N. J.

C. H. Muckenhirn, President

S

OTTAWA PLUMBERS' STRIKE.

IT is a well-known saying that there are two sides to every question, and according to word received from Ottawa this week only one side has yet been given regarding the trouble between the master plumbers and the journeymen of that city.

The master plumbers state that on a month's notice the journeymen demanded 32 cents per hour after an unsolicited increase in wages had been granted this Spring by the majority of the master plumbers. The second increase meant that in some of the shops the masters stood to lose hundreds of dollars on the contracts they had booked, the journeymen's demand meaning an extra outlay in wages of from $2,000 to $3,000 per year. The Master Plumbers' Association decided that the demand for the 32 cents could not be entertained, after carefully reviewing the situation.

Of the two shops that have compromised, one is said to have only one journeyman, while the other employs a journeyman only at intervals. It is understood that the proprietors of these shops are not now members of the association.

It is altogether likely that the trouble will come to a speedy termination, the course of the master plumbers being such as to commend itself, not only to the public and trade generally, but also to many of the men, the employes of one shop having returned to work irrespective of the union and there being a strong probability of the remainder taking up their tools again within a week.

PLUMBING NEWS AND GOSSIP.

Plumbing and heating is very brisk at Amherst, N.S. The Amherst Foundry Co. are manufacturing some popular lines of baths, sinks and lavatories.

Dickenson & Allen have opened a new plumbing shop on Victoria avenue, Hamilton.

Toronto journeymen defeated the master plumbers at baseball last Saturday—nine to six.

Nines representing the Ontario Lead & Wire Co. and the Toronto Master Plumbers' Association, play baseball at the Woodbine next Saturday.

Toronto Master Plumbers' Association elected Messrs. W. Mansell, R. W. Harrison and K. J. Allison, as delegates to represent Toronto at the convention in Winnipeg next month.

The executive committee of the Ontario M.P.A. meets in Toronto this month, probably on Friday, the 28th.

No Toronto plumber should forget the good time billed for Friday, July 21, at Lorne Park. And if he forgets his wife should remind him, as it is ladies' day.

W. J. Wall, dealer in plumbers' supplies, floor tiles, and other lines of goods of a similar nature, has opened a new showroom on Bleury street, near Craig street, Montreal.

NEW RADIATOR COMPANY.

It is understood that a new radiator company is in process of formation in Toronto, and the charter is expected to be issued this or next week. A satisfactory manufacturing site in the west end has been chosen and construction work will probably be rushed forward at once.

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing British and American Manufacturers. Correspondence invited from firms wishing to be represented in Canada.

BRONZE POWDER AND LIQUID

is used by every steam-fitter. Ask your supply house for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors,
Shipping and Forwarding Agents
and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

IDEAL
Woven Wire Fencing



MAKES MONEY FOR YOU

Your customer, the farmer, wants a fence that can be put up quickly and easily just when he wants it. Hand made fences cost too much when you figure the time it takes to build them, to say nothing of the hard work.

Why not sell "The Ideal," the best woven wire fence made? You can build up a permanent trade that will pay you as much as any line you are handling. Other hardware merchants are doing it. Why not you? The Ideal will give satisfaction to your customer and make him your friend.

Have you seen the Ideal? Let us send you a sample and catalogue showing why Ideal fence made from No. 9 hard steel wire throughout is the strongest and the best value.

Ask us about the Ideal all metal farm gate.

The McGregor-Banwell Fence Co., Limited,
WALKERVILLE, ONT.
Merrick, Anderson & Co., Winnipeg, Man.
Sole Agents for Man. and N.W.T.

NOW, THE SHINGLES



Every Paint man should get acquainted with

RAMSAY'S SHINGLE STAINS

They are becoming popular. You will be asked for them sooner or later. We will send you a sample set with prices and directions if you ask for it. Do it Now.

A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Paint Makers

ONE MAN DOES

THE WORK OF TWO WITH

The "Toledo" Adjustable Die Stock

Threads pipe from 1 inch to 2 inch, inclusive.
A new principle in Hand Power Pipe Threading.



No. 1

With this device one man can thread 2-inch pipe easily with one hand and we

GUARANTEE IT

Ask your jobber about them ; if he don't know, write us for Catalogue and Discounts.

THE TOLEDO PIPE THREADING MACHINE CO.
Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

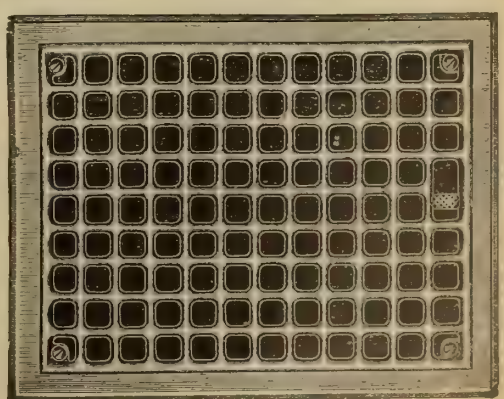
THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO

Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.

HART & COOLEY COMPANY
NEW BRITAIN, CONN., U. S A.



NO RISK

in painting if Pure White Lead is used. Dealer runs no chances, neither does the house-owner.

Nothing in it but the pure quill—buyer knows what he's getting.

The best practical painters use it—they ought to know good paint.

Tiger  Brand

PURE WHITE LEAD

has a reputation back of it. Pure as can be made and guaranteed so.

Increasing sales show that its quality is appreciated. Every package bears the "Yellow Label."

Specify "Tiger."

THE MONTREAL ROLLING MILLS CO.



Kerr's "Copper-Alloy" Disc

GLOBE VALVES

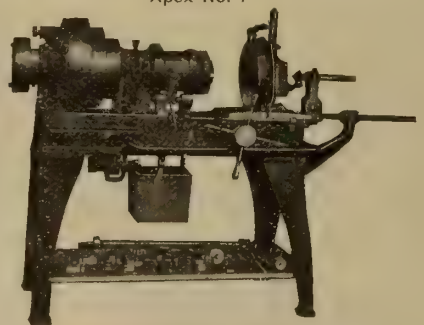
are superior to any other disc valves on the market for high steam.

This is a very superior valve, at a moderate price.

The KERR ENGINE CO.,
MANUFACTURERS Limited
WALKERVILLE, ONT., CANADA

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

The vise is our celebrated serpentine. I is opened and closed while the machine is in motion by simply moving the dog forward or backward. Capacity of machine, from ⅛ to 2 inches, inclusive. Especially adapted for making Nipples.

Post Card will bring Catalogue.

THE CANADIAN FAIRBANKS CO.
Sole Agents for Canada Limited
MONTREAL, TORONTO, WINNIPEG, VANCOUVER

VALUE OF CONVENTIONS.

AT the recent gathering of the National Association of Master Plumbers, at Atlanta, Ga., Mr. J. H. White, of Paterson, N.J., gave an interesting address from which we make the following extracts :

"Past experience tells us that these gatherings of ours have been channels through which we gathered valuable education. We have rubbed up against each other, exchanged thoughts, laid out plans and devised ways and means to carry out the said plans for the best interest of all those who need our services, as well as ourselves. We come together, not to praise ourselves (though it is not a bad thing to give a pat on the back when it is needed), but rather to point out our faults. As a consequence we learn something of the failures as well as the many good things which have been accomplished in our profession.

"We gather together to try to find out how much better our work can be done, not to see how cheaply it can be done. We gather together not with a purely philanthropic idea of helping some one out of a pit which he dug himself, but for the purpose of exchanging ideas. We find the men we meet are not only willing but anxious to impart their knowledge to their fellow craftsmen and get something in return along the same lines; and therefore these conventions are doing a whole lot of good not only to us but to the public at large.

"Some think the only protection we need is from the journeymen. Some think we need it from the supply houses; some one thing and some another; but all agree it is the other or outside party who makes all the trouble. Now let me say right here that the protection we need most is from ourselves. It will be a strange think if we go out of this convention without hearing of some one who has kicked over the traces. He saw or thought he saw a dollar on the other side, and to get that dollar he endangered the whole superstructure, reaching over dollars to pick up pennies. And, let me whisper, it is the large shops who are the worst.

"Man is prone to selfishness and to live for himself. He figures out, 'I am only one and one can't help many.' That man needs protection from himself. So we agree with him and say, 'Come to our conventions, for many can help one.' So we meet in our locals at home to help each other there; then we meet altogether once a year to compare notes and lay out plans for our locals to work from, so that we can be helped more. In other words, to till that soil in which the seed of protection was planted.

"Every year has seen the number of master plumbers increased in our conventions. Let us resolve not to give up the fight until all are enrolled under our banner living up to the standard of loyalty until the public not only sees but is willing to acknowledge that the plumber is its protector against the greatest of all foes—sickness and death. In the cities where the plumbers are best organized and are loyal to their organization is found the lowest death rate.

"Another point I want to bring out for our local meetings is the social end of it. Remember that 'all work and no play makes Jack a dull boy.' Have a good time as often as you can. For the most successful local I have met in

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO

$2 FOR THIS SMALL SUM THE **$2**

MANUFACTURER and SUPPLY MERCHANT

may keep posted on new openings for trade.

The CANADIAN CONTRACT RECORD

reports weekly all projected building and other construction works throughout Canada as well as new business enterprises.

Send your name and address with $2 for a year's subscription to

Canadian Contract Record

Toronto, Montreal, Winnipeg, and Vancouver

$2 **$2**

"The Best South Wales Produces"

IN STEEL CAKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

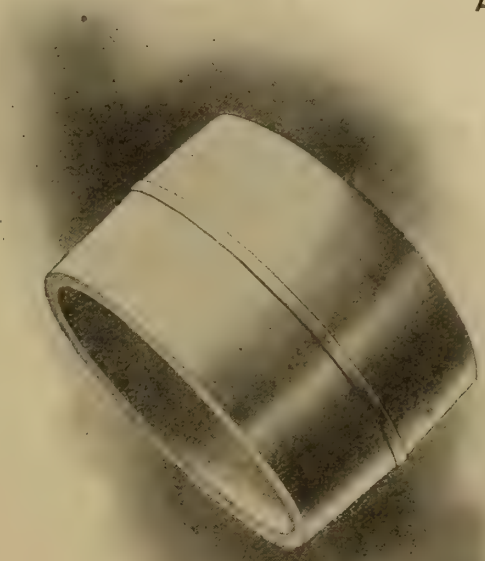
IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

TIGHT SECTION JOINTS

in boilers are possible only through a metal to metal connection, such as is perfected by the Oxford Push Nipple.



Accurately tapered both ways, it fits into section holes of corresponding taper, and makes an absolutely steam and water tight joint when two sections are pushed together on it.

Practical men will recognize at once the radical advantage of such a section joint over the old time rubber gaskets and other leaky makeshift devices.

Send for the Gurney Oxford Book on Steam and Hot Water Heating. It's FREE.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, P.Q.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

my travels the president gave this as his reason: 'We have an 'annual' banquet four times a year and a lunch in between.' Remember there is no nearer way to a man's heart than through his stomach. And don't neglect to make a place in your festivities for your wives and daughters or sweethearts. If you can get them interested the success of your institution is assured."

PROFITS ON FURNACE CONTRACTS

By F. G. Schafer, Youngstown, Ohio.

NOW that the stringency is past, and everything points to at least three or four years of normal business conditions, is it not well for furnace dealers generally to consider the question at the head of this article? There are certain lines of trade in which this question is never seriously considered, as there seems to be an "unwritten law," or tradition, or custom, regarding a minimum of profit beneath which no self respecting, and certainly no successful, dealer will figure an estimate. For instance, in the shoe and clothing trades a profit of from 25 to 33 1-3 per cent. is considered not only proper, but entirely reasonable, while $100 net still remains the standard or average profit on the sale of a really good piano. While human nature is such that each tradesman considers his own particular business as entitled to a profit slightly better than the average, yet a furnace dealer would be entirely justified, and still remain consistent, by applying this rule to his own estimates. When a piano dealer sells an instrument, even of an average quality, there is scarcely one chance in 100 that he will ever have any ill will or complaints or a lawsuit on his hands because of it, and even when it requires tuning the purchaser does not look to the dealer to do it free.

This same rule applies to almost any other mechanic except a furnace dealer, who, unlike the mason, painter, roofer or carpenter, cannot be sure that he is through with his job when he packs his kit and turns his back upon it. Unlike almost any other article in the building trades, a furnace dealer's product is subjected to the greatest destroying element in nature, fire; besides which fully nine-tenths of the success of his job depend upon conditions outside of the furnace itself. The writer is fully aware that the strong claims made by the manufacturers for the better grades of furnaces are quite true, provided the owner allows, or cellar partitions permit, its proper location and the attendant gives it proper attention. But how often is this the case? Is it not true in thousands of cases—yes, in the great majority of sales—that the purchaser retains a string around the dealer's neck for years after his job has been installed? Another element to be taken into consideration is that a furnace dealer, more perhaps than any other tradesman, takes his reputation in his hands the moment he enters this business. Indeed, it has been said that even if a dealer in furnaces were as honest as Job he could not sell 100 furnaces to 100 different persons and retain a reputation for common honesty in the minds of all of them.

Unfair Risk Compelled.

No matter how good a cast iron fire pot may be constructed it is a well-known fact that its life, especially with soft coal, is as problematical as that of a lamp chimney, which may crack the day it is bought, or last for years. I have in mind an unusually thick and apparently durable fire pot (20 inch, weight nearly 400 pounds) which cracked and sent volumes of smoke into the rooms during February of the second Winter. Hundreds of dollars' worth of these furnaces had been sold by this dealer previously, some to intimate friends, a number of whom had similar trouble. And they speak of this dealer in the same vein as one would of a thief or confidence man. Yet the dealer was just as honest in his intentions as the man who placed the slate roof on his customer's residence and who retained the owner's good will, simply because slate is not subject to wear, while a furnace is.

Is it any wonder, in view of these things, that many hardware dealers positively refuse to handle furnaces for fear that this addition to their business will "queer" their other lines? How often are furnace dealers called out in zero weather to pacify furious customers, only to find that clinkers have not been removed or the cold air slide is not properly adjusted. Or probably the customer himself insisted upon a poor location for the furnace or registers, for which error the customer rarely blames himself when Jack Frost compels him to be up against the fruits of his own folly.

Unreasonable and Unprofitable.

Some time ago the writer was berated for refusing to send a man, free of charge, at a cost of street car fare and nearly a half day's time, to instruct a user of his furnace, this man having bought the house five years after the furnace was installed. Some time later a housekeeper threatened by telephone to "tell her neighbors what kind of a man you are" unless the dealer would clean out her furnace of soot free of charge. On another occasion a customer asked for a man to fix his chain which the children had disarranged or broken, and to do this free of charge, although it meant 20c. street car fare, a trip of 5 miles, and one-half day's time of a workman.

Recently a notorious "Cheap John" furnace dealer was considerably puffed up by the fact that he had sold 112 furnaces in 1903 and about 100 in 1404, and did not seem to realize that the number of dollars he had earned was of more importance to him than the number of sales he had made. This man has no financial standing, drives a horse and wagon that would do credit to the average rag peddler, and gets as little as $27 worth of pipe by freight c.o.d. Last Summer even this small lot of pipe was allowed to lay in the freight house for nearly three months until 75c. storage had accumulated. Finally the manufacturers arranged with another dealer who did not sell one-third as many furnaces, but who had a gilt edge credit, to take the goods at three-fourths of their value rather than be forced to pay the freight both ways.

Price and Profit Too Low.

Fellow furnace dealers, is it not time to call a halt on "Cheap John" profits in this business, in which more than in any other, it is impossible to please all, and in connection with which are so many unpleasant and worrying features, due largely to the purchasers themselves? One of the most successful dealers the writer is acquainted with says: "Irrespective of the grade or price of a furnace contract I look upon every sale as a proposition in which I many look for some annoyance or loss of time, due to the carelessness or laziness of the users themselves, and that each contract should net an average of $66.67. I set this odd figure, which is two-thirds of $100, so that it is an easy matter to get a rough estimate of my profits, as every third sale means a profit of $200." Inquiries among other dealers of the better sort shows that, with the exception of sales to real estate firm, the minimum of profit on any contract direct with the user should never be less than $50.

Furnace dealers should realize that an unreasonably low estimate is an injustice to their fellow competitors and that a contractor as well as a laborer can be a "scab" in the trade. To bring about better prices, however, every dealer should use his influence to educate the buying public in the fact that it does not pay to give up less than three figures for a furnace job, or as the couplet puts it:

To make it pay you in the end,
Over one hundred you must spend.

The writer trusts that this article will call forth others on this vital question to the trade. At all events, if it will cause a certain class of dealers to stop for a moment and do a little thinking it has not been written in vain.

THE NATONAL ASSOCIATION OF MASTER PLUMBERS AND STEAM AND HOT-WATER FITTERS OF CANADA.

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PIPE THAT IS PIPE

THIS IS OUR BRAND

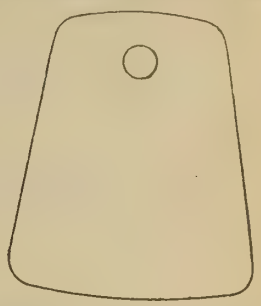
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

The Bowmanville Foundry Co., Limited

BOWMANVILLE, ONT.

Manufacturers of

Stove and Piano Trimmings,
Fine Grey iron Castings,
Pressed Steel Work,
Brass, Copper, Nickel-Plating.

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

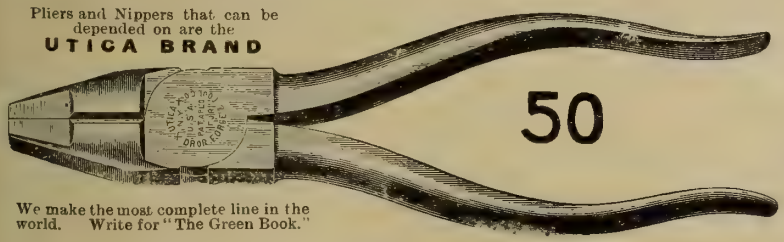
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American Shearer Mfg. Co., Nashua, N.H., USA

Wiebusch & Hilger, [illegible] representatives, 9-15 Murray Street.

No. 50. Standard Side-Cutting Plier

Pliers and Nippers that can be depended on are the UTICA BRAND



INSIST on having the GENUINE

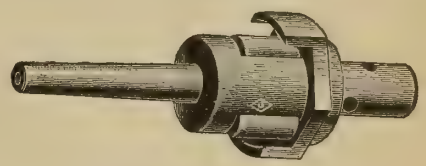
If your dealer has not got them, write us

Our tools are GUARANTEED

We make the most complete line in the world. Write for "The Green Book."

Factory: Utica, N. Y.
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UTICA DROP FORGE & TOOL CO.
296 Broadway, New York, U.S.A.



JARDINE'S

Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.

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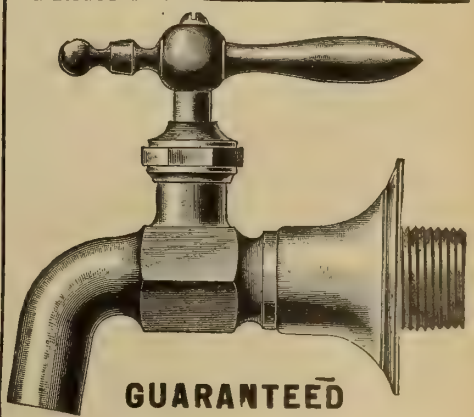
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No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

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POSITIVELY NON-HAMMERING

PATENTED and MADE BY

GLAUBER, CLEVELAND, OHIO, U.S.A.

"SWORD & TORCH"

Price low consistent with quality

INSIST upon having this brand. NONE better, many worse

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TRY

THIS  BRAND

QUALITY and FAIR PRICES
ARE OUR STANDARDS

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

July 14, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$32 00 $33 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
I Allaway's Best"—Standard Quality.	
I C	4 50
I X	5 50
X	6 50

X Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 25	7 50
" " 26 "	7 75	8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M." Self-hardening		0 50
"J" quality		0 18
"I" "		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	011
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
" ¼ "			5 60
" 5-16 "			4 45
" ⅜ "			3 85
" 7-16 "			3 70
" ½ "			3 55
" 9-16 "			3 45
" ⅝ "			3 35
" ¾ "			3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 25	16 50

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 41½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks		7 00
Part casks		7 25

LEAD.

Imported Pig, per 100 lb.	3 50	3 75
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 06½
Sheets, 3 to 6 lb. "		0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	0 09½

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality		Special
4 and 4½ ft.	13 in. rolled rim		$18 00	16 00
5 feet		"	19 00	17 00
5½ "		"	20 50	18 50
6 "		"	23 25	21 25
Plate E II				
4½ feet	2½ in.	"	16 75	14 75
5 "	2½	"	17 50	15 50
5½ "	2½	"	19 00	17 00
Plate 123 E, lavatories		1st quality		8 90
" 123 E, "		2nd "		7 50
" 127 E, "		1st "		5 70
" 127 E, "		2nd "		4 80
" 128 E, "		1st "		5 60
" 128 E, "		2nd "		4 70
" 129 E, "		1st "		5 40
" 129 E, "		2nd "		4 50
Sinks 18 x 30 in flat rim, A quality				2 45
" " " " B "				00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 77
1¼ "	7 88
1½ "	9 45
2 "	12 60

Malleable Fittings—Canadian discount 35 per cent. American discount 20 to 25 per cent

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c.
Cushion work, discount 50 per cent.
Fuller work, discount 65 per cent.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 55 per cent. With in lots of 2 dozen and over, an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I. B. B. M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " " "	1 90
No .7 Fuller's "	2 20
No. 4½, " "	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $31; 5 and 10 per cent. discount.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 55 per cent	
" " iron " " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

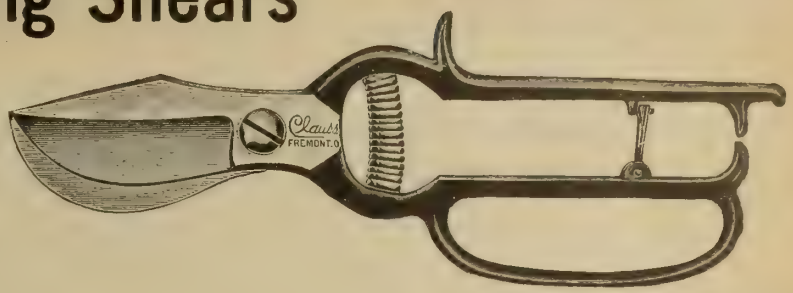
Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20,00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand Pruning Shears

Fully Warranted

Our Plain Pruning Shear is of the very best our secret process of manufacturing can produce. There is no question as to the quality, which is unsurpassed.

File Handles and Finely Polished Blades. Ask for Discounts.



Clauss Shear Co., 169 Spadina Ave., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 17½
Wiping	0 15½
Refined	0 16½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.
Pure	5 75
No. 1	5 25
No. 2	5 05
No. 3	4 12½
No. 4	4 05
Munro's Select Flake White	5 50
Elephant and Decorators' Pure	5 50
Tiger brand, pure	5 75
Decorators' Special for exterior use	5 00
Monarch	5 75
Decorator's Pure	5 50
Essex Genuine	5 00
Sterling Pure	5 75
Island City Pure	5 75
Ramsay's Pure Lead	5 50 5 75
Ramsay's Exterior	5 25 5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75

Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07¾	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	$ 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 66

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

LOST

A good order through not carrying a stock of **Paterson's Wire Edged Ready Roofing** and **Building Papers.**

Such has been the experience of many Hardware Merchants before they commenced handling goods of our manufacture.

We make the material your customers want, and it won't pay you to handle any other kind.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.	
Arcade	70	" 10	"
Kearney & Foot	70	" 10	"
Disston's	70	" 10	"
American	70	" 10	"
J. Barton Smith	70	" 10	"
McClellan	70	" 10	"
Eagle	70	" 10	"
Nicholson, 60 and 10 to 60, 10 and 5			"
Royal	80		"
Globe	70 to 75		"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz. pairs.
Steel barn door	8 00 10 00
Stearns, 4-inch	.... 4 50
" 5-inch	.... 6 00
Zenith	.... 9 00
Lane's covered—	
No. 11, 5-foot run	.... 8 40
No. 11½, 10-foot run	.... 10 80
No. 12, 10-foot run	.... 12 60
No. 14, 15-foot run	.... 21 00
Steel, covered	4 00 11 00
" track, 1 x 3-16 in(100 ft)	.... 3 75
" " 1½ x 3-16 in(100 ft)	.... 4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up		3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned c 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval / Head
M.R.M. Co. brand, 55 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut		$ 8 50 to $11 00
Star, 9 -in.	"	6 00 to 6 50
Daisy, 8 -in.	"	5 25 to 5 75
Philadelphia, 7½-in.	"	6 00 to 7 50
Woodyatt, 10½ in., ball bearing		13 25 to 18 00
Grass Boxes		1 75 to 2 00
King Edw'd 12-in., 14-in. cut		9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ..... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire.
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	2 50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent.

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

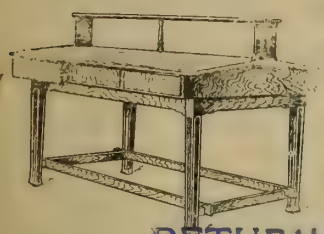
PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

RETURNED JUL 19 1905

STANDING DESKS

AND EVERY OTHER KIND OF DESKS



Our Double Standing Desk

Our line of Standing Desks are without exception the best and strongest Standing Desks in America. Big talk! You're right it is, and merited, too; give us your inspection and you'll decide likewise. Made in 5 ft., 6 ft., 7 ft., 8 ft., double and single sizes, in ¼ Oak, Plain Oak and Elm. Write for Catalogue.

RETURNED JUL 19 1905

THE OFFICE SPECIALTY MFG. CO., LIMITED

Factories: NEWMARKET. **97-105 Wellington St. West, (near York), TORONTO**

To Owner cut soon 38 Page 13

PUNCHES.

Saddlers' .....per doz.	1 00	85
Conductor's..... "	3 00	1 50
Tinners, solid.....per set	....	1 75
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0 11	
Pure Manilla	0 14½	
"British" Manilla	0 11	
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea	0 16	
Jute	0 09	
Lath Yarn, single	0 10	
" double	0 10½	
Sisal bed cord, 48 feet.....per doz.	0 65	
" " 60 feet ..... "	0 80	
" " 72 feet..... "	0 95	

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75	
" No. 50, nickle-plated, "	0 80	
Common plain	4 50	
" plated	5 50	

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete.....each 0 75 2 75
" frame only.....each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" " common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid "	1 50	1 75

SASH CORD.

Per lb.....	0 28	0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	....	0 85
" 18 x 30	....	1 00
" 18 x 36	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	...	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.		0 28	0 60
Hindostan ..... "		0 06	0 07
" slip ..... "		0 09	0 09
Labrador..... ..... "		....	0 13
" Axe..... "		....	0 15
Turkey ..... "		....	0 50
Arkansas..... "		....	1 50
Water-of-Ayr ..... "		....	0 10
Scythe .....per gross	3 50		5 00
Grind, 40 to 200 lb., per ton....	....		25 00
" under 40 lb., "	....		28 00
" 200 lb. and over	....		31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	35
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German .....per doz. 4 75 6 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	0 13½
Brook's	0 12½
Pipe Vise, Hinge, No. 1	3 50
" " " No. 2	5 50
Saw Vise	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 4 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15 —No. 9, $2.55 — No. 10, $3.20 to $3.20 —No. 11, $3.25 to $3 25 — No. 12, $2.65 —No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17 $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots. fo

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

— ALUMINUM —
THREE-GALLON TEA POT

YOU WANT THE BEST



ALSO MADE IN
6, 9 AND 12 CUP SIZES

WE MAKE THE BEST

Aluminum utensils take and retain the heat better than any other kind.

Aluminum does not rust, no danger of poison, does not taste the coffee, and can be set on the stove without any detrimental effects to either the coffee or the pot.

MADE BY

CANADIAN ALUMINUM WORKS, LIMITED

Catalogue on Application.

CHAMBLY CANTON, QUE.

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Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co. Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Thompson, B. & S. H. & Co., Montreal.

Pottery.
Foster Pottery Co., Hamilton, Ont.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.
Page Wire Fence Co., Walkerville, Ont.

Refrigerators.
Davidson, Thos., Mfg. Co., Montreal.
Fabien, C. P., Montreal
Sanderson-Harold Co., Paris, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Disston, Henry, & Sons, Philadelphia, Pa.
Lewis Bros., Montreal.
Shurly & Dietrich, Galt, Ont.

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screen Doors and Windows.
Sanderson-Harold Co., Paris, Ont.

Screws, Nuts, Bolts.
Acme Lathe Products Co., Manchester
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co. Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc
Bowmanville Foundry Co., Bowmanville.
Burrow, Stewart & Milne Co., Hamilton.
Canadian Heating & Ventilating Co., Owen Sound.
Clare Bros., & Co, Preston, Ont.
Dangler Stove Co., Cleveland, Ohio.
Davidson, Thos., Mfg. Co., Montreal.
Finlay Bros., Carleton Place, Ont.
Gies, P., Berlin, Ont.
Gurney Foundry Co., Toronto.
Kemp Mnfg. Co., Toronto.
McClary Mfg. Co., London.
Moore, D. C., Hamilton, Ont.
Pease-Waldon Co., Winnipeg.
Record Foundry Co. Moncton & Montreal
Ross, J. A., Winnipeg, Man
Smart, Jas., Mfg. Co., Brockville, Ont.
Stewart, James, Mfg. Co., Woodstock.
Taylor-Forbes Co., Guelph, Ont.
Telephone City Stores, Brantford, Ont.
Walker Steel Range Co., Grimsby, Ont
Wright, E. T., & Co., Hamilton.

Tacks.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Telephones.
Bell Telephone Co. of Canada.

Traps
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Staunton's Limited, Toronto.

Washing Machines, etc
Boss Washing Machine Co., Cincinnati, O.
Connor, J. H., & Son, Ottawa.
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.
Voss Bros. Mfg. Co., Davenport, Iowa.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Caverhill, Lea mont & Co., Montreal.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

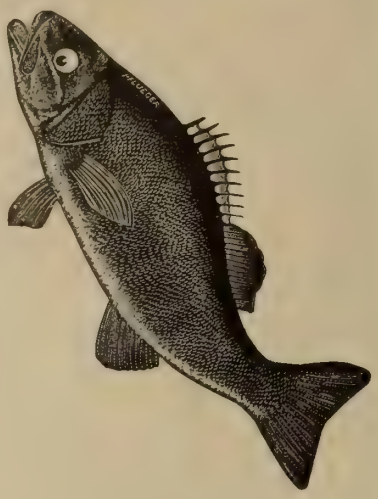
Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
McGregor - Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
United Factories, Toronto.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.
Royal Paper Mills Co., East Angus, Que.

PFLUEGER'S
Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines. Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio



DELIGHTED

Bridget will be delighted with the Russwin Food Cutter. It makes her work easier, pleasanter—gives widest scope to her skill, and does most in least time. Just try it. For sale everywhere. Made by

RUSSELL & ERWIN MFG. CO.
NEW BRITAIN, CONN.

—FOR SALE BY—
The KENNEDY HARDWARE Co., Limited
49 Colborne St., TORONTO, Ont.

Want Ads.

In this paper cost 2 cents per word first insertion, 1 cent per word subsequent insertions. Contractions count as one word, but five figures (such as $1,000) may pass as one word. Cash remittance to cover cost **must in all cases** accompany orders, otherwise we cannot insert the advertisement. When replies come in our care 5 cents additional must be included for forwarding same. Many large business deals have been brought about through advertisements of 20 or 30 words. Clerks can be secured, articles sold and exchanged, at small expenditure.

MacLEAN PUBLISHING CO., Limited
Montreal and Toronto.

...ESTABLISHED 1849...

BRADSTREET'S

Capital and Surplus, $1,500,000. **Offices Throughout the Civilized World.**

Executive Offices: Nos. 346 and 348 Broadway, New York City, U.S.A.

THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker o mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying and promulgating information no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

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HALIFAX, N.S. HAMILTON, ONT. LONDON, ONT. MONTREAL, QUE.
OTTAWA, ONT. QUEBEC, QUE. ST. JOHN, N.B. TORONTO, ONT.
VANCOUVER, B.C. WINNIPEG, MAN.

THOS. C. IRVING, Gen. Man. Western Canada. Toronto.

WALKER'S QUICK AND EASY ICE PICKS



SEVERAL OTHER STYLES ILLUSTRATED IN OUR NEW CATALOGUE

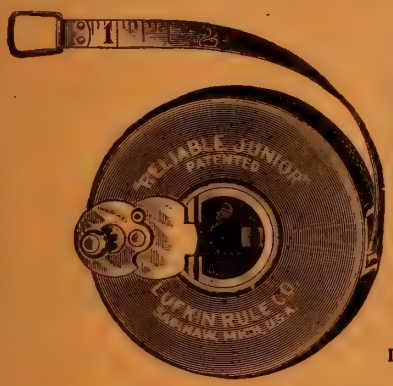
MADE OF CRUCIBLE STEEL, OIL TEMPERED, ANTI-RUST, NICKEL PLATED.
WILL NOT BEND, BREAK OR RUST. EACH ONE TESTED AND GUARANTEED.

ERIE SPECIALTY COMPANY, ERIE, PA.

IRON STEEL

Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

London Rolling Mill Co.
Limited,
LONDON, CANADA.



LUFKIN MEASURING TAPES

Steel, Metallic, Linen, Pocket, Ass Skin, Pat. Leather, Bend Leather, Etc.

ARE THE BEST AND MOST POPULAR TAPES IN THE WORLD.
YOUR STOCK IS NOT COMPLETE WITHOUT THEM.

LUFKIN RULE CO., Saginaw, Mich, U.S.A.

London Office and Warehouse—48 Lime St. New York City Branch—280 Broadway.

For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.



ONEIDA COMMUNITY'S WELDLESS COW TIES.

Illustration shows the
NIAGARA WIRE LINK
OPEN RING TYPE

Also made in CLOSED RING, THREE CHAIN and DOMINION (or "Short") TYPES.

Oneida Community Cow Ties can be had of all the leading jobbers. We invite correspondence where any difficulty is experienced in obtaining our goods.

ONEIDA COMMUNITY, Limited
NIAGARA FALLS, ONT.

FIBRE

WE ARE MANUFACTURERS OF
FIBRE

Our Specialties are
Fibres, Glazed Hardware and No. 1 Manilla.

ROYAL PAPER MILLS CO.,
EAST ANGUS, QUE.

Est. 1868 Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve Medals



Awarded
By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

The Fisk
Detachable Motor Tire

A tire that's firmly fastened to the rim in a simple and sensible way, so that you can attach it or remove it with an ordinary wrench, quickly and easily.

Even with the tire flat, you can travel on it safely—and not only that, but because of its peculiar construction you can do it with the least possible risk of injury to the tire.

There's more wear and less trouble with this tire than with any other on the market—and it's safe.

Manufactured in Canada solely by

THE GUTTA PERCHA & RUBBER MFG. CO.

OF TORONTO, LIMITED.

Head Offices:
47 YONGE STREET, TORONTO
Branches—MONTREAL, WINNIPEG, VANCOUVER.

SHEET ZINC
ZINC SPELTER
ANTIMONY
INGOT TIN
INGOT COPPER

Prices from Stock or to import on application to

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

AGENTS:
United States Steel Products Export Co.
American Sheet and Tinplate Department

SADLER & HAWORTH

LEATHER BELTING

"Crown Brand" Lace Leather

As manufacturers of **Leather Belting,** it is our wish to supply customers with a **Lace Leather** that will be found satisfactory in every particular. To all users of **Belting,** therefore, we offer our **"Crown Brand" Lace Leather,** a strong, smooth, beautifully finished article at a moderate price.

Montreal, Toronto.

If You Don't Handle the Pease Economy Heaters

Why Not ?

HAS it occurred to you that it would be easiest to sell a Heater that the great mass of our people believe to be the Best ?

Has it occurred to you that such a Heater will afford you a larger margin of profit on your contracts than the cheap kind ?

Is it not a fact that if you sell your customer a second grade Heater you cannot reasonably expect that such a sale will do much in the way of increasing your business in the case of the other goods that customer may need ?

There is no need in the line of Heating apparatus that the Pease Company cannot fill. Your customer may prefer Steam, Hot Water, Combination or Warm Air, and you can in each case fill his requirements with a first-class Heater from the splendid **Pease Line.**

For twenty years the Pease Company have been constantly in the front in the best interests of the Heating Trade —First Class Goods Only—Good Work Only—a Fair Profit for the dealers. Is this not the only policy that is likely to increase your business, and incidentally, your profits ?

Let us hear from you—a Post Card will answer—send it to-day.

Pease Foundry Co., Limited,

Toronto

Established 1854

CAVERHILL, LEARMONT & CO.

MONTREAL.

Shelf Hardware, Heavy Hardware Metals,
Sporting Goods, Guns, Rifles and Ammunition
Hardware Specialties.



A CORNER IN THE WINNIPEG SAMPLE-ROOM

WE CARRY A COMPLETE STOCK

HEAVY HARDWARE AND METALS

WINNIPEG

Mail Orders Receive PROMPT SHIPMENT and our LOWEST PRICES

CAVERHILL, LEARMONT & CO.

CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, JULY 22, 1905 NO. 29

E. M. BICKINSON'S

CARVERS
CASED GOODS
TABLE CUTLERY



BUTCHERS'
HUNTING &
POCKET KNIVES

CUTLERY.

FOR SALE BY LEADING WHOLESALE HOUSES.

JUST AS GOOD AS
"QUEEN'S HEAD"

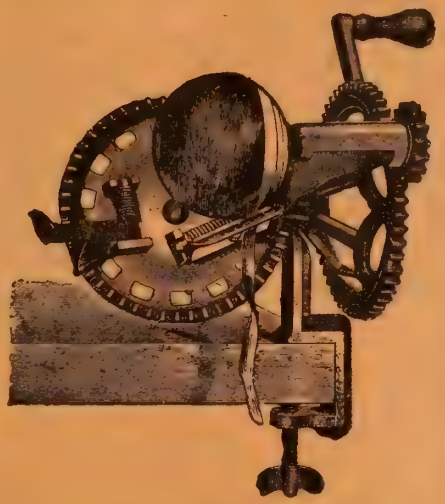
is the cheapest advertising we get.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL, Managers Canadian Branch

Hardwaremen!

This is the season for

APPLE PARERS



The Hudson Pattern is the one for you to handle. Why? Because, first, we are the only manufacturers of **Apple Parers** in Canada, and, second, it is the best model in the world. Easy to say. Just as easy to prove. Compare the material in **The Hudson Pattern** with the material in any other pattern that you know of—compare the "Hudson" with any other for simplicity, durability, ease of operation—compare it for price. Every machine made with scrupulous care; hence, the guarantee. See your jobber at once, or write direct to us for quotations. We can ship any quantity on short notice.

Taylor-Forbes Company
LIMITED.
Montreal Branch: 9 De Bresoles St.
GUELPH, CANADA.
The Largest Manufacturers of Hardware in Canada

Classified List of Advertisements on Page 63.

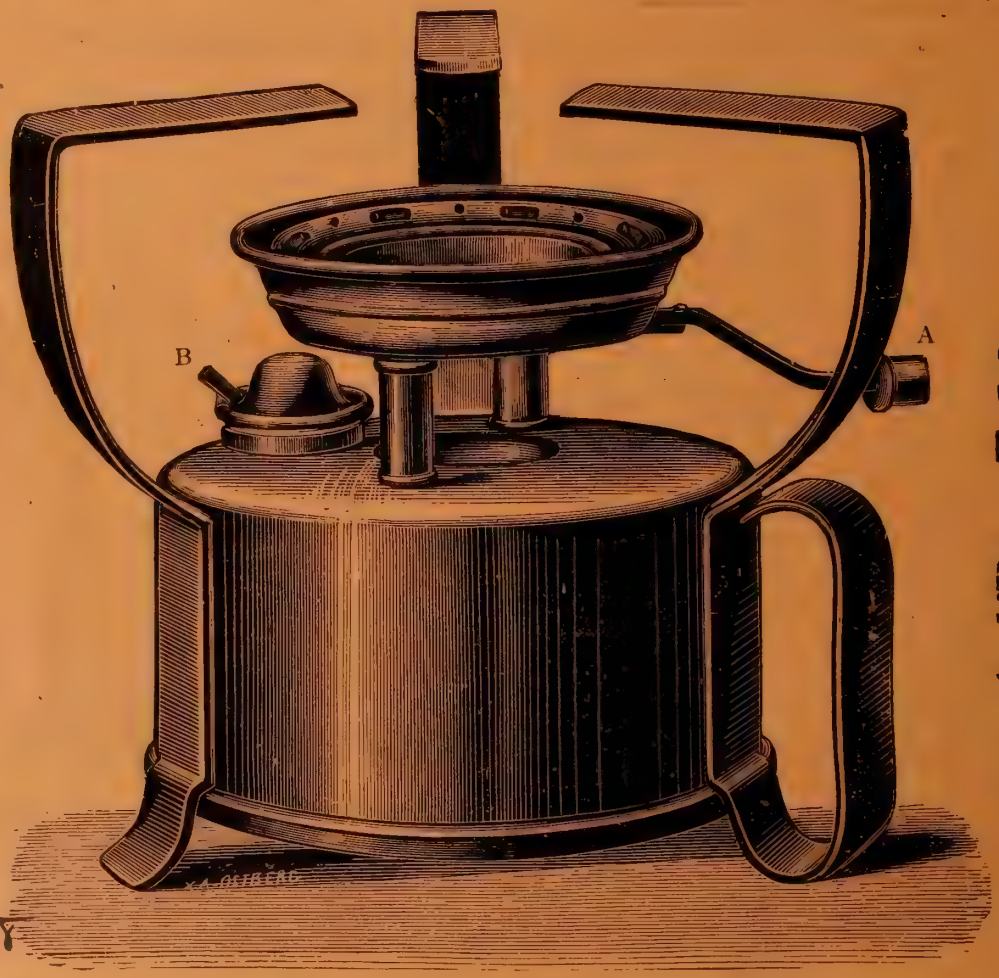
THE REFORM SPIRIT GAS STOVE

HAS THE FOLLOWING ADVANTAGES:

It boils more quickly than any other stove.
It is absolutely safe, as explosions cannot occur.
The consumption of spirits is extremely small.
The wick does not char and so never requires renewal.

SPIRIT GAS STOVES

without wicks, and absolutely safe.



SPIRIT GAS STOVES

in small and large sizes, for sick rooms and travelling purposes.

RETURNED
JUL 22 1905
To Owner.
Cut Book 38
Page 23.

Alcohol Stoves

WRITE FOR PRICES

RICE LEWIS & SON

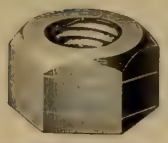
LIMITED

TORONTO.

PATENT

LOCK-NUT.





BAYLISS, JONES AND BAYLISS, Ld.

ARE SOLE OWNERS AND MANUFACTURERS



Made from ¼ in. to 2 ins.

SAMPLE NUT AND COMPLETE LIST MAILED FREE.

Also Manufacturers of BOLTS, NUTS, PATENT TIE BARS, RAILWAY AND TRAMWAY FASTENINGS, IRON AND WIRE FENCING, HURDLES, RAILING, GATES, Etc.

VICTORIA WORKS:— WOLVERHAMPTON, (ENGLAND).

LONDON OFFICES AND SHOWROOMS: 139 and 141 CANNON ST., E.C.

Portland Cement
Ready Roofing
3 ply
Saturated Tarred Felt
7, 10, 16 oz.
(RED CROSS BRAND)
Dry and Tarred Sheeting
Roofing Cement
Block Pitch

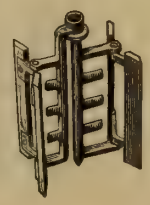
Large Stock. Close Prices.

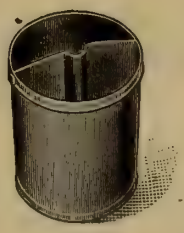
THOS. BIRKETT & SON CO., LIMITED

WHOLESALE HARDWARE MERCHANTS

OTTAWA, ONT.







"AMERICAN" (2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

"LIGHTNING" "GEM" "BLIZZARD"



THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.

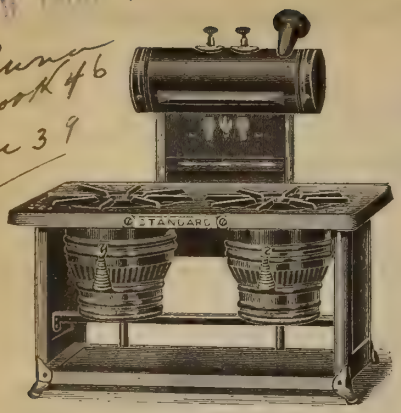






"LIGHTNING" ICE CHIPPERS "CROWN" "GEM" ICE SHAVE

RETURNED
FEB - 9 1906



A Catalogue showing a full line of these stoves mailed on application

The "Standard" Blue Flame Wickless
COAL OIL AND GASOLINE STOVES

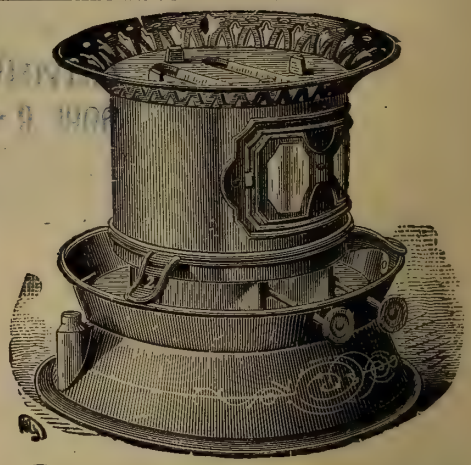
Absolutely Safe and Easy to Operate
Lights Instantly and Cooks Quickly

Simply turn on the oil and apply the match

"Standard" Safety Gasoline Stoves are constructed according to the safety requirements of the National Board of Fire Underwriters, and are on their list of "Permitted Stoves"

THE

"PRINCESS" COAL OIL STOVE



(TWO BURNERS)

A Good Serviceable Stove and a Powerful Cooker, at a very low price.

We have also in stock the "Summer Girl," "Eagle" and German Oil Stoves, Extension Tops, Wicks, etc. Write for prices.

The Thos. Davidson M'f'g Co., Limited
MONTREAL

GALVANIZED SHEETS

"Gordon Crown" "P.F. Crown"

None Better **Lots Worse**

Enquiries solicited for shipment from stock or for import . . . .

M. & L. Samuel, Benjamin & Co.
503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

P. P. G.

These initials stand for the "Caption" **PUSH PROFITABLE GOODS.**

You will make a big difference in the character of your sales if you take this for your motto.

Give your time and attention to these goods which bring in an adequate profit.

Pick out the seasonable lines in which you can make some money and let them be your leaders.

Advertise them—Display them—Talk about them—Stimulate the demand for them.

You can wonderfully increase your profits by constantly pushing this class of goods.

(Hardware Hints)

Hurd's Axes are sold at a profit.
We will not supply them to price cutters.
If you want the agency for your town write to us.
They do not cost any more than inferior grades.
Why not Have the Best?

LEWIS BROS., Limited

Shelf Hardware

OTTAWA
TORONTO
VANCOUVER
CALGARY

IMPORTERS AND



DISTRIBUTERS

Heavy Hardware

Always address Head Office at

MONTREAL

RETURNED
JUL 22 190
Cut Book 80
Page 24
To Dom
Adv

Best on the Market

FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

IN CASES

Table Cutlery, etc.

SOLD BY

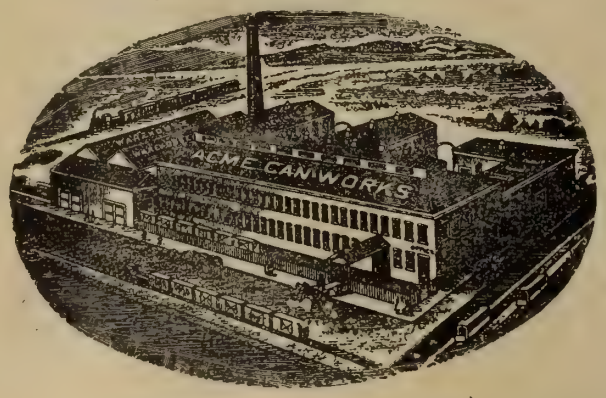
E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.



When in Need of Cans, Serve Your Best Interests and Consult Us

Acme Can Works

make the largest assortment of any factory in America of **TIN CANS** by the latest up-to-gate automatic machinery.

We are the only makers in Canada of
KEY-OPENING MEAT CANS, POULTRY CANS.
They are our specialties.

Manufacturers for Canada of
Jewett's Self-Heating Can.

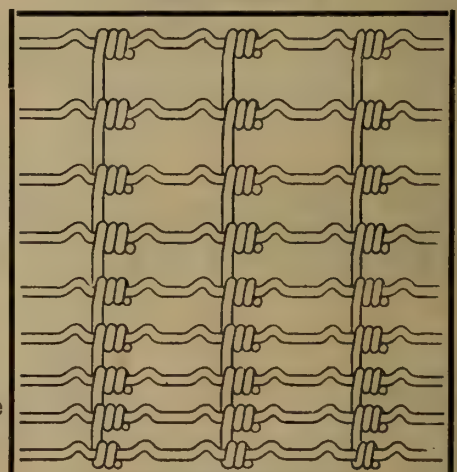
We solicit inquiries for prices on
Baking Powder, Oil, Syrup, Lye, Paint, Varnish, Condensed Milk, Poultry, Fruit, Vegetable } **Cans** **Lard, Syrup, Butter** } **Pails**

ACME CAN WORKS
Ontario Street East, - - MONTREAL, P.Q.

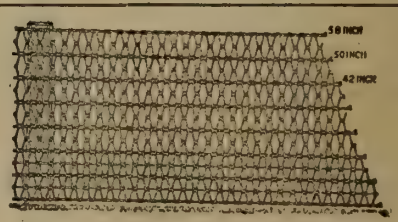
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



Ellwood Field and Lawn Fence

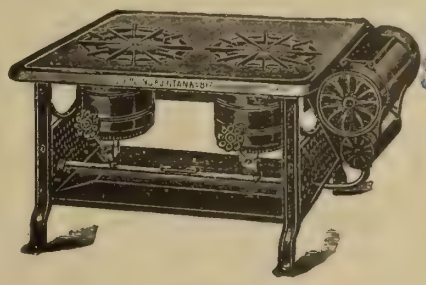
We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us
THE CANADIAN STEEL AND WIRE CO., LIMITED
WINNIPEG, MAN. HAMILTON, ONT

BLUE FLAME COAL OIL STOVES

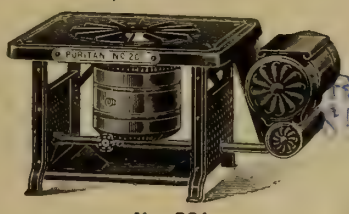


No. 203



No. 812

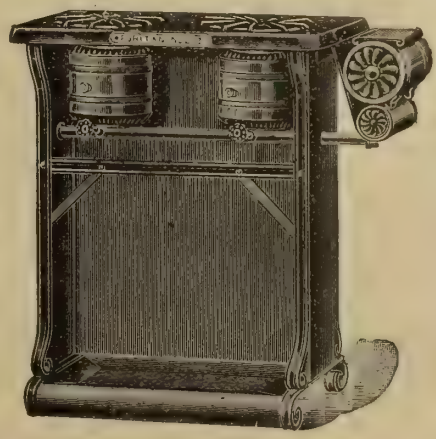
The best wickless stove on the market. Simple in construction, perfect in operation, cheaper than gas, coal, wood or gasoline, and much cooler and more satisfactory to work with. Will do any kind of cooking. Just the thing for kitchen, camp, nursery and bath-room. Special features, such as the improved vaporizing bowl, and specially constructed top grates, covered by strong patents. Every stove guaranteed.



No. 201

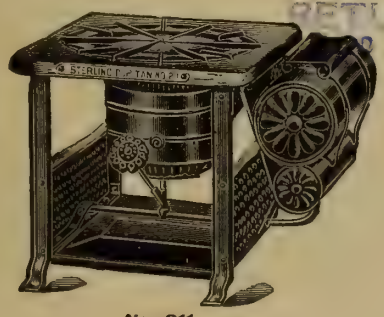


No. 202



No. 212

Nos. 811, 812, 813, are "Sterling-Puritan." Nos 201, 202, 203, 212, are "Puritan," which is quite similar in construction, the principal difference being in the construction of the valve. The "Puritan" is cheaper. We stock this stove and Nos. 811, 812, 813, 852, 853, 844, and 845 of "Sterling-Puritan."



No. 811



No. 813

Write for Particulars

FOR SALE BY

The Hobbs Hardware Co., Limited

London, - - Ontario

Manufactured by The Cleveland Foundry Co., Cleveland, Ohio

RAZORS

IN 1904 RECEIVED

THAT ARE RAZORS

GOLD MEDAL

WILKINSON'S RAZORS are manufactured from the finest of **SWORD STEEL.**
GOOD QUALITY in the past has won for them a **SPLENDID REPUTATION.**
THIS REPUTATION will, in the future, greatly **INCREASE SALES.**

MAKE INQUIRIES of our representative before purchasing.

WILKINSON SWORD CO., LONDON, ENG.

R. G. HOW, Sole Representative, 204 St. James Street, MONTREAL. LIMITED

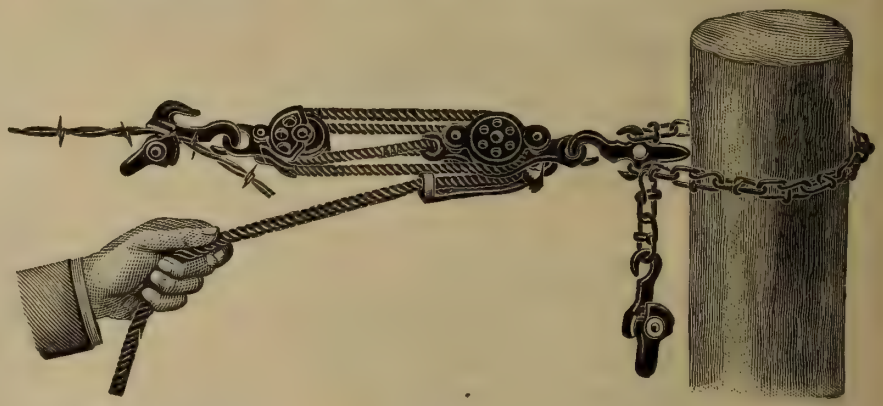
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



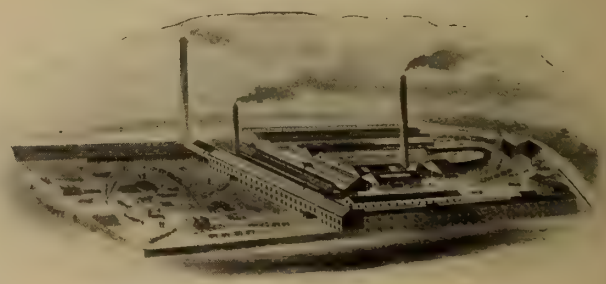
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

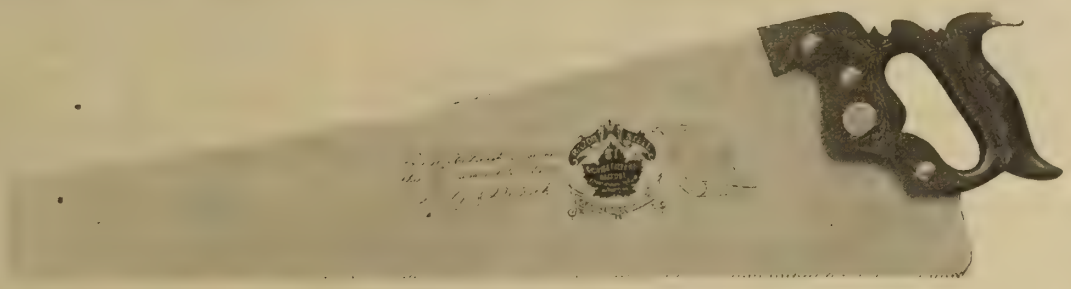
GALVANIZED SHEETS

IN ENGLAND

The sheets made by John Summers & Sons, Ltd., in one week, if laid end to end, would measure over 400 miles in length, or equal to the whole length of England.

Agent: F. Hankin, Montreal

Canada Leads the World in the Manufacture of HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.

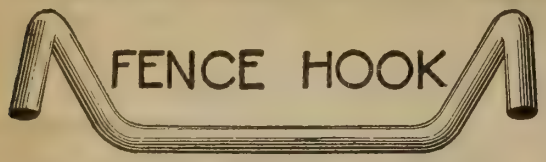


No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

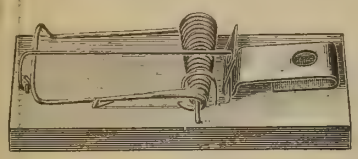
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.

LITITZ, PA.

GLAZIERS' DIAMONDS

Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

Established 181

ALSO
Lead Vices,
Carbon Tools,
Etc., Etc.,



Agents for Canada: A. Ramsay & Son Company, Montreal

GLAZIERS' DIAMONDS



Ahead of all others in quality and workmanship. If sparks of fine quality, set by experts, are what you require, buy Diamonds of A. Shaw & Son's make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 155 Chambers St
NEWARK, N.J., U.S.A.

SEYMOUR SHEARS

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

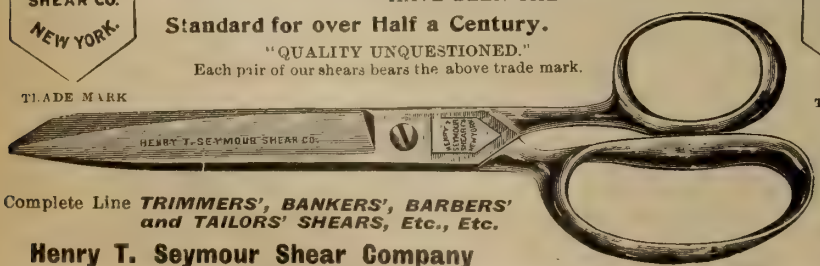
HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK



Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

TRADE WITH ENGLAND

Every Canadian who wishes to trade successfully with the Old Country should read

"Commercial Intelligence"

(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)

Moreover, regular subscribers are allowed to advertise without charge in the paper. See the rules.

CONNOR'S O. K. ROTARY WASHER.



No experiment, but a trade winner. Dealers who handle this washer say they sell easier than any other. Write for our catalogue and price list.

J. H. CONNOR & SON, LTD., Manufacturers OTTAWA

Buy the Best.



HERCULES

Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.

MAPLE LEAF

STITCHED COTTON DUCK

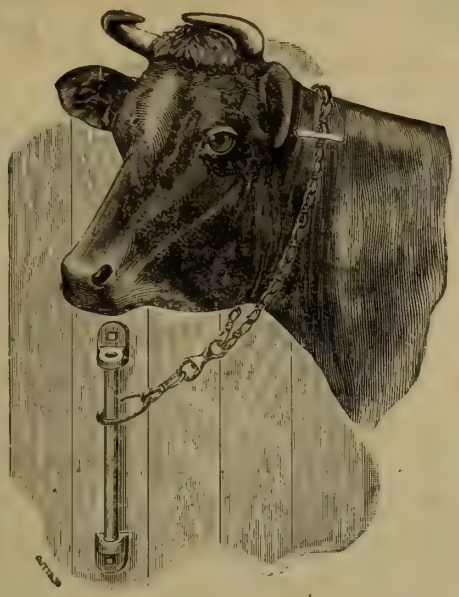
BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

GREENING'S PATENT

GREENING'S



COW TIES

These cow ties have stood the test for years.

Undoubtedly the best and strongest on the market.

It will pay you to handle only the best.

A complete line of all sizes ready for shipment.

FOR SALE BY ALL JOBBERS

THE B. GREENING WIRE CO.
LIMITED

HAMILTON, ONT. MONTREAL, QUE.

Dillon Hinge-Stay —Fence—



Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

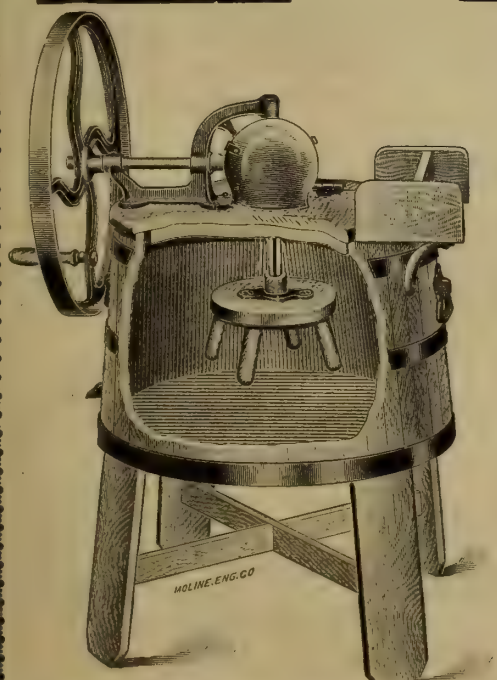
OWEN SOUND WIRE FENCE CO., LIMITED,

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) Montreal and Winnipeg

1905 Ocean Wave Washer



Accident Proof! Dust Proof!

SPECIAL FEATURES:

1st. Covered Gearing
which can be opened instantly to expose working mechanism.

2nd. Improved Dasher
We do not use **wooden** Dasher Pole.

3rd. Mechanical Movement Most Simple ever Constructed.

4th. The Best Seller
because it is more attractive than others

Sold to only one dealer in each town.
Trial Order will convince.
Write us.

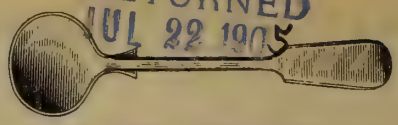
VOSS BROS. MFG. CO.——DAVENPORT, IOWA, U.S.A.

RETURNED JUL 22 1905



Mustard Spoon, Fiddle Pattern.

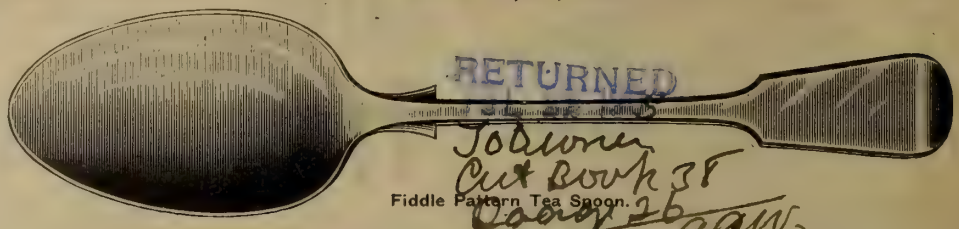
RETURNED JUL 22 1905



Salt Spoon, Fiddle Pattern.

F. & W.

They Look like Sterling Silver



Fiddle Pattern Tea Spoon.

RETURNED
Johnson
Cut Book 38
Copy 2b
Gain.

they are so heavily plated. For the same reason **they wear** like Sterling Silver. They are heavy, strong and full-size English make, Harrison Bros. & Howson. Remember the name.

We have the Fiddle Pattern, heavy style, in Gravy, Table, Dessert, Tea, Coffee, Egg, Mustard and Salt Spoons; Soup and Sauce Ladles; Table and Dessert Forks, and Sugar Tongs.

We especially recommend the line for hotels, steamboats and restaurants. Not too high priced for general sale. Our recommendation is based on **25 years' experience** with the line.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants, - - Montreal, Canada.

For Nearly a Century in the Hardware Trade.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
JR & S ALL THE ROUND JR & S
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



31520.—ENTREE DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE



31197.—E.P.N.S. CAKE BASKET

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

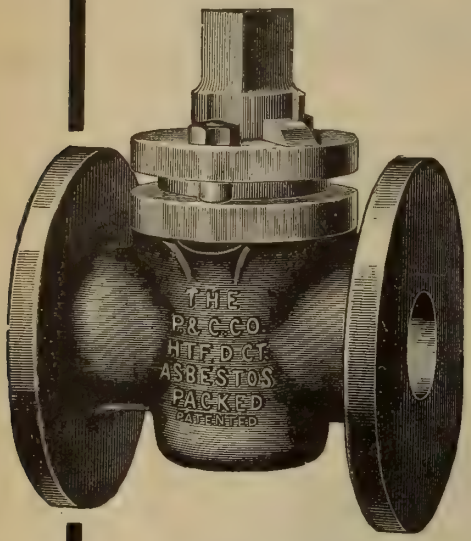
BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; F. H. ANDREWS & SON, Quebec, P.Q.; GEO. WOOD, London, Eng.

Look Out for Imitations

OF

"P & C" ASBESTOS PACKED COCKS



Imitation is the sincerest form of flattery.

There are several imitations of the Pratt & Cady Asbestos Packed Cock now being offered. They are called Asbestos Packed Cocks, but they are the same as all other imitations, i.e., NO GOOD.

Anybody can make an iron or brass Cock and pack it with asbestos and call it an Asbestos Packed Cock. But they can't make one that will last as long as the original Pratt & Cady, or one that will give the same amount of satisfaction. Our P & C Asbestos Packed Cocks are packed with a special preparation of asbestos, and a vulcabeston ring is used on the shoulder of the plug for top packing. These special formulas are known to us alone. When you put in a P & C Asbestos Packed Cock it lasts. When you put in an imitation it wire-draws and blows out. That's the difference. Look out for the P & C trade mark on every Cock you buy.

If your dealer can't supply you write us direct.

The Canadian Fairbanks Co., Ltd.

Montreal ***Toronto*** ***Vancouver*** ***Winnipeg***

KEMP'S SPRAYERS





The Deluge Sprayer can be supplied with either tin or copper reservoir, as required.

These Sprayers are unexcelled for spraying bushes, plants, potatoes, vines, also horses, cattle, etc.

We carry a large stock and can make prompt shipment.

Prices are low and we will be pleased to quote you.

KEMP MANUFACTURING GO., TORONTO, CANADA

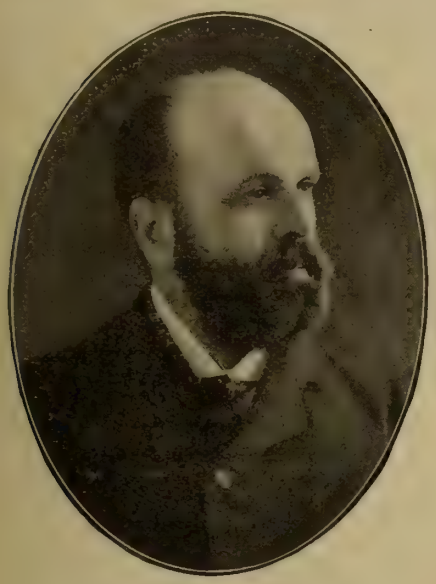
KEMP MFG. AND METAL CO., LIMITED,
McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

MARITIME WHOLESALE HARDWARE ASSOCIATION CONVENTION

SEVENTH annual convention of the above association was held in Digby, N.S., on July 12 and 13, and it proved to be one of the most successful meetings of the association.

The convention was held at The Pines,



John A. McAvity, St. John, N.B.

one of Digby's most modern hotels. A better place could not have been chosen. This fine hotel with its large verandahs and spacious rooms stands on a high hill overlooking the Bay of Fundy and giving a splendid view of the beautiful town of Digby.

Those present at the meeting were as follows:

Jas. Pender, of Jas. Pender & Co., St. John.

T. C. Lee, of W. H. Thorn & Co., St. John.

W. S. Fisher, of Emerson & Fisher, St. John.

John A. McAvity, of T. McAvity & Sons, St. John.

John Keeffe, of Jas. Robertson & Co., St. John.

John J. Foote, of the McClary Mfg. Co., St. John.

H. N. Coates, of the S. Hayward & Co., St. John.

E. K. Spinney, of E. K. Spinney & Co., Yarmouth.

A. W. Smith, of Geo. E. Smith & Co., Halifax.

W. S. Robertson, of Wm. Robertson & Son, Halifax.

J. L. Crowell of Wm. Robertson & Son, Halifax.

A. B. Wiswell, of A. M. Bell & Co., Halifax.

W. J. Stairs, jr., of Wm. Stairs, Son & Morrow, Halifax.

C. A. Sterns, of H. H. Fuller & Co., Halifax.

M. O. Crowell, of Crowell Bros. & Co., Halifax.

W. H. Sterns, of H. H. Fuller & Co., Halifax.

G. H. Conley, of Jenkins & Hardy, Toronto.

F. M. Alexander, of Hardware and Metal, Toronto.

The business meeting proved very interesting, and many lively discussions took place. The principal business which was the election of officers resulted as follows: President, Mr. John A. McAvity; vice-president, W. G. Robertson; Executive Committee—T. C. Lee, H. N. Coates, John J. Keeffe, M. O. Crowell, E. K. Spinney, W. H. Sterns. The secretary will be appointed by the Executive Committee in St. John, N.B.

It was much regretted that Mr. Weldon was unable to accept the nomination for office of president, but he has a worthy substitute in Mr. McAvity, who was the unanimous choice of the meeting. All reports were read and adopted, and the place of the next annual meeting was left to the executive to decide.

The retiring president, Mr. W. H. Sterns, made a brief speech, thanking the members for their loyal support in the past year. He said he had made his remarks at the executive meetings and would give the others a chance now and cut his speech very short.

The amusements of this convention were many, and a pleasant time was spent in the two days. The principal pleasures were bowling, billiards, tennis, buckboard drives, swimming, and in fact every form of amusement was indulged

---

John F. Foote, of the McClary Mfg. Co., acted as official photographer of the party.

Convention Notes.

One word describes the place of meeting—delightful!

Eighty-two in the shade, but nothing was drank but pink lemonade.

Mr. Weldon, the past vice-president, who could not be present owing to the press of business, was very much missed.

Some of the members took their annual Bay of Fundy bath to fortify themselves for the evening session.

Owing to Mr. Jas. Pender's modesty, he does not appear in the picture, but was much in evidence all the same.

Mr. W. S. Fisher was, as usual, one of the shining lights of the convention and had a smile for everybody.

The cheers were loud and long when Mr. McAvity was announced president for the coming year.

The McClary Mfg. Co., through their St. John representative, Mr. Foote, presented each member with a very handsome leather card case, which was very much appreciated.

When the band struck up on the boat, which brought the St. John contingent to Digby, some of the members imagined they were crossing the Boyne, but soon awoke to the fact that it was the Bay of Fundy, although it was the morning of July 12th.

A feature of the convention was that every merchant present was found to be not only a subscriber, but an interested reader of Hardware and Metal, some of the delegates subscribing for a number of copies for the use of the members of their staffs. F.M.A.



Maritime Wholesale Hardware Merchants at Digby, N.S.

CANADIAN MANUFACTURERS IN ENGLAND

By W. L. E.

No. 1—British Hospitality.

Birmingham, June 26.

BRITISH hospitality is proverbial for its magnificence. We have been in England a week and have learned to appreciate this from experience. Our voyage across the Atlantic was longer than we expected; but it was, perhaps, not an unfortunate thing. It fortified us for the round of pleasure which mine host, the London Chamber of Commerce, had provided for us. And we needed to be fortified. From Monday morning to Sunday night we were kept on the go.

* * *

The initial function was the presentation of our party of nearly three hundred to the King and Queen. This was really not a part of the original programme. It was not until our steamer was docked at Liverpool that this agreeable intelligence was announced to us. It was suggested by His Majesty and arranged for by Lord Strathcona, who appears to have the ear of King Edward, as well as that of a great many of the leading men of London, and especially of those engaged in trade and commerce. Lord Strathcona is doing a great work for Canada in Great Britain; and one does not discover this to the full until one comes into close contact with the merchant princes of London, as we have been during the past week.

* * *

But this is digressing from the main object of this letter, which is to speak of the hospitality of the business men of London, as exhibited in their treatment of the members of the Canadian Manufacturers' Association now touring Great Britain. The most optimistic of us had never dreamed of such entertainment. And had we dreamed it would probably have been accompanied by nightmare. But I do not know of anyone who experienced nightmare, for, to say nothing about the antidote of mal de mer that nearly every one but ourselves, of course, suffered, the London Chamber of Commerce, through Secretary Murray, were careful to see that with every feasting function there was an alternative function in the open air on land or river, with the result that all returned to their hotel each night tired, to fall so fast asleep that no nightmare on earth could trot fast enough to overtake them.

* * *

The graciousness and tact of the King were shown in an eminent degree at the Windsor function. Before proceeding to the castle we were driven to the Frogmore Mausoleum, where lie the remains of Albert and Victoria. Since the death of Victoria the mausoleum is only opened once a year, and that only for two hours, but at the King's command it was specially opened for the inspection of his Canadian subjects, as were also the magnificent royal gardens. The King and Queen received us at the foot of the main terrace at Windsor, and after each of us had made our best bow before them, His Majesty, who was dressed in grey frock suit and white tall hat, slowly approached our group, raised his hat and remarked: "I thank you very much. I welcome you to England. I welcome you especially to Windsor. I hope you will spend a happy day and return to your homes not too much fatigued after your long journey."

"God Save the King" and "three cheers for His Majesty" followed. Then refreshments were served in the orangery. And all returned to London delighted with our first function on British soil.

* * *

The British people in general, and the members of the London Chamber of Commerce in particular, possess the art of entertaining to a degree altogether unknown to us on the western hemisphere. When complimented they merely remark: "Oh, we're used to it. We've been entertaining for hundreds of years. But then we're only trying to repay the kindness you Canadians showed towards our delegates to the convention of the chambers of commerce of the empire two years ago."

* * *

But it was not only the entertainment that impressed us. There was the prearrangement. It was simply perfect. Secretary Murray and his staff labored unceasingly, and every function came off without a hitch. Mr. Thomas F. Blackwell, the president of the London Chamber of Commerce, was equally solicitous. The delegates are no more likely to forget the indefatigable labors of these gentlemen than they are the sights and experiences of their British tour. And the pre-arrangement of our tour in Great Britain is not confined to the visit to London. Secretary Murray also arranged the provincial tour of two weeks, upon which we are starting to-morrow (Monday).

No. 2—Provincial Tour.

London, July 8, 1905.

We have just ended the first week of our provincial tour. We have visited in turn Walsall, Birmingham, Sheffield, Leeds and Bradford, and in each place we were accorded the heartiest kind of receptions. Nothing was too good for the Canadians. And it was significant that while the masses cheered, it was the business men who made the pre-arrangements for our entertainment. They were interested in Canada and its trade, and eager for information in regard thereto.

* * *

The manufacturers and merchants of Great Britain are not unconcerned about Canadian trade. On the contrary, they are most solicitous. The question with them is how to get it. Business is business with them; but they are by no means devoid of sentiment. They want to be on closer terms with us politically and commercially, because the people of Great Britain and of Canada are brothers. There is the utmost friendliness towards the United States, and it is evident that any little remark of unfriendly criticism of that country displeases them, but the people of Great Britain consider the relationship with Canada as much closer. "The people of the United States," said a prominent speaker at one of our functions, "are our cousins, but Canadians are our own kith and kin. They are our brothers." And the remark was applauded to the echo.

* * *

The reception we secured at Walsall was unique. The town has a population of about 90,000, and every soul seemed to have turned out to see us. When we arrived at the station the streets from there to the Town Hall were literally packed with men and women and children, and the police had some difficulty in getting us elbow room. The business men, as represented by the Chamber of Commerce, were not so demonstrative, but they exhibited their cordiality, first by a reception, secondly by a substantial luncheon, and thirdly by throwing open their factories and workshops to our inspection.

* * *

Walsall is famous for its manufactures of leather goods, souvenirs of which many of our party brought away with them; but it has iron and steel and clothing industries of no mean order. Walsall is an old town. Indeed, its citizens boast that it was born before Birmingham; and as proof of this relate how letters were once addressed "Birmingham, near Walsall." But it appears that when the railway age dawned, the men of power in Walsall would not allow the iron horse to enter their gates. The beauty of the town would be marred, and the lives of its citizens endangered. It took a later generation to correct this; but in the meantime Birmingham had got the start—and kept it.

* * *

From Walsall to Birmingham is only a step, and before we had forgotten the warm good-bye hand shake of the business men of the one city we were in the warm embrace of the business men of the other. The function at which we were guests was, of course, the luncheon

WIRE NAILS
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tendered by the Chamber of Commerce, the centre of attraction being, of course, the speech of the Right Hon. Joseph Chamberlain, whom President George so aptly described as the best Colonial Secretary Great Britain has ever had. A great deal has recently been heard about Mr. Chamberlain's health, but in neither manner nor matter did he exhibit any loss of vital force. The speech was tactful and masterly, and in the Canadians present Mr. Chamberlain found a sympathetic audience. As a speech, it was the best we have heard since we landed in Great Britain.

* * *

After listening to Mr. Chamberlain's address we entrained for Bournville, the famous model village in connection with the cocoa and chocolate works of Cadbury Brothers. And it is a model village. Each workman's home is a delightful little villa, ivy and rose covered, and surrounded by pretty and well-kept gardens, all of which are rented at a low rate. At one time the workmen were allowed to purchase their homes, but speculators took advantage of this to the detriment of all concerned—except the speculators, of course. This put an end to the home-purchasing scheme. The village is now managed by a trust board.

* * *

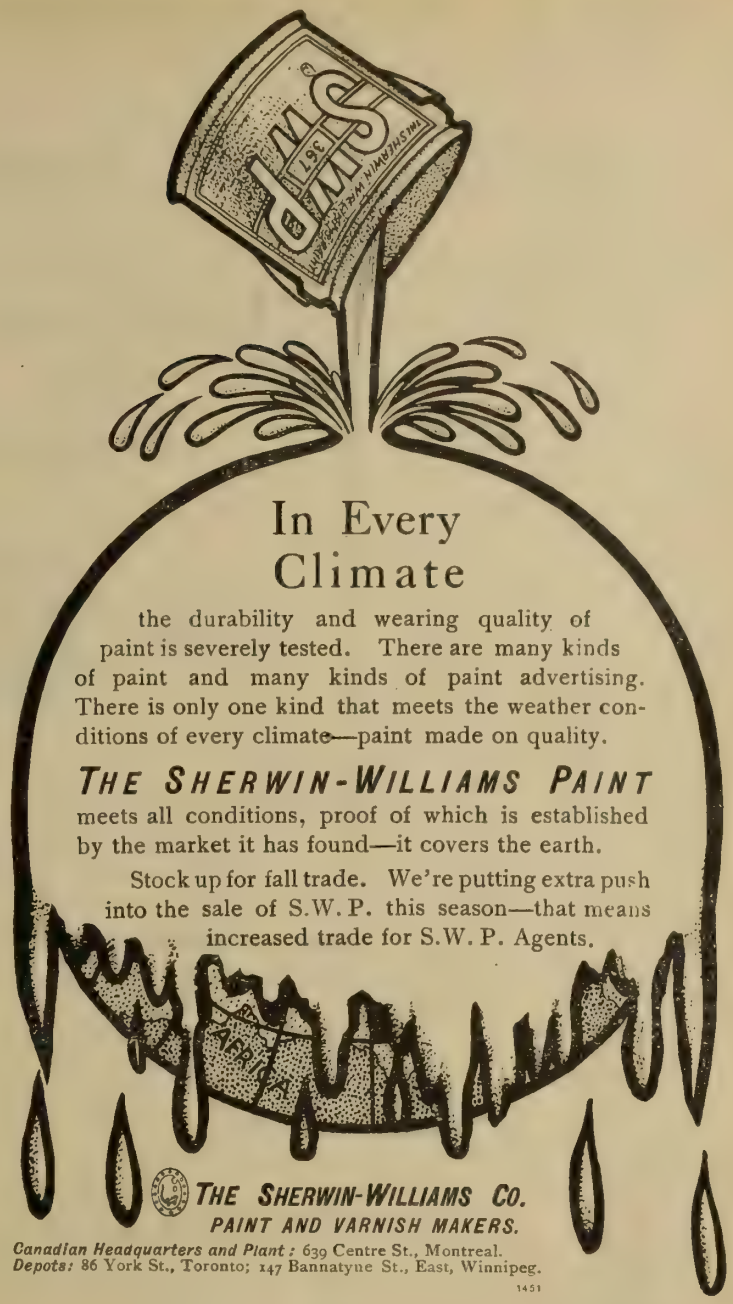
A great many of the employes at Cadbury's are girls and young women, and the regulations of the firm demand that each girl must take two hours' exercise per day either in the open air or in the gymnasium. Each girl has a proper costume for the occasion, and while we were there we saw them nimbly leaping over bars and playing basket ball on the lawn. Not the least of the attractions at Bournville is a magnificent clubhouse and athletic grounds. There are also two beautiful parks within the village enclosure for the benefit of the employes. Mr. and Mrs. George Cadbury entertained us. Both made speeches, Mrs. Cadbury being particularly gracious in her remarks.

* * *

Smoky and grimy as Sheffield is, our visit to that city will be long and favorably remembered. The business men of that city could not do enough for us. They threw open their interesting factories as well as their hearts to us. We visited factories in the morning and factories in the afternoon, and between the two was sandwiched a magnificent luncheon in Cutlers' Hall.

* * *

Among the factories visited in Sheffield none gave greater pleasure than that of Thomas Turner & Co., cutlery and file manufacturers. Refreshments were pressed upon us as we entered. Every part of the works were thrown open for our inspection and the process of manufacture explained by guides, and as we left the works each visitor was presented with a handsome souvenir knife. At the steel works of Thomas Forth & Sons, Limited, attention none the less merited was shown. Two of the chief members of the firm piloted us for two or three hours about their works.



We saw enormous cannon being forged by enormous hydraulic hammers of 3,000-ton pressure, shells being cast, and merchantable steel being prepared for the market. Then tired and grimy we were led to a cool and spacious dining-room on the premises, where refreshing tea and other kinds of refreshments were served us. And then, as if they had not done enough for us, we were presented with handsome pocket knives as we departed. "We go forth laden with hospitality," remarked a witty lady in the party.

* * *

In Leeds the centre of attraction to most of the visitors was the ruins of the famous Kirkstall Abbey; but just beyond the abbey are the works of the Kirkstall Forge Co. It was to these that Mr. W. S. Leslie, of Montreal, led a party of the excursionists. To us the steel works of this company were as interesting as the abbey, for the monks who built the abbey started the former. What is known as the new part of the steel works was built in 1740. But without an explanation this is not true, for on the sale of the works of 1740 is erected one of the most modern rolling mills in England. Mr. Butler, the chief member of the firm, took charge of us and during our trip through the works we saw much that was old blending into the new. In other words, the old methods are gradually but surely being swallowed up by the new. And some day even the interesting old forging hammer, driven by a waterwheel, will have to depart. It is the last of its kind left at the works, and even the modern hammers which surround it appear to have compassion upon it.

* * *

Bradford received us most cordially. From the station to the grim and gothic

Town Hall the streets were lined with people, who cheered us as we marched by. After a drive about the city and a brief visit to some of the factories, we were entertained at luncheon at the Cartwright Memorial Hall—one of the most beautiful places we had visited,—and shortly after 3 p.m. we were on our way back to London.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Stoves, Ranges and Radiators.

THE GURNEY FOUNDRY CO., LIMITED, have issued their stove catalogue, No. 61, and its artistic appearance commands instant attention. It is a book of 152 pages and cover, 8" x 11" in dimensions, and is illustrated throughout with half-tone engravings of the well-known "Oxford" lines. The cover is elaborately colored and embossed, the distinguishing feature of both front and back being an embossed engraving of an Imperial Oxford Range. A cord hanger through the upper left-hand corner of the book adds to its convenience. Complete information is given concerning the many lines manufactured by this firm, including stoves and ranges, hotel ranges, warm air furnaces, steam boilers, radiators, hot water heaters, general castings, etc. The Gurney Foundry Co. has two plants, at Toronto and Toronto Junction, the latter of which is given over to the manufacture of boilers and radiators. All dealers interested in the goods manufactured by this firm will do well to send for a copy of the new catalogue, mentioning Hardware and Metal in writing.

Rubber Roofing.

The Pedlar People, Oshawa, Ont., have sent Hardware and Metal samples of their flexible rubber roofing. The three grades—one, two and three-ply—are shown, neatly bound in booklet form. This roofing is said to be much more durable than wood or tin, and prices will be quoted to any dealer applying and mentioning Hardware and Metal. The goods are sold f.o.b. Oshawa, Montreal, Ottawa and Toronto.

The Columbian Hardware Co.

This firm sends us three new catalogues averaging about thirty pages, all of which are gotten up in first-class typographical style, with embossed covers. Two of the booklets are illustrated by frequent half-tone engravings, and contain prices of spring hinges, door springs, sash lifts, door pulls, vises and anvils. The third is devoted to joist hangers and includes carefully prepared tables which will be very useful to architects. The Columbian Hardware Co., Cleveland, Ohio, will send these booklets to any dealer on mentioning Hardware and Metal.

Scully's List.

Hardware and Metal has received the July and August stock list, giving prices and half-tone illustrations of the various goods handled by this firm. It is a compact booklet of 144 pages, and gives considerable information which will be interesting to the trade. The catalogue will be sent to any who ask for it and mention this paper.

There are **HAMMERS** *that "Knock," and there are* **HAMMERS** *that convince. We employ the convincing kind; for instance, we say contact with the Hammer will not discharge an*

IVER JOHNSON REVOLVER

And then we use our **HAMMER** *just to demonstrate the truth of our assertion. We call this a convincing argument, not "Knocking."*

Hammer the Hammer



Send for literature.

IVER JOHNSON'S ARMS & CYCLE WORKS,
FITCHBURG, MASS.
New York Office: No. 99 Chambers Street.

Builders' Hardware.

The Gurney-Tilden Co., Limited, of Hamilton, have published a catalogue supplementary to their No. VII. edition of Builders' Hardware. Prices are given on many varieties of locks, knobs, door sets, fresh plates, pull handles, and miscellaneous hardware. The whole is illustrated by half-tone engravings. All hardwaremen will be interested in this price list, which will be sent to any dealer who refers to Hardware and Metal.

BUSINESS CHANGES.

Ontario.

H. Cleland, blacksmith, Stratford, has sold to J. K. Goetz.

E. Kalbfleish, blacksmith, Blake, has sold to C. Brown.

Baker & Burger, brick manufacturers, Fort William, have assigned to R. F. Waddington. A meeting of creditors was held July 21st.

Quebec.

Garland & James have been registered as roofers, Montreal.

Belisle, Viau & Co., have been registered as contractors, Montreal.

Dhalut & Deschamps have been registered as plasterers, Montreal.

De Villiers & Lebrun have been registered as blacksmiths, Montreal.

Provost & Lussier have been registered as carriagemakers, Marieville.

Nova Scotia.

Geo. E. Smith & Co., wholesale and retail hardware merchants, Halifax, have suffered loss by fire.

Manitoba and N.W.T.

A meeting of the creditors of J. A. Stovel, hardware merchant, Edmonton, will be held Aug. 1st.

Twiss & McNeil, dealers in implements, High River, have been succeeded by Alberta Implement Co.

D. D. England has been admitted to partnership with England & Co., plumbers, Winnipeg.

C. Sanderson, brick manufacturer, Edmonton, is dead.

British Columbia.

Mehan & Kirkwood, blacksmiths, Nanaimo, have been succeeded by Mehan & Porteous.

McDonnell & Sykes, painters, etc., Vancouver, have dissolved partnership.

H. P. McDowell, painter, Victoria, has been succeeded by J. Stow.

W. K. C. Manly, hardware merchant, Grand Forks, has suffered loss by fire.

P. D. Dods & Co., (of Montreal), dealers in wholesale paints, etc., Vancouver, have been succeeded by H. Darling.

Ellison & Henry, hardware merchants, Vancouver, have dissolved partnership.

H. S. HOWLAND, SONS & CO. LIMITED

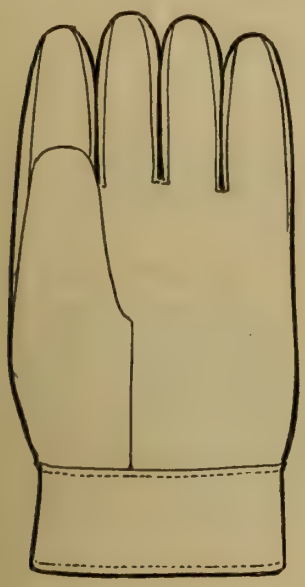
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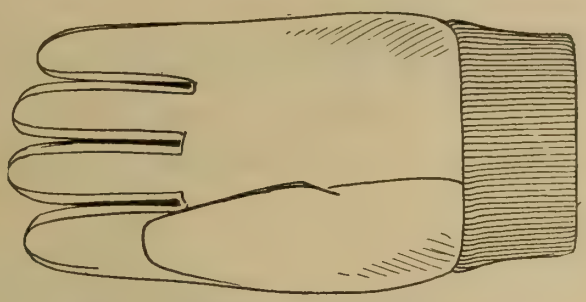
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Wholesale Only

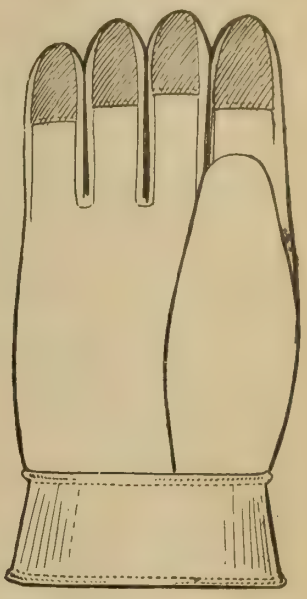
MITTS



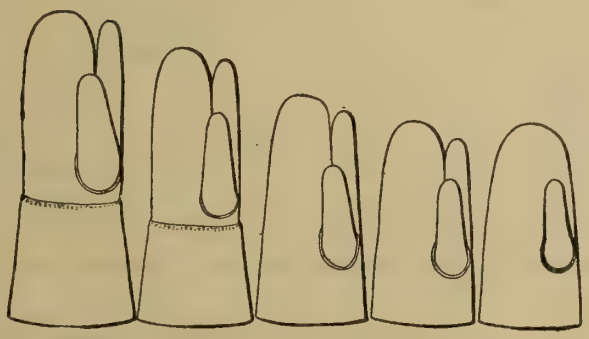
No.
115. 10 in long, Cotton.



No.
120. 10 in. long, Cotton, with Knitted Cuffs.
130. 10 " " " " " " Heavy.



No.
140. 10 in. long, Cotton, with Leather-tipped Fingers.

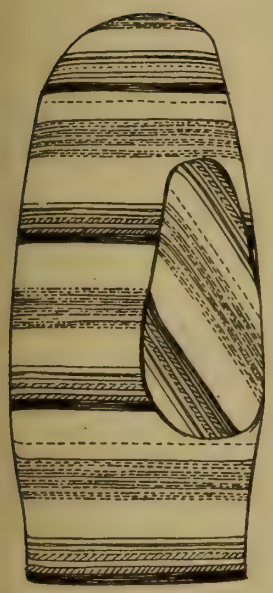


MULE SKIN.

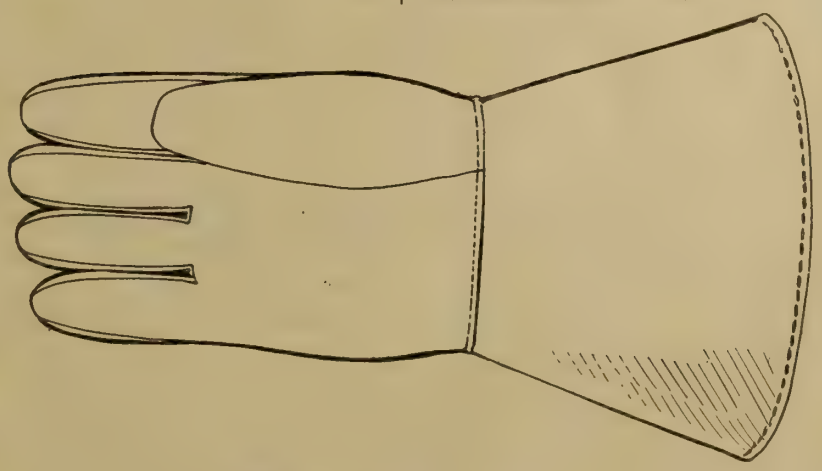
No.		Made from		Material.
01.				
02.	1 Finger,	"	10 "	"
03.	1 "	"	12 "	"
04.	1 "	"	14 "	"

SARANAE.

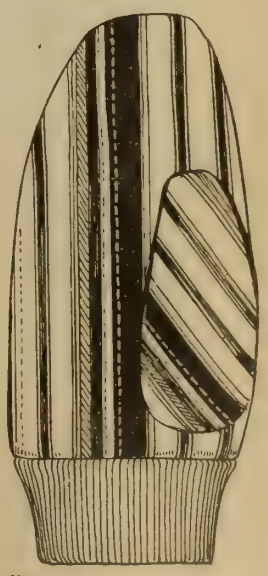
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1.				
2.	1 Finger,	"	10 "	"
3.	1 "	"	12 "	"
4.	1 "	"	14 "	"
5.	1 "	"	16 "	"
25.	Horse-hide Palm	"	16 "	"



No.
150. 11 in. long, Cotton, Lined.



No.
125. 12 in. long, Cotton, with Gauntlet.



No.
160. 11 in. long, Cotton, Lined, with Knitted Cuffs.

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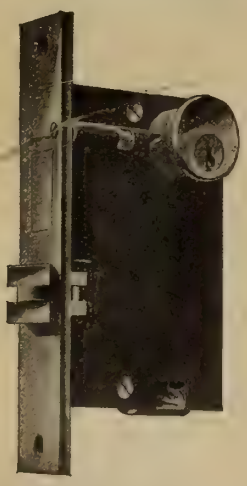
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No. 650

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Gurney Cylinder Locks take a firm stand in that Quality Affair—a stand for Exactness, Accurateness, Thoroughness. Makers of cheap, unreliable American Locks are satisfied with the "give-and-take" principle. Hence the descent of these locks in public favor and the ascent of

GURNEY CYLINDER LOCKS

Always working by one standard, in one way—the **Gurney** way, or **right** way—this must tell in the end. No hardwareman **can afford** to be without **Gurney Cylinder Locks.** Also numerous designs in artistic trimmings.

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BUILDING AND CONSTRUCTION

CONCRETE IN MINING INDUSTRY.

CONCRETE is now displacing wood in the mining industry. It is found to be more durable, efficient and in the long run more economical than timber and lumber. Concrete is used for lining shafts, airways and other openings, from top to bottom of the various openings. It does away with the water dripping down the sides of the shafts, so common with wood linings, which rapidly deteriorate and must frequently be replaced, while concrete once in place calls for little or no repairs. At the same time it holds the loose rock and earth in place, thus removing the element of danger, which is always more or less present in the wooden linings, especially in deep mining, where death often results from caving in of the sides of the shaft. Great tracts of forest lands are denuded to supply timber required in mining operations, and in numerous instances the timber supply having run short in the immediate vicinity of the mines, long hauls at great expense were entailed to keep up the necessary allotment to permit work to be continued with safety. Concrete displacing wood in mining has brought the desired relief in this respect. Its use is destined to become almost universal in permanent mining operations.

BUILDING NOTES.

Several fine new residences are being erected in Sydney, N.S.

James Lumbers, Toronto, is altering the front of his wholesale warehouse.

A new four-room schoolhouse is to be erected at Fredericton Junction, N.B.

St. Paul's Church, Regina, will be extended immediately at a cost of $10,000.

Two brick dwellings will be erected at the corner of Emerald & Stinson streets, Hamilton.

W. E. Fraleigh and W. G. Breckon, Fort Frances, will commence at once the erection of new stores.

The Winnipeg School Board have purchased three new school sites, the total cost being about $37,500.

R. Press & Son will build a $3,000 house at the corner of Kent street and Stanley avenue, Hamilton.

Alterations at the City Hospital, Hamilton, will be commenced immediately and will cost $44,000.

Messrs. Scott & Burney Bros., are preparing to erect immediately two brick stores in Forest, Ont.

Bulman Bros., Winnipeg, have definitely decided to rebuild. Their new structure will be seven-storeys high.

The Western Commercial Co. are constructing a three-storey solid brick building, 50x80, in Riverdale, Sask.

Ossington avenue Baptists, Toronto, will commence work on their new church in a couple of months. The building will cost $10,500.

The cut-stone front of the Gananoque Harness Works warehouse fell into the street and the building will have to be entirely razed.

The congregation of the Davenport road Presbyterian Church, Toronto, recently authorized, have selected the site for their building.

Contracts for the building of the enlarged Central Congregational Church, Winnipeg, have been let, the total amount being $22,000.

The Sydney Cement Co., Sydney, N. S., have begun the manufacture of Portland cement. This is the first Portland cement manufactured in Canada east of Montreal.

The Keewatin Flour Mills Co., Limited, of Ottawa, have completed plans for the erection of a large fireproof milling and elevator plant to cost $750,000.

Tenders are asked for the erection of a brick-veneer schoolhouse at Shoal Lake, Man. Plans and specifications may be seen at the office of W. M. Ingersoll, Shoal Lake, or of Frank R. Evans, architect, Pacific avenue east, Winnipeg.

Messrs. McDuff & Lemieux, architects, Montreal, are preparing plans for the erection of a new factory building which is to be situated on the south side of St. Antoine street near Windsor street of the same city. The new building will be five storeys high and will have a frontage of seventy-five feet.

All the buildings of the Montreal Light, Heat and Power Co. are to be absolutely fireproof. In the immediate future the work of rendering the big Chambly power station absolutely fireproof will be started, after which the company intend to drop all the insurance they are carrying on their buildings. A saving of $10,000 a year will thus be effected.

The following building permits have been recently granted by the Vancouver, B.C., department: John McLeod, Seventh avenue, $1,000; F. H. Lantz, Harwood street, $6,000; Wm. Herron, Seventh avenue, $1,000; D. Bailey, Pandora street, $1,500; Calder & Hunt, Pacific street, $2,000; J. E. Guinet, Robson street, $1,000; W. L. Jewell, Tenth avenue, $2,300.

Building permits in Regina for the current year have already reached a total of $355,241, and it is estimated that the million dollar mark will be passed by the end of the season. Among the buildings which will be shortly commenced are: Regina Brewery, $30,000; Bank of Montreal, $50,000; Post Office (estimated), $70,000; Cockshutt Plow warehouse, $12,000.

Messrs. Hardenburg & Gilbert, architects, of New York, who are preparing the plans for the new Windsor Hotel in Montreal, have submitted the plans to the directors. The new hotel when finished will be 130 feet in height. Work will be begun about the first of September and it is expected when the Winter sets in that not only will the entire foundation be laid, but a fair amount of the steel structure will be placed.

TORONTO BUILDING PERMITS.

L. Seager, brick dwelling, College street, $1,600.

B. Saunders, brick dwelling, Clarendon avenue, $5,000.

James Brown, brick warehouse, King street, $20,000.

A. W. Sheffield, brick dwelling, Havelock street, $4,000.

M. Sullivan, brick dwelling, 341 Sackville street, $3,000.

Nellie B. Collins, brick dwelling, Olive avenue, $2,500.

A. Petrie, one pair brick dwellings, Givens street, $4,000.

John Hands, roughcast dwelling, Dovercourt road, $1,500.

Consumers' Gas Co., addition to office, Toronto street, $10,000.

H. F. Squires, three brick dwellings, Bathurst street, $6,000.

Geo. H. Sweet, brick bakery, 28 Sorauren avenue, $1,500

Eaton & Co., two pair brick dwellings, Rusholme road, $13,000.

H. Howard Shaver, brick dwelling, Clarendon avenue, $4,000.

T. Clinkinbroomer, brick store, 1450 Queen street west, $2,500.

Mrs. William Weekes, roughcast dwelling, Givens street, $1,950.

Jno. W. Cowan, addition to factory, brick, Mincing lane, $5,000.

Daniel Conboy, concrete factory, Don Improvement road, $40,000.

E. Smith, brick and stone dwelling, 512 Dovercourt road, $3,700.

H. Todd, three pair roughcast dwellings, Hamilton street, $9,000.

Mrs. Jane Carmichael, brick and stone dwelling, 60 Wood street, $3,000.

City Corporation, brick laundry, rear of the Isolation Hospital, $2,200.

S. R. Hughes, brick and stone residence, Palmerston avenue, $5,000.

T. Sproule, two pair stone and brick dwellings, Rusholme road, $11,600.

Mrs. G. Derry, dwelling, brick and stucco, 715 Markham street, $1,800.

Mary and Alfred Nurse, three brick dwellings, Salisbury avenue, $4,000.

Fred. S. Duff, two pair stone and brick dwellings, Beatrice street, $8,000.

Granatstein Rag and Metal Co., brick and stone shop, 126 Agnes street, $2,000.

Blanchard & Courtmanche, two pair brick dwellings, 10 to 16 Golden avenue, $7,200.

Jacob Spring, stone and brick dwelling, corner Teraulay and Alice streets, $2,500.

Permits have been issued from July 10 to 15 for the erection of 47 new

dwellings and other buildings, to cost $191,500.

James Lumbers, alterations to warehouse, wood, glass, steel columns, 67 Front street, $1,500.

MONTREAL BUILDING PERMITS.

O. Belanger, dwelling, 362 St. Hubert street, $4,500.

A Pleau, dwellings, Huntly street, St. Denis ward, $1,800.

Dr. W. A. Molson, dwelling, 854½ Sherbrooke street, $1,800.

A. Loyer, dwellings, Huntly street, St. Denis ward, $2,000.

R. Riset, dwellings, Pontiac street, St. Denis ward, $2,600.

M. Larose, dwellings, Labelle street, St. Denis ward, $1,700.

J. T. Sagala, dwellings, Huntly street, St. Denis ward, $1,600.

E. Pare, dwellings, St. Andre street, St. Denis ward, $2,500.

L. Bergeron, dwellings, Harbour street, Hochelaga ward, $3,000.

N. Corbeau, dwellings, Aylwin street, Hochelaga ward, $3,500.

J. Poussaint, dwellings, Huntly street, St. Denis ward, $1,500.

O. Gagnon, dwellings, Cuvillier street, Hochelaga ward, $2,500.

A. Lagarde, dwellings, Ontario street, St. Mary's ward, $4,500.

O. Vanier, dwellings, Berri street, St. Jean Baptiste ward, $8,000.

J. A. Brosseau, dwellings, Boyer street, Duvernay ward, $2,000.

Dominion Oilcloth Co., alterations to factory and erection of chimney, rear of 88 Parthenais street, $2,300.

T. Charpentier, dwellings, Demontigny street, Papineau ward, $2,000.

P. Archambault, dwelling, St. Hubert street, St. Denis ward, $1,800.

J. O. Gagnon, dwellings, Notre Dame street, Hochelaga ward, $3,300.

Sicily Asphalt and Paving Co., shed, rear of 45 Prince street, $3,000.

Jos. B. King, dwellings, Marquette street, St. Denis ward, $1,800.

N. A. C. Fortier, dwellings, Labelle street, St. Denis ward, $3,500.

I. Moguin, dwellings, Mount Royal avenue, Duvernay ward, $4,500.

P. Barrette, dwellings, Chambord street, St. Denis ward, $1,600.

W. R. Hunton, dwellings, Durocher street, St. Lawrence ward, $12,000.

D. Tremblay, dwellings and store, Forsyth street, Hochelaga ward, $4,500.

Northern Electric Co., factory, corner of William and Guy streets, $31,000.

Canadian Rubber Co., factory, corner Notre Dame and Dorion streets, $3,500.

J. A. Marsan, dwellings, Christopher Columbus street, Duvernay ward, $3,000.

Dominion Express Co., office and shed, Latour street, St. George's ward, $7,000.

Christian Brothers, religious building, Sanguinet street, St. Louis ward, $1,500.

S. Lafleur, alterations to dwellings, corner of Logan and Champlain streets, $1,500.

Estate Geo. W. Stephens, dwelling and store, 32 and 34 St. Antoine street, $50,000.

W. T. Haldimand, alterations to store, corner of St. Antoine and Windsor streets, $1,500.

RENOVATION COMPLETED.

The building occupied for business purposes by the J. R. Walker & Co., dealers in scrap metals, etc., at No. 35 Common street, Montreal, which suffered rather seriously in the upper portion of the building from fire early on the morning of April 23rd, has been rebuilt. The installing of a new elevator and a number of new presses places the firm in a better position to handle the supplies purchased by them more promptly. More room has been obtained by placing as a cover a square roof instead of the old sloping roof. Mr. Walker states that they are now in a position to pack fifty bales of either paper or rags daily, which is considerably better than they were able to do before they were visited by the conflagration of the above date.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

836. A North Country firm asks to be placed in touch with Canadian manufacturers of excelsior packing.

847. A Lancashire manufacturer of nuts, setscrews, rivets, washers and bolts, would be pleased to correspond with Canadian wholesale hardware merchants.

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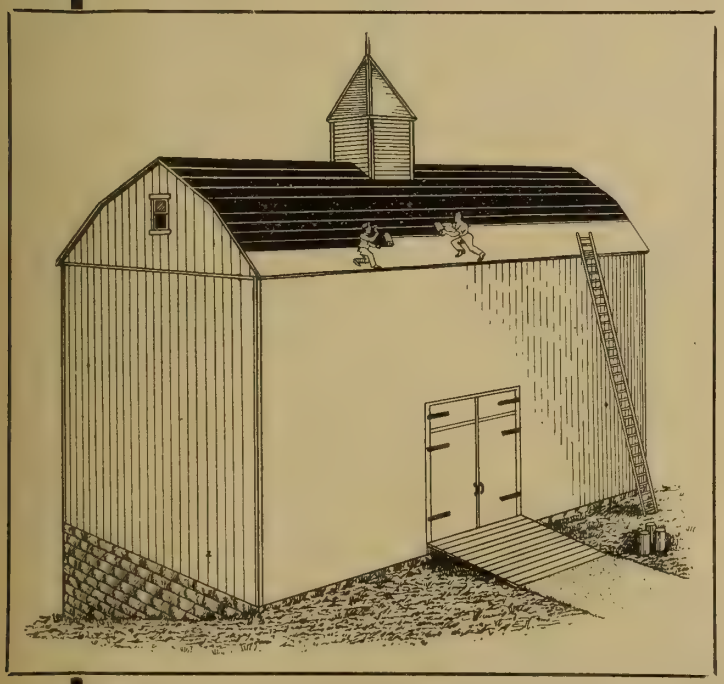


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Manufactured from best wool felt and does not contain any pitch, tar or asphaltum.

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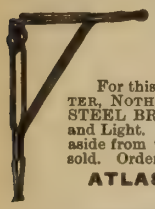
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For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
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Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
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NEWMAN'S INVINCIBLE FLOOR SPRING
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INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

At the annual meeting of the New Brunswick Telephone Co., it was decided to erect a number of lines during the present season. A brick building will be erected on Carleton street, Fredericton, for the use of the company's head offices, and the Moncton and Fredericton plants will be improved.

The N. Thompson & Co., machine shops at Vancouver, may re-open at no distant date.

Mining conditions in British Columbia are much improved and there is also great activity in the lumber industry.

The Cushing Pulp Mill Co. has secured property at Kingsville, N.B., and will erect a small plant to prepare wood for use in the pulp mill.

Foley, Lock & Larson, wholesale grocers, Winnipeg, are erecting a five-storey structure to be utilized as a biscuit and confectionery plant.

The R. C. Donald wood-working factory at Sunny Brae, N.B., has been taken over by the Le Blanc-Bourque Wood-Working Co.

The new plant of the Canadian Shredded Wheat Co., Limited, was started in Toronto. Henceforth orders for the Canadian trade will be filled from this new Canadian factory.

The Keystone Sugar Co. have purchased the Whitby Harbor Co's. property for a consideration of $60,000. The sugar company thus have a most satisfactory site for their large beet sugar factory.

The Dominion Carriage & Bearing Co. Limited, will at once secure a charter, and erect a plant at Amherst, N.S. The capital of the company will be $200,000 with power to increase to $500,000.

The Western Canada Cement & Coal Co., of which Sir Sandford Fleming and Premier Haultain are directors, are seeking subscription through the Royal Bank for £225,000 of 6 per cent. first mortgage bonds.

A large addition, 30x100 feet is being made to the factory of the Dominion Suspender Co., Niagara Falls. This will give them more floor space than any other factory in America manufacturing neckwear and suspenders.

H. A. Richardson will establish a peat-making industry at Winnipeg. He estimates that peat fuel produced by his patented process can be supplied to Winnipeg consumers at $5.50 per ton, and will compare favorably with anthracite.

Galt is to have a new industry which will be known as the Power and Gas Machine Co., and will be capitalized at $100,000. The factory, which will be 40x80 feet, will be erected at once, and cement blocks will be used in the building.

The Thorold Board of Trade is negotiating for the establishment of a factory there, to manufacture pulp containers, bottles of that material as well as other articles. An expenditure of $10,000 is probable if the deal goes through.

Ottawa now owns the plant of the Consumers' Electric Light Co. and will operate it under the title of the City of Ottawa Electric Co. City bonds to the par value of $200,000 have been handed over to the Consumers' Co. for the deed to the property.

The Canadian Klondike Mining Co. are importing a piece of machinery weighing 27,000 lbs. to be used in their mammoth dredge, which will be operated at the mouth of Bear Creek. All the bridges on the road over which the big piece passes will require special bracing to withstand its weight.

Many inquiries have been received from foreign firms who wish to purchase Canadian ores direct, especially zinc, chrome, nickel, cobalt, asbestos, mica, phosphate, coal and corundum. Among them are the following: Messrs. Armand & Co., Paris, are willing to purchase copper; M. De Rosenorn, Bordeaux, would like to buy Canadian phosphate; Edmond Gersenberger, Liege, would be willing to purchase ferro-silicon containing 35 per cent. of silicon; F. Pradez, Liege, would like to buy direct zinc and lead ores; Leon Deugmond, Brussels, inquiring about mica deposits; D. Carnegie, Hadfield Steel Foundry Co., Sheffield, for corundum.

The Imperial Steel and Wire Co., Limited, Collingwood, intends to enlarge its plant during the present Summer, bringing its capacity up to 50 tons of wire per day. Work on the buildings for the additional plant has been commenced. The building will consist of a fence mill, 60 x 200 feet, two storeys; galvanizing building, 40 x 250 feet, and warehouse, 100 x 200 feet. The additional machines to be installed will consist of a 250 horse-power water tube boiler and a compound condensing engine of 150 horse-power to drive a 100 k.w. generator. This generator will be used to drive the nail mill, with 40 tons daily capacity; wire fence mill, with 10 tons daily capacity and galvanizing plant, 10 tons per day capacity. The company will install the very latest devices in motors and silent chain drive in the transmission of its power and the operation of its machines. The expenditure on the additional plant will run close to $100,000.

Will Dominion Steel Sell.

Directors of the Dominion Steel Co. laugh at the rumor that the Dominion Steel Co. were trying to interest the United States Steel Corporation with a view of selling out to that concern. This rumor has done duty off and on ever since the steel plant at Sydney was created, and has received impetus from the fact that several U.S. Steel officials

have visited the Sydney works at various periods.

The present revival of the rumor is due to a stock market sheet in Boston, which "understands that Canadian interests are seeking to interest the United States Steel Corporation in the Dominion Co."

Incidentally the paper points out some of the advantages of the Sydney company, and says that when running at full capacity the putput in tons per month is as follows:

	Tons.
Four blast furnaces	36,000
Ten open-hearth furnaces	20,000
One blooming mill	20,000
One billet mill	18,000
One rail mill	20,000
One rod mill	7,000

There are 450 by-product coke ovens, but as it requires from 40 to 48 hours to make coke suitable for blast furnaces from Cape Breton ores, they do not produce enough coke for even three blast furnaces. Consequently only two have been in operation for some time past, but additional coke ovens are now being built to permit of three blast furnaces being kept in continuous operation.

The site of the works covers 393 acres, with a water frontage of 2,400 feet.

Nearly all of the iron ore used by the company is from its own iron ore properties on Great Vell Island, 400 miles from Sydney. This ore bed has an average thickness of eight feet extending over 817½ acres, and is estimated to contain 28,000,000 tons of available ore, besides the areas under the sea, which are believed to be extensive. The ore is red hematite, containing about 50 per cent. of iron, low in sulphur but high in phosphorous. This ore is mined, transported and laid down at the works at a cost of about $1 per ton. The company also secures ore from Lake Superior and from Spain and Sweden. It is claimed that Lake Superior ore can be laid down cheaper at Sydney than it can be at Pittsburg.

GOOD SPORT IN WARM WEATHER.

Lawn bowling is about the only sport or outdoor game which can be thoroughly enjoyed in the hot Summer days. To supply the increasing demand Messrs. Rice Lewis & Son, Toronto, have just received a shipment of Taylor's Scotch lawn bowls in extras and firsts quality; all sizes and weights.

BEFORE PLACING ORDERS FOR
GALVANIZED SHEETS
GOOD WORKING-UP QUALITY, ASK
RD. JOHNSON, CLAPHAM & MORRIS, Limited
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FOR PRICES OF THEIR BRAND

It's The Man

behind **THE HAMILTON RIFLE** that makes the sales and gets the profit. Specially rolled steel is used in their construction, giving a maximum amount of strength with a minimum amount of weight. All working parts are interchangeable; every part, where liability of wear exists, is hardened, and every rifle is carefully tested and adjusted before leaving the factory. Model **No. 15** and Model **No. 19** (retail at $2.00 and $2.50 respectively) are the rifles **you** could sell. See your Jobber, or write direct.

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We are at home to you at the Winnipeg Exhibition and we hope you will call and see our display. As a heating contractor you can't help being interested in the Pease Line.

We are exhibiting our

"Florence" Boilers
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FOR COAL OR WOOD.

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Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

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RETURNED
JUL 25 1905
To Owner
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Page 31



"KITCHEN" Steel Range

ENTIRELY NEW

Supplied with both coal and wood linings.
Water-front can be supplied if desired.
Has large 20x20-inch oven bottom.
Made with 4-8 inch or 4-9 inch pot covers.
Fire-box will take a 24-inch wood.
Duplex grates, drop oven door with **Enameled Steel Lining.** Steel body and steel leg base. Extra large ash pan. Steel high shelf or closet.
The "Kitchen" has already made itself popular with the trade, and is sure to be a fast seller.

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"EVERYTHING FOR THE TINSHOP"

HARDWARE AND METAL

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FOLLOWING ENGLISH PRACTICE.

IN England the general public demands much from its public men, and Cabinet Minsters or prominent parliamentarians who allow their names to be used as directors of commercial corporations in which they are mere figureheads, meet with sharp criticism indicative of public disapproval. Those, however, who have served their country for extended periods are not allowed to pass out of public life without having their services recognized, an instance of this being the recent retirement of Speaker Gully, of the British House of Commons, who has been granted the customary retiring allowance of several thousand pounds annually.

Despite the claims of such papers as the Toronto Star, the MacLean Trade Newspapers were the first to advocate the principle that retiring Ministers should be granted annual honorariums, believing that our public men should receive ample remuneration for their public services, sufficient to allow them to live upon their public income without being forced to supplement it by directorate fees from corporations or from other questionable sources. There has been too much talk of the sinister influence of corporations, an influence which can always be expected to be present where public men are weakened by the knowledge that their small salaries are insufficient to do more than meet present requirements, and a realization that no provision can be made for the future.

The advocacy of this principle has met with general approval sufficient to warrant the Government in including in the new schedule of parliamentary salaries a clause providing for an annual allowance to retired Cabinet Ministers of five years' consecutive service.

Members of the Senate and House of Commons are to receive $20 per day. If the session goes beyond 30 days each member gets a sessional allowance of $2,500. There is to be a deduction of $15 a day for each day in which a member fails to attend the House. The salary of the Prime Minister is to be $12,000, and the Opposition leader gets an extra sessional allowance of $7,000. There is to be allowed to each member of the Senate and of the House of Commons his actual moving or transportation expenses between his place of residence and Ottawa, going and coming once each way, but no such allowance shall be made for traveling outside of Canada, except from one point in Canada to another, by any direct route. Members are required to hand the Clerk of the House at the end of each month and at the end of the session, statements of their traveling accounts. Every Minister who has served five consecutive years, as head of a department shall, upon his retirement from the Cabinet, be entitled to an annuity for life equal to one-half of the salary attached to his office. The Liberal ex-Ministers to whom this provision will apply are Messrs. Tarte, Blair, Sifton and Costigan. The Conservatives who will receive the annuity are Sir Hector Langevin, Sir Charles Tupper, Sir John Carling, Sir A. P. Caron, Sir Mackenzie Bowell, Sir C. H. Tupper and Hon. Messrs. Foster and Haggart. Under the wording of the resolution Sir Mackenzie Bowell and Sir Charles Tupper will each draw $4,000 per annum, half their salary while Ministers. All the others will receive $3,500 each.

The bad features of the arrangement are that no provision is made for preventing Cabinet Ministers who have retired in disgrace from participating in the enjoyment of the annuities, and that the retired Ministers who continue to sit as members of the Senate or Commons are to be allowed to receive both annuity and sessional indemnity, while ex-Cabinet Ministers who become judges are not to be allowed to draw the annuity while on the bench.

While it might be difficult to frame a clause defining what would constitute "retiring in disgrace," it would certainly be foreign to the spirit of the new regulations to provide pensions for any who might prove untrue to the responsibilities of the high office of a Minister of the Crown.

In our opinion every Minister who continues in office as a member of the Senate or Commons should not receive the dual salary, and the exemption now applying to judges should also include ex-Ministers who have not retired from public office. We congratulate the Government on their progressive action in making more secure the financial positions of those who shape our country's destinies, but we regret that this legislation was introduced so near the close of the session, lack of time then allowing the legislation to become law without remedying the defects outlined.

TARDY JUSTICE FOR JUDGES.

ANNOUNCEMENT has at last been made that the Dominion Government has introduced legislation providing for an increase in the salaries paid to Canadian judges, the necessity of which The MacLean Newspapers has consistently advocated for several years.

Just a year ago, in the issue of July 2, 1904. Hardware and Metal reproduced an article from an American newspaper criticising the small remuneration given public servants in Canada, a brief extract being as follows:

"Matters on the bench are even worse. The High Court judges in Ontario receive $6,000 a year, and Federal Supreme Court judges, the highest in the land, only $7,000 a year. The insufficiency of these salaries may be gathered by comparison with New South Wales, with a population of only 1,400,000, which pays ten puisne judges $12,500 a year each; Victoria, population 1,200,000, pays $15,000 to the High Court judges, and so in all the Australian colonies. The integrity of Canada's judges is traditional, but the salaries paid are below he earnings of first-class lawyers."

In commenting on the matter Hardware and Metal took the ground that the increased cost of living made necessary an increase in the salaries paid if the ablest jurists were to be encouraged to give up the rich emoluments of private practice for an honored career in the service of the country, pointing out that a deterioration in the personnel of the bench was inevitable unless better salaries were paid. Reference was made particularly to the fact that "the Government continues to keep in office at the salary set at Confederation, the most responsible, the most honored servants of the Crown, the judges of the Supreme Court of Canada, men on whose decisions rest the disposition of millions of dollars, and on whose strength and ability the honor and integrity of our judicial system is in large measure dependent: "Viewed from any standard of comparison, the salaries of our Supreme

Court judges is ridiculously small. Compared with the salaries attached to similar courts in other British colonies, weaker in every respect than Canada, or compared with the salaries paid to the men who attain to eminence in the Canadian industrial, commercal or professonal world, and particularly when compared with the income of any first-class lawyer in this country, the stipend attached to the Supreme Court of Canada is shamefully small and inadequate."

In succeeding issues attention was drawn to judges accepting positions upon the directorate of corporations, $5,000 in shares being given one judge for the use of his name, the company failing, and the judge arguing his own defence when an action was brought against him in an attempt to force him to pay for the stock he held. Hardware and Metal strongly criticised the actions of the judges, pointing out, however, that it was a result of the small salaries paid them, editorials entitled " A Dangerous Precedent " and "Debasing the Bench " being copied extensively and was strongly supported by the press throughout the Dominion.

It is with satisfaction, therefore, that we note the action of the Government, considering, however, that the increase given to the members of the Supreme Court is still insufficient to attract the most desirable men from the bar to this most important of all Canadian courts. If the traditions of British justice are to be preserved, the remuneration given to the occupants of such honored positions must be more nearly equal to the amount the same gentlemen could earn in private practice. Comparing the salaries to be paid judges in Canada with the amounts paid in the Australian colonies, it will be seen that the Canadian figures are still absurdly small and the increase of from ten to twenty-five per cent. should have been at least fifty per cent. Conditions in Canada are vastly different to those existing in Great Britain, where the majority of public men have private means and can afford to accept positions on the bench or membership in the House of Commons for the honor pertaining to the position. In Canada the standard of living and cost of travel is constantly increasing, and many of the most talented and successful lawyers are prevented from accepting positions of public trust because of the sacrifices made necessary by giving up a paying professional practice for an unremunerative position.

According to the new schedule the salaries paid in future will be as follows: The Chief Justice of the Supreme Court is to receive a salary of $10,000 per annum, and the other judges $9,000 each. The judge of the exchequer court is to get $8,000 per annum. The Chief Justices of Ontario and Quebec are each to receive $8,000 yearly. The other High Court judges in Ontario, and twenty-two puisne judges in Quebec $7,000 each. Sixteen puisne judges in Quebec are to receive $5,000 each, two Gaspe and Saguenay, $4,500 each. The Chief Justices in New Brunswick, Nova Scotia, Manitoba, Territories, and British Columbia are each to receive $7,000, the other judges $6,000. In Prince Edward Island the Chief Justice will receive $6,000, the other judges $5,200.

Of the County Court judges, the senior judge of York County, Ontario, is to receive $2,900, 67 other Ontario judges, senior and junior, $2,500 for the first three years, after that $2,900. In Nova Scotia and New Brunswick the salary of the County Court judges is to be $3,000. In Queen's County, P.E.I., the senior will receive $3,500, the others $2,500, and after three years' service $3,000. The latter provision also applies to Manitoba and British Columbia.

It is to be expressly provided in the Act that no judge of any court in Canada shall henceforth, directly or indirectly, act as director or manager of any public corporation, or in any other manner whatsoever engage in any occupation or business other than his judicial duties.

OUR REGINA CONVENTION REPORT.

MacLean Pub. Co., Toronto:

Gentlemen,—"I also beg to compliment you on the excellent report you have given in your July 8th issue of the convention. The work of this convention was better written up in your paper than in any other I have seen, correct in every detail, and I again beg to compliment you on the same."

Yours truly,

R. J. Hutchings,
First Vice-President N.W.T.
Boards of Trade.

Calgary, July 14.

HOW TO STORE VARNISH.

ONE who has had considerable experience in the handling of varnishes, is quoted by the Painter and Decorator as saying that when varnish is stored in barrels it should never be moved about, because after standing a few days a sediment falls to the bottom of the barrel, which consists chiefly of particles of manganese driers and refuse of the gum, known as varnish foots. When this has settled, if the barrel is disturbed by shaking, this sediment mixes with the varnish and turns it streaky and unfit for first-class work, as the varnish when applied over white or any delicate tints clearly shows the faulty varnish by brushing up in dirty irregular patches. The idea prevalent among the users of varnish that unless the sediment be mixed with the varnish the drying power is lost, is a mistake, as the sediment is simply the spent drying agents and refuse from the gums used in the manufacture of the varnish. This sediment can only be removed by allowing it to settle or by passing it through a filter press. A good method of removing varnish from barrels is to insert a treacle tap in the barrel about two inches from the bottom, so that the varnish will run clear of foots, then place on a stand and allow to settle some time before using.

SHOULD RETAILERS SOLICIT?

IN these days of fierce competition, it has frequently been debated at hardware conventions, whether the retail merchant should adopt the methods of wholesale dealers, and aggressively endeavor to force his business upon the consumer.

Should the hardwareman fold his hands and wait for business to come to him, serene in the consciousness that he doesn't need to become a pedlar, or should he emulate the manufacturers or jobbers from whom he himself buys and put a little more of the personal element into his business?

In considering this question, the dealer cannot deny that it is always desirable to increase the number of sales; and, in the hardware business especially, the best means to do it is to make buying as convenient and pleasant as possible. And this latter problem, too, will be differently solved in different localities; different methods would have to be adopted in large cities and in country towns.

It is a universally accepted truth that people buy more than they need. By some it is even estimated that fifty per cent. of their purchases are what they don't need,—or, in other words, luxuries.

Now, in the hardware business, as in all others, there are necessities, and there are, also, innumerable useful and handy articles, which, though not necessary, are desirable, and may be considered as the luxuries of the hardware trade. The merchant who keeps these lines most constantly before his customers is the one who will reap the largest profits, as the demand for hardware necessities is comparatively constant.

In large cities some retailers are trying to capture this trade by adopting the Marshal Field method of making their places of business pleasant and comfortable for customers, some going so far as to instal free telephone booths and reading and writing rooms. But in

the smaller places this is quite impracticable.

Even in the least populous localities, however, the hardwareman can add to his business by keeping his store neat and attractive. If a customer comes in to buy some nails, it is because he needs them. But, if he happen to see a nice array of the luxuries before referred to, it is often possible for the salesman, by a little judicious urging, to sell him a great deal more than the nails.

In many parts of Canada the hardwaremen depend to a great extent upon the farmers' trade, and this is where the merchant can use his aggressive methods. If the retailers would occasionally take an after-supper drive to visit some of the responsible farmers in his neighborhood, taking with him some article of interest to his customer, he could accomplish more in a few hours than by many talks in his own store. A farmer rarely makes up his mind to buy a wire stretcher or a cream separator in the few minutes he can afford to spend in the hardware store on one of his regular visits to town. It would greatly increase the sale of such goods as these if the retailer would begin an aggressive campaign such as is outlined above, and he would soon find his staple lines more in demand as well.

Hardware and Metal throws this out as a suggestion to the retail trade, and as it is a question of paramount interest, invites discussion of it in these columns.

CONDITIONS IN ENGLAND.

REPORTS of business depression in Great Britain have reached this country for some months past, but particulars have not been given in any detail. In a recent issue of the Ironmonger editorial reference was made to the condition of the hardware trade, from which the following extract is taken in order to give our readers an idea of the conditions prevailing in the Mother Country :

"The continued depression of the building trade in all parts of the country, with the solitary exception, perhaps, of London, is now seriously affecting the makers of joiners', bricklayers', and edge tools in Sheffield. These departments enjoyed a remarkable run of prosperity for nearly a quarter of a century continuously, but the conditions today are far worse than they have ever been before. The workmen are earning but a pittance, and manufacturers who are able to make ends meet regard themselves as fortunate. South Africa is a most unsatisfactory market for the goods referred to. These colonies were heavily stocked with tools at the end of the war, and the work of reducing the stocks makes such slow progress that there is no necessity to order new supplies. Nor is there as much building going on in South Africa as might reasonably have been expected."

BUILD UP SMALL INDUSTRIES.

PROSPERITY has been so general in this country of late that the very air seems to breathe of it and people look for it as a matter of course. At the present time the grassy meadows, the fields of growing grain, the loaded orchards and the contented cattle proclaim the fact, while the activity in the warehouse, the busy mill and workshop, running night and day in many instances, tell more plainly than many written chapters the prosperous state of affairs. In spite of this there is many an older settled town and village in Canada at a standstill, when such need not be. The large cities are growing larger, the west and north are being settled in a satisfactory manner and yet a large number of the smaller centres look on and wonder why they do not share in the general advance. They cannot imagine why things do not come their way.

The reason is obvious. They are asleep. Like the ancient town of legendary fame, they have sat down to rest, unable to realize that they have within themselves the potential energy—brains and capital—that rightly directed would double the municipality's population in a few years. While this is not a general state of affairs, the places that should feel guilty on the subject are not few. There isn't a town in Canada included in this category but has men of means, whose capital is unproductive—unproductive beyond the interest of a savings' bank or a loan or mortgage. Such capital placed toward starting a number of small industries of the right sort in the community would act as a magician's wand and change the whole order of things within half a generation.

In most cases towns owe their present size to a few men of pluck and enterprise, who, starting in a small way, have built up manufacturing industries that have been the mainstay of the people.

Since this has been, what greater results might be expected to-day where conditions for manufacturing are so much better than formerly. Because some places have had their fingers burned bonusing something that has not been successful, the moneyed men therein twist a few extra coils around the necks of their money bags and shake their heads at the thought of promoting an industry. Bonusing questionable industries has been an evil in the past and must continue so. A concern started with the sounding of trumpets and the clashing of cymbals by outside individuals with a town's money may succeed all right—many times it hasn't—but let the same industry be started with private capital, the men interested sitting at the directors' board, and there is little danger of the outcome.

Half a dozen smaller concerns covering a variety of manufacture give more stability to a place than a single plant six times as large as the average of the others. If the towns that have not grown appreciably within the past few years would give the matter a thought, and if the men who have the stock in trade to promote industry are public-spirited enough to do so, the way to bring their native or adopted place forward should be clear before them. A number of industries started either under one or separate management and rightly looked after can hardly fail to bring about the desired result.

FAIRBANKS-MORSE NEW PLANT.

CONSTRUCTION is to commence at once on the first three buildings of the new Canadian manufacturing plant of the Canadian Fairbanks-Morse Mfg. Co., Limited, at Toronto. As announced in Hardware and Metal some weeks ago, a splendid site, comprising ten acres of land, has been secured south of Bloor street and between the Grand Trunk and Canadian Pacific Railways, about half a mile south of the Canada Foundry Co.'s works. Plans of the buildings have been prepared, and Mr. Fuller, president of the company, was in Toronto this week completing the necessary arrangements to allow the work to proceed at once.

The buildings to be gone on with at present include a machine shop, 288 x 100 feet, with galleries 24 feet wide on both sides the entire length of the building; a foundry, 72 x 180 feet; a blacksmith shop, 72 x 98 feet; and a power house, 60 x 80 feet. The material to be used in all the buildings will be reinforced steel concrete, the contract calling for the completion of the buildings by October 15. All buildings will be built with blind ends to permit of their being extended as the requirements of the business demand.

It is the intention to manufacture practically the full line popularized by the Fairbanks-Morse Co. in the past, as well as many new lines, but it will be impossible to realize these plans from the outset. The product of the plant at first therefore, will consist of Fairbanks-Morse gas engines, steam pumps, hand cars, stand pipes, and other railway supplies, the output being handled exclusively by the Canadian Fairbanks Co., Limited. Mr. Geo. W. Sparks, of Fairbanks, Morse & Co.'s plant at Beloit, Wisconsin, will be manager of the factory.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 58.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 21, 1905.

JULY conditions of other years are now prevalent. Although a general quietness is noticeable, the demand, comparing it with this month last year, is good. The season on several lines of goods is just winding up and naturally trade will be quiet until the orders for Fall and Winter goods begin to flow in. The majority of travelers are off the road, and this is another cause for the change in the prevailing conditions. All orders for harvest tools have now gone forward, and all that remains in this branch of the trade is the infrequent arrival of small assorting-up orders.

A few lanterns for the Fall and Winter trade are going forward. As all, or the majority, of orders have now been booked for some time, the forwarding of orders will be the principal feature of the trade for some time. A few orders are being received for cow ties, heavy axes, apple parers, cherry stoners, halters, fruit presses, sleigh bells and skates. With the exception of one or two articles the shipments of the last-named goods will not take place for some time.

Lumbermen's tools are beginning to move, and it is expected on the part of the local wholesale jobbers that a good trade will be in progress before very long Considerable cutting in the prices of hand saws has been going on for some time between the local jobbers. This is especially noticed in the brands imported from the United States. The matter has been looked into by the manufacturers, and it is expected that prices will assume a much steadier aspect. It is believed that there is a movement on foot to advance the price of home-manufactured cement, but as yet no change has occurred at this point.

The season on such articles as spring hinges, green wire cloth and poultry netting has practically ended. The brisk trade in sporting goods has slackened. Local dealers are not alarmed at the present condition of the market. In fact, they expect it to remain quiet until the middle of September, when retail merchants will begin to strengthen their stocks to meet the demand of the late Fall and Winter trade.

Axes—A few orders have been booked for the heavier variety of axe. With this exception trade is quiet, as it is yet early to forward shipments on orders booked some time ago. Prices are steady and in all likelihood will continue so for some time. We quote as follows: Chopping axes, unhandled, $6 to $9.50 a dozen: double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—As it is too early to book orders for Winter trade the conditions on this market are quiet. Our quotations are as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—The demand is showing a tendency to decrease. Prices are firm at the figures quoted below. We quote as follows: Hand sewing machines; $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Conditions of a week ago continue. No change is expected to occur until much later in the year, when orders for Spring delivery will be booked. Prices are firm and unchanged. Our quotations are as follows: Cold blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—A few orders have been booked for job lots. These orders are well assorted and denote the winding up of the season. We quote as follows: $2.75 for 100 lbs. f. o. b. Montreal: $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—The season for this article is drawing to a close, and all that remains is to forward a few orders which were booked some time ago. Prices continue unchanged. Our quotations are: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—Trade conditions remain prictically the same. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Manufacturers report a much quieter demand. They expect these conditions will become brisker later on in the Fall. Prices continue unchanged. Our quotations are: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent.; brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—A good demand continues, and general conditions remain practically unchanged. The majority of the orders are being received from the machine shops. Our quotations are: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5. Activity rules.

Wire Nails—No further decline has occurred on this market. The demand is much quieter, which is natural at this time of the season. We quote: $2.10 to $2.20 a keg f.o.b. Montreal.

Cut Nails—A fair demand only is the best that can be said of the trade on this market. Prices are firm and remain unchanged. We quote: $2.20 a keg f.o.b. Montreal.

Horseshoes—The general conditions of a week ago are still prevalent on the market. We quote: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4. $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—Conditions remain the same.

Sporting Goods — The majority of orders have now been booked, and the principal item is to get the orders forwarded on time. Orders of this year show a great increase over previous years, especially in rifles and ammunition. Prices are firm and unchanged. Our quotations are as follows: Canadian-made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—A steady demand is in progress. Manufacturers anticipate a noticeable increase over the trade of last year. Three-ply roofing has the best demand, and orders for this material are being received continually.

Cordage—Most of the binder twine has now gone forward, although a few sorting-up orders have been received. An advance is noted in cotton rope and sash cord. The advance ranges from one cent to two cents per lb.

Cement and Firebrick—A feature of this market this season is the absence of large contract orders. Small jobbing orders are being received, but the majority of these are local, and it is estimated that outside dealers are ordering direct from the home producers. A movement is on foot to advance the price of the home product, which may take place at any time. Trade in firebricks is quiet from the jobbers' point of view,

although shipments from the foreign markets are continually arriving. Home trade will probably brighten up before the close of navigation. Our quotations are as follows: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $1.90 to $2.00. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—Trade conditions remain the same. Prices are firm. We quote: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Coil Chain—A better demand for heavy chain is noticed. As this demand is generally small, it will in no way affect the price list. We quote the following: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9 16 inch, $3.30; 5-8 inch $3.20; 3-4 inch $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth—Practically speaking the season has now drawn to a close, and orders from now on until the opening of next season will be scarce.

Poultry Netting — The demand is gradually decreasing, and a few more days will finish the trade on this market. We quote: Discounts for two inch nineteen gauge standard, and sixteen gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges—Conditions have become quiet. Prices remain the same. We quote as follows: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Some large orders have been booked during the week. A large stock is being held by the local jobbers, and all orders are being forwarded immediately. Prices are firm and continue unchanged. Our quotations are as follows: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

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Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
July 21, 1905.

BUSINESS among Toronto wholesalers shows very little falling off, in spite of the fact that the travelers are now enjoying their well-earned fishing in the cooler parts. Orders, however, are mostly for sorting up, and will be of that nature until the opening up of the Fall trade.

Sporting goods are beginning to move strongly, and this is, perhaps, the feature of the week's business. Fishing tackle and ammunition have been most in demand.

The great building operations going on throughout the province permit no falling off in the orders for wire nails, screws, bolts, nuts, rivets, etc.

Farmers are building and repairing fences in the interval between crops, and there is consequently a good demand for spring wire.

No change is noted in cement, and the demand continues strong. There is practically no change in last week's quotations.

Lawn Mowers—The lateness of the season accounts for inactivity in this line.

Sporting Goods—Orders are coming in already for guns and ammunition. A good season is expected.

Washing Machines—There is still a good demand for wringers and machines.

Chain—No change is reported in trade conditions. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Business is good at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Large orders are being received as farmers are seizing upon the lull after haying to build and repair fences. Prices unchanged.

Barb Wire—A brisk demand is reported.

Wire Nails—Business remains firm at last week's prices. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—Trade continues satisfactory. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Though the usual July falling off is evident, the trade is particularly good for the season. We quote: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonably light trade is noted. Prices are the same.

Screws—Large orders are met by a good supply.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—No falling off is experienced and prices are steady.

Cordage—Large orders are being received for binder twine and hay fork rope, at unchanged prices. We quote: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—Prices are unchanged, though a strengthening is expected as a result of tariff changes. Our quotations are as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—No change in condition may be noted. Prices remain as before. Our quotations are as follows: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—There is a brisk demand and prices are maintained well.

Hides, Tallow, Skins and Wool — Receipts of hides and wool are light owing to good demand and the readiness of local dealers to pick up stock in the country. Such men are paying relatively more for fleece wool than the larger interests can afford to pay. Deacons have been crossed from the list. We quote as follows:

Hides, No. 1 green steers, per lb	....	0 10
" " 2 " " "	....	0 09
" No. 1 green, per lb	....	0 09½
" " 2 " "	....	0 08½
Country hides, flats, per lb	0 08½	0 09
Calf skins, No. 1, selected	....	0 10
" " No. 2	....	0 08
Sheep skins	....	1 25
Lamb skins, each	....	0 55
Shorn pelts "	....	0 45
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb	....	0 15
Wool-washed fleece	....	0 25
Pulled wools, super, per lb	0 21	0 23
" " extra "	0 22	0 24

For Manitoba, British Columbia and Maritime Province markets see following pages.

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Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 21, 1905.

JUDGING by the continued advance on certain lines of metals, the trade is in a much better condition. Such, however, is not the case, and it is feared that foreign buyers are responsible for the continued advance in the prices. Orders are coming in more freely, but the increase in the home demand does not warrant the advance in price. The most appreciative orders of the week were those booked for pig iron. The price of the home product is so low that many founders throughout the country are using the pig variety where they would otherwise use scrap; hence the marked increase in the demand.

Antimony still continues to advance, owing, no doubt, to the inability of the Japanese and Chinese to ship from their mines. Local dealers do not agree on the figure for booking, and as a result a wider range is quoted. Sheet zinc and ingot tin have also advanced. Ingot zinc has been advancing on the foreign market, but as yet no change has occurred here. There is at present, however, a strong tendency for an advance. The most notable change is in the case of pig lead, which has advanced from 25c. to 40c. per ton.

Pig Iron—Orders booked last week are much larger and numerous, and at present there is a good outlook for a strong and brisk trade this Fall. Prices on Canadian iron are firm, but no change has taken place. We quote:

"Disc," No. 1.....$16.50 delivered Montreal.
"Dom.," No. 1..... 17.50 " "
Usual difference in price for lower grades.

Ferrona No. 1	$18.00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	delivered	Montreal.
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—Local wholesale hardware merchants report a better demand for this article. The demand which has now begun may continue for some time, as the blacksmiths will begin stocking up in a few weeks. We quote: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—The demand, which increased wonderfullv a few days ago, is continuing unabated, and at present there are good prospects for a steady brisk trade. Prices are firm, but remain unchanged. We quote as follows: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—A steady trade is prevalent. Prices continue unchanged. We quote: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2: spring, $2.75; toecalk. $2.62 1-2; machinery iron finish, $2.10: reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold-Rolled Shafting—The Canadian machine shops continue to purchase large shipments. Trade is of a better volume than that which has been attained in previous years. Prices remain the same. We quote as follows: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—Canada plates have been used so extensively for building purposes this year that local dealers find the demand very heavy. Large orders are being continually booked, and it would not be surprising if an advance occurred shortly. Our quotations are: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—The demand still continues steady and active. No feature, other than that already mentioned, has been prevalent this week. We quote: Queen's Head, 28 gauge, $4.15; 26 gauge $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra.

Black Sheets—No change has occurred on this market. We quote: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—Prices still continue to advance, which is no doubt due to the inability of the Japanese and Chinese miners to supply the market. Different prices are being quoted on this market and therefore a wider range of prices is given. Our quotations are: 13 1-2 to 14 1-2 cents.

Sheet Zinc—The advance in price which has been looked forward to for some time has at last taken place, it having advanced 25 cents. The heavy foreign demand along with the small increase in the home demand is supposed to be the cause for this change. We quote: Cask lots, $7.25; small lots, $7.50.

Tin Plates—The demand continues to be steady with firm prices. We quote the following: Cokes, $3.75; charcoal, $4.00.

Ingot Tin—Another advance of 1-2 cent per lb. tends more clearly to show that the output is unequal to the present demand. Prices are very firm and if the present demand continues the prices may advance within a few days. Our quotations are: 34 to 34 1-2c. per lb.

Ingot Copper—Local dealers state that it is very difficult to purchase copper for filling orders. The market is strong and the present active demand may cause an advance. We quote as follows: 16 to 16 1-4c.

Ingot Zinc—This market has become much firmer and at present there is a strong possibility of an advance. One is reported as having already taken place on the foreign market but nothing has taken place here. We quote: 6 1-4 to 6 1-2c.

Pig Lead—Another advance is noted this week. The market has become very firm and local dealers are anticipating something further in connection with the advancement of prices. Our quotations are: $3.75 to $4.00 per ton.

Boiler Tubes—A steady demand is still in progress. The outlook is for a continuation of the present prevailing conditions. We quote the following: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—The warm weather has affected the local market materially inasmuch that the amount of scrap metal purchased by the foundries has fallen off. Scrap iron is showing a tendency for a further decline. The market as far as outside purchasers are concerned is quiet and is expected to continue so until later on in the Fall. Our quotations are as follows: Heavy copper and wire, 12 3-4c.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, July 21, 1905.

A SLIGHT slackening off is reported, but trade is, on the whole, very good for this season of the year. The revival of the market in the States has developed a better tone here and prospects for business during the balance of the summer are most satisfactory. Many mills have shut down during the warm spell and goods will be harder to get in consequence.

The advancing prices in foreign markets have not affected quotations in Toronto beyond giving them additional strength and firmness. Tin is very strong and even at the high prices there is much activity. Copper is also moving lively, while antimony is still attracting a great deal of attention.

Pig Iron—No changes have taken place, business being fairly lively.

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Trade is very brisk with prices held firm at the old figures. Our quotations are as follows: $1.85 f.o.b. Toronto, with discount of 2 per cent.; for extras as cut to length, while rolling, 2 feet and over, 10c. per 100 lbs., 1 foot and under 2 feet, 15c.; under 1 foot, 20c.; over 20 feet, by special agreement according to length and size.

Tin—Prices continue to advance in outside markets, the result being to make prices very strong here. There has been no further advance on the local market. We quote: 34 to 35c. per lb.

Tin Plates—The strong demand and general activity is giving added strength to prices, which are unchanged.

Galvanized Sheets—There is a heavy demand at the same quotations.

Canada Plates—Sales are fairly large with no change in prices.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—Demand continues strong at firm quotations. We quote: Pig lead, $3.80 per 100 lbs,. and bar lead, $4.80 per 100 lbs.

Zinc Spelter—An average trade is being done. Prices are steady. We quote as follows:, 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Activity is reported. A large trade is doing and quotations are unchanged., We quote: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—No decline has taken place, the recent advances holding strong. A large volume of business is reported. Our quotation is 14c.

Old Material—Demand for iron from outside buyers is not as strong, but lead, copper and brass are all active. Dealers' buying prices are: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.;

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

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Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc., etc.

heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Little business is being booked and the dealers' stocks are well in hand, preparatory to the Fall rush of business. We quote: Anthracite in cars at bridges: Grate, $5.05 per gross ton; egg, stove and nut, $5.30 per gross ton; pea, $3.70 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run. $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

LONDON METAL MARKETS.

From Metal Market Report, July 19, 1905.

Pig Iron—Middlesboro No. 3 foundry is quoted at 45s. 4 1-2d, and Scotch warrants at 49s. 4d., making prices as compared with last week unchanged for Middesboro and unchanged for Scotch warrants.

Tin—Spot tin opened easy at £143 12s. 6d., futures at £142 10s., and after sales of 130 tons of spot and 300 tons of futures closed strong at £144 7s. 5d. for spot and £143 7s. 6d. for futures, making price as compared with last week £1 7s. 6d. higher on spot and £1 8s. 6d. higher on futures.

Copper—Spot copper opened firm at £66 13s. 9d., futures £67, and after sales of 500 tons of spot and 700 tons of futures closed strong at £67 for spot and £67 7s. 6d. for futures, making price as compared with last week £1 higher on spot and £1 7s. 6d. higher on futures.

Lead—The market closed at £13 15s, making price as compared with last week 3s. 9d. higher.

Spelter—The market closed at £24, making price as compared with last week 2s. 6d. lower.

U.S. METAL MARKETS.

From the Iron Age, July 20, 1905.

THE long delayed buying movement in pig iron has come rather unexpectedly and while it has not developed in any large proportions yet it has greatly encouraged sellers. Some of the leading consuming interests, and notably the Cast Iron Pipe Consolidation, started the buying. This interest took about 26,000 tons of southern iron at various prices at and below $11, Birmingham. Other melters followed, and in the aggregate a considerable tonnage was placed in all the principal distributing markets.

In the east some round lots of basic pig were taken by steel works, aggregating about 15,000 tons. Rolling mills placed orders in moderate individual amounts for a good deal of tonnage for the next quarter. In the Pittsburg dis-

SANDERSON'S TOOL STEEL

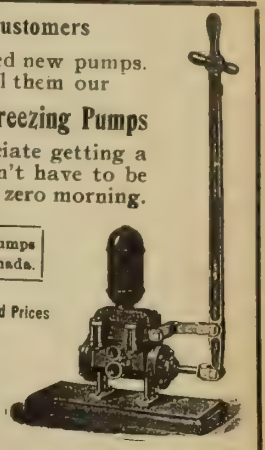
"The most reliable tool steel on the market."

LARGE ASSORTMENT IN STOCK.

A. C. LESLIE & CO.
MONTREAL.

Ask your customers
if they don't need new pumps.
If they do sell them our
Standard Anti-Freezing Pumps
They'll appreciate getting a pump that doesn't have to be thawn out every zero morning.

—McDougall Pumps
—Made in Canada.



Write for Catalogue and Prices
The
R. McDougall Co.
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B. K. MORTON & CO.'S
"ALPHA"
HIGH SPEED STEEL
AND
Crucible Cast Steel
Large stock on hand. Send for Stock List

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

tricts the mills also bought quite a quantity of forge grades.

From Chicago comes the report of sales of malleable pig aggregating about 20,000 tons, of sales of basic pig to a local plant of 10,000 tons and of purchases by a St. Louis car builder of about 10,000 tons of foundry iron.

Orders from the general foundry trade have been in fair volume and have been well distributed. Much of the business was done at low price, at $11 and under, Birmingham, but now $11.25 for early delivery has become scarce and the leading makers ask $11.50 and upward for delivery during the balance of the year.

So far as can be learned consumers have only partially covered requirements for the balance of the year. From Cleveland comes the report that a buying pool has been formed in that important foundry centre among buyers of pig iron.

The business in the heavy lines—steel rails, plates and shapes—continues very satisfactory. There is little prospect of any advance in official prices, but it seems likely that premiums on shapes may become more general. The largest contract placed during the week was that for 15,000 tons for the Poughkeepsie Bridge.

In the lighter lines there is a notable movement in the steel bar trade, and a better feeling prevails in sheets. In these branches, as in the wire trade, the stocks in the hands of distributers have been pretty well worked off.

The leading tin plate interest has a large accumulation, collected in anticipation of a possible strike.

The export trade goes on in a very satisfactory manner. It is an interesting fact that in spite of the rush for material for home use during last Winter and Spring the export tonnage of the United States Steel Corporation during the first six months of this year was only 46,000 tons below the shipments of the corresponding period of last year, when export work was sought so vigorously and effectively. Last year the total shipments for six months ran a little above 500,000 tons. This year they are slightly below that figure.

MINES AND MINERALS.

The Canadian Metal Co. are progressing rapidly with their smelter at Frank, Alberta, and expect to be running by the 1st of September.

* * *

Seattle capitalists have a bond on a newly-discovered iron property at Ouatsino Sound, Vancouver Island, and are talking of establishing a $500,000 smelter.

* * *

Mr. Townsend, of Louisburg, C.B., lately discovered peculiar stones near that town, which he believes are diamonds. The stones are represented as hard and transparent, and will cut glass readily and sparkle in a dark room.

* * *

The Board of Trade, Nelson, B.C., the centre of the silver-lead ore industry, have unanimously passed a resolution that it is their wish that the payment of bounty on lead ore be not extended after June 30. Those present were all interested in silver-lead mines. The consensus of opinion was that the bounty law was not a success. Since the order-in-council enacting the bounty provision on lead went into effect the Dominion Government has paid out more than $400,000. The encouragement applies to ore exported as well as that smelted in the country. Practically all the bounty payments have gone to British Columbia.

* * *

The biggest discovery made in the history of coal mining in Canada was made a few days ago when the famous Mullins seam, which has been lost for upwards of fifty years, was located near Lingan, about seven miles from the Town of Glace Bay. N.S. The discovery has created a big sensation among mining men, and President Ross and the officials of the Dominion Coal Co. are exceedingly jubilant over it. The seam shows thickness of nearly 6 feet, and is computed to contain over six hundred million tons of coal. It underlies all the other seams controlled by the company. The work of developing the seam will be started this Fall.

New Brunswick Trade News

St. John, N.B., July 18, 1905.

HARDWARE trade, though characterized to some extent by the usual "midsummer dulness," is, nevertheless, not without redeeming features. When account is made for this "midsummer dulness," the business in the hardware branch of trade may be spoken of as fairly good. In some lines of goods there is a tendency somewhat in evidence toward slightly lower prices. On the other hand, certain articles show a tendency toward a stiffening in price, so there is, perhaps, no reason for any complaint. If any reason for complaint does exist, it is found in this fact,—collections are far from being of the best. However, this state of affairs will probably be remedied before long, so complaint is not very reasonable after all.

An event of some importance and which may, perhaps, be fittingly mentioned here, sook place recently. This was the launching of the ferry steamer Ludlow. Such a happening is worthy of notice here because the Ludlow was built at a local foundry—the Phoenix Foundry of the Messrs. Fleming—and because she is the first metal craft to be built here. For many reasons the launching of the Ludlow attracted a good bit of attention here, and the Fleming people are deserving of credit for their work on her.

A word may not be amiss concerning refrigerators, hammocks and carpet sweepers. This is a timely season for the pushing of these goods and local merchants, who have realized this, have had no reason to be dissatisfied with the result. The time for the rush in the hammocks' sale is, of course, now drawing near its close, but the general report is that the season has been a good one. Prices have been steady and demand active. Refrigerators are coming into favor more and more. One fact that is against larger sales is the comparative highness of the figures at which they are sold. The contention may be made that the prices asked are not unreasonable, and that may be right enough, but it is tolerably certain that a refrigerator offered at a really low figure and which is at the same time a serviceable article is needed in many stores. The demand for carpet sweepers is growing here, with many dealers at least. At this time of year when wielding a broom is provocative of unpleasant warmth, a carpet sweeper is sure to make friends of the housewives. Some merchants have realized this and increased business has resulted. Others will do well to consider the matter.

The wire fencing season is now practically over, though a sale now and then is reported. Fencing staples, however, are rising slightly, though the upward tendency is not particularly noteworthy.

Linseed oil is an article that has received its share of attention lately. This oil is worthy of attention at this stage because of the price which it is bringing compared with the price of last year. Its present figure is away above that which it brought twelve months ago, and for that reason opinions regarding the oil are apt to differ according to one's point of view. Turpentine is strong just now with prospects of remaining so. The prevailing price is now about $1, ranging from that figure down to 90 cents.

Zinc is selling at about 7¼ cents by the cask. Spetter is approximately the same. Horseshoe nails and horse shoes are in fair demand. Of the former, No. 8, countersunk, are about $8.75 per hundred weight; No. 7 being $9.60. Bar iron is firm, showing no change; galvanized iron is in good demand.

Nova Scotia Trade News

Halifax, N.S., July 18, 1905.

THE local market is steady and price firm. A fairly good jobbing trade is reported, but it is not quite up to expectations. Collections show no change, and the scarcity of ready money is much in evidence.

Another Halifax hardware firm has been hard hit by fire. This time it is George E. Smith & Co., whose premises are situated at the corner of Bedford Row and Cheapsides. On Saturday afternoon, while the place was closed, fire was discovered in the fourth storey, and before it was extinguished the fine stock was ruined, principally by water. The loss by fire was very light. The fire is supposed to have been caused by spontaneous combustion in some oakum, which was stored on the top floor, spread to a quantity of cotton waste, and then ignited some 200 wooden rakes which were on top of the lot. The firm's stock is valued at about $50,000, and it is expected their loss will be about $25,000. There was $30,000 insurance on the stock, and $12,000 on the building, nearly all of which is held by local companies. The firm will resume business at once.

During the week the first Portland cement made in Canada was turned out at Sydney. The tests were highly successful, and the cement is said to be of excellent quality. The test fully demonstrated what the plant is capable of doing. The plant has a capacity of 500 barrels per day of twenty-four hours.

The moulders who went on strike for more pay at J. Hillis & Sons' stove foundry, are still out.

Reports from Amherst say that the industries of the town are booming. The Robb Engineering Co. have received during the week an order for a 150-horse-power boiler for the Good Shepherd Asylum, Quebec, one 80-horse-power engine and boiler for the Electric Light Co., of Golden, B.C., and a 50-horse-

power engine for the Dunlop Tire Co., of Toronto.

The price of turpentine here is fluctuating from 90c. to $1. Other quotations are as follows:

Lead pipe	$ 4 70
Sheet zinc, in casks	7¼c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3¾ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 30
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White lead per 100 lbs., pure	5 75
" 2nd quality	5 50
" 3rd "	5 00
Barbed Wire	2 55
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 co
Black sheet iron	35c.
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00

British Columbia Trade News

Vancouver, B.C., July 20.

LAYING a finger on the weak point in the condition of the Kootenays as to mining development is a difficult thing to do. Perhaps an expert who was one of the party of the American Institute of Mining Engineers, who last week visited the province, came nearer than any one has yet, when he said that too much money spent in machinery and not enough in actual development work was the cause of the backward condition of mining in the Kootenays. He said that he could point out where fully $2,000,000 worth of mining plant lay idle in the Kootenays and had never earned a cent. That sum, he pointed out, could work wonders judiciously spent in development work.

In nearly every section of the Kootenays are mines where the blocking out of ore has been neglected to attend to the immediate profit to be secured from raising what was actually in sight and milling it. The money went in this work, in erecting machinery and in paying dividends, and when the ore in sight was worked out, no money was in hand to develop further. The eminent engineer who expressed this homely view of the situation probably struck the nail squarely on the head, and it remains if those to whom he spoke will take heed of the words of wisdom.

* * *

The lead production of the Kootenays for the year ending June 30 was a little over 27,871 tons, of which 17,000 tons was produced in British Columbia, and the remainder exported. The bounty is less for the lead from exported lead than from that treated locally. It is paid on a sliding scale varying with the price of lead in London. This year the amount to be disbursed will be about $340,000 out of a total of $500,000 set aside for the purpose by the Government. The production of lead this year is the largest but one in any year in the history of the industry in the province. In 1900 it was 31,674. In 1903 the year before the bounty was given, it was but 9,044 tons. Last year it was 18,323 tons.

* * *

Kamloops coal is the latest competitor for notice in the coal areas of the province. A development company has holdings south and west of the town, and shafts sunk 380 feet have cut seams aggregating 40 feet in thickness. A mining company now has options on the property, and as the same company has recently erected a 50-ton smelter for the Iron Mask mine, it will develop the coal for coking purposes if it takes up the option. The coal is of superior quality for coking. The deposit is thought to underlie the whole Town of Kamloops, and one enthusiast predicts that shafts will be sunk some day within a stone's throw of the city hall.

* * *

The coal areas of the Similkameen district are likely to receive further attention this year, by reason of the railway extension now going on to reach that district. There are coal deposits all over the district. That at Princeton is 19,200 acres in extent, with 60 feet of coal in strata varying from 2½ to 18 feet thick. It is of very fine coking quality. Analyses show fixed carbon from 54 to 74 per cent.

* * *

The employes of the building trades, beginning with the carpenters, have demanded that the weekly wage be paid in cash, not in cheques, for several reasons, one being that the men are often compelled to buy something to get the cheque cashed, and also they often get them cashed in saloons. The carpenters receive their demanded currency, and the other trades followed. No trouble is anticipated, as the employers as a rule are willing to accede to the request.

* * *

The British Columbia Electric Railway, which last week took over the Lulu Island branch of the C.P.R., running to Steveston, and is now operating it as an electric tramway, is to build in North Vancouver, the rising community across Burrard Inlet. In that district they are to build five miles of railway, and to extend as needed. The franchise is for fifty years and was voted on by the ratepayers and approved. The same company also gets the lighting franchise and street lighting also.

* * *

Mr. E. Tougas, head of the Montreal house of P. D. Dods & Co., left for home on the 10th, after completing the transfer of the firm's Vancouver business to Mr. H. Darling, who has bought it out. Mrs. Tougas remains here for some time with her son, Mr. Allan Dods, who has been manager in Vancouver. He has been in poor health some months.

* * *

Three thousand tons of cargo for Vancouver wholesalers is being discharged from the Bark Nivelle, from Liverpool to Victoria and Vancouver. One consignment consisted of 4,000 bbls. of British cement, and the rest was mainly heavy metals, and manufactures of steel. A temporary shed had to be built at the C.P.R. wharf to accommodate the cement.

* * *

Fire on Saturday night last destroyed the store and stock of the Manley Hardware Co., Grand Forks, B.C. Mr. A. A. Richardson, appraiser, has been sent to adjust the insurance and appraise the loss.

* * *

The first gold brick from the Cariboo Consolidated Co.'s mines at Bullion, Cariboo, this season, has been received by the Bank of Montreal. It is valued at $25,000 and represents the first partial clean-up of the season.

* * *

A casting weighing five tons and measuring 10 feet long by 6 feet high was turned out by the Albion Iron Works, for the steamer New England. It is a part of the condenser which broke down recently. The successful making of such castings is inducing boats and steamers to have their repairs done in Vancouver.

* * *

Gustave Loeb, of the banking firm of Kuhn, Loeb & Co., New York, has been inspecting the property of the B. C. Copper Co. in the Boundary district, as the company is about to double its capital to $4,000,000, and the New York bankers are to handle the shares. It is possibly the same banking house will finance the Midway-Vernon Railway.

* * *

The British ship Springbank has cleared with a million and a half of B.C. lumber for Melbourne, Australia. She had 400,000 feet of California redwood aboard, which she loaded before coming to this port.

WHITE LEAD SITUATION.

THE change in the tariff which resulted in the advance of the duty on white lead from five to thirty per cent., has caused several meetings of the grinders of Montreal. Although everything on the surface appears to be smooth, nevertheless a fair portion of the opinions which have been offered "on the quiet" have been far from favorable to the recent change.

Two meetings of the leading Montreal lead grinders were held last week, while others were held this week which resulted in two different deputations journeying to Ottawa and interviewing certain members of the Cabinet in the hope that some clauses in the new Tariff Bill might be rectified.

The clause relating to the classification of white lead purchased by Canadian grinders before and after the change came into effect, is rather indefinite, and this is the point to which the Montreal grinders took exception, and which was the cause of the two visits to Ottawa.

The first deputation journeyed to the capital on Monday afternoon, July 17, and was composed of Messrs. R. Munro, of the Canada Paint Co.; Henderson, of Henderson & Potts, both of Montreal. Members of the Cabinet were interviewed, the principals of which were Mr. Fielding, Mr. Fitzpatrick, and Mr. Cartwright, and the chief object sought was to gain, if possible, an extension of time on the Amendment Act. The date named was the fifteenth of September. Due consideration was promised by the members interviewed, but the deputation returned feeling anything but satisfied. At a meeting held almost directly after their return it was decided to send another deputation, and gain if possible something more definite.

The result of this meeting was the sending up of Mr. C. C. Ballantyne, of the Sherwin-Williams Co., of Montreal; Mr. R. Aird, of the Canada Paint Co., and Mr. Kinghorn, of the Montreal Rolling Mills. Another interview was secured, but as far as can be learned nothing definite was arranged, as the Senate was already debating upon the sug-

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Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.
Contractions count as one word, but five figures (as $1.000) are allowed as one word.
Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.
Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words each insertion,	1 year		$30 00
" " "	6 months		17 00
" " "	3 months		10 00
50 " "	1 year		17 00
" " "	6 months		10 00
25 " "	1 year		10 00

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

BUSINESS FOR SALE.

HARDWARE and tinsmithing business on Main Line C.P.R. in Manitoba. Stock and fixtures $9,000. Solid stone store $3,500. Terms: Half cash, balance on easy payments. Purchaser can lease store if preferred. This is an old and well established business, paying handsome profits. Good reason for selling. For full particulars apply P.O. Box 32, Oak Lake, Man. (29)

TRAVELER WANTED.

AN experienced hardware traveler; state experience and with whom employed. Address Box 216, Montreal. (30)

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3893

gestions put forward by the first deputation.

A strong plea to more closely define the clause relating to the re-selling of the lead was presented by these three gentlemen. This part of the Act was to the effect that all lead purchased on the foreign market and sold by the Canadian grinder before the date of the enforcement of this Act must be admitted into the country at the old rate of duty, namely, five per cent. This in itself is very indefinite and, furthermore, there is nothing to prevent a grinder who will stoop to practice underhand work from re-dating his orders, or adopting some other unfair means of benefitting himself and his customers. Even should the Government keep a strict supervision over each grinder's books, it would be possible to doctor them so as to avoid detection except by those on the "inside."

An instance occurred recently where a retail merchant residing in the country wrote to one of the leading grinders of Montreal and complained of the slowness of the grinder to forward his order for white lead, which he had booked some two months ago. This grinder admitted that no such order had been booked, but that this letter was nothing other than a hint for the grinder to forward the shipment of ground white lead at the old prices, and he—the retail merchant—would co-operate and help the grinder in his underhand work if he chose to follow that manner of transacting business. In all probability this method will be adopted by some, no matter how strict a watch is kept by the officials. On these grounds, then, it is claimed that it would be much better for Mr. Fielding to withdraw the clause respecting the purchasing and selling of the lead before a certain date. Besides being more satisfactory to the Canadian grinders of white lead, it would also save the Government unnecessary labor and worry.

DEATH OF CHAS. GARTH.

MR. CHARLES GARTH, president and managing director of the Garth Company, general steam and gas fitters and plumbers, of Montreal, passed away at 10.30 a.m. on the morning of July 18th.

The late Mr. Garth was born at Rochdale, Lancashire, England, on Aug. 25, 1822, and came to Canada with his parents when he was four years of age. In 1838 he took managing control of his father's business and became its sole proprietor when his father, George Garth, accepted the management of the Montreal Gas Works. On the business becoming a limited company he preserved a controlling interest and was its president and managing director. In 1861 he was made president of the Mechanics' Institute, of which he was a life member. He represented Centre Ward in the City Council, and at the time of his death was a member of the Board of Trade, a governor of the Montreal General Hospital, and a governor of the Montreal Diocesan Theological College.

For some years the late Mr. Garth was treasurer of the Diocesan Synod of Montreal. He was an ex-president of the Montreal Cotton Company, and president of the Windsor Hotel.

PERSONAL MENTION.

Mr. Peter McMichael, manager of the Dominion Radiator Co., Toronto, is in Winnipeg this week.

Kerr & Coombe's Foundry employes, Hamilton, held a successful picnic at Niagara Falls last Saturday.

Mr. Henry Clucas, of the Canada Paint Co., Toronto, is back in harness after a holiday trip up the lakes.

A small explosion took place in works of the Dominion Cartridge Co., at Brownsburg Quebec, on July 14.

Mr. J. E. Seale, hardware merchant, of Morin Flats, Que., was a visitor to the hardware trade in Montreal this week.

Mr. W. R. Ross, of Frothingham & Workman, Limited, Montreal, is spending his vacation at Lac Des Isles, St. Agathe.

Canadian Rubber Co., of Montreal, ran a very successful picnic to St. Ours by the steamer Three Rivers, on Saturday, July 15.

Mr. John T. Sheridan, president of the Pease Foundry Co., Limited, Toronto, is in Winnipeg this week consulting with the management of the Pease-Waldon Co.

The staff of molders employed by the Pease Foundry Co., at Toronto Junction, found it necessary to lay down their tools during the hot weather of the first of the week.

A small fire started in the works of the Canada Paint Co., Montreal, early on July 17. The flames were, however, subdued by the company's own men before any serious damage was done.

McClary Mfg. Co.'s molding shop at London has been shut down temporarily by the company owing to a number of men absenting themselves from duty last week. The shop will re-open in a few days.

Mr. Jas. J. Murphy was a welcome visitor at the Montreal office of Hardware and Metal last week. Mr. Murphy is a resident of Quebec City, and deals extensively in cements, firebrick, fire clay, and contractors' supplies.

The wholesale hardware firm of Frothingham & Workman, Limited, of Montreal, are to open a new branch office and warehouse in Winnipeg. Nothing as yet has been definitely settled regarding the situation of the new warehouse.

The Canadian Fairbanks Co., Limited, expect to occupy their new Toronto premises on Front street, west of Yonge, early next week, and arrangements are now being made to transfer their offices and samples from their temporary offices on King street west, where they have been since the fire of last year. When the new building is occupied Hardware and Metal will give a description of the new premises.

After a long and painful illness, Mr. William Jessop, chairman of William Jessop & Sons, Limited, steel manufacturers, Sheffield, died on July 4, at the age of forty-eight. The deceased was the head of one of the most famous families in the whole metal world, and there are records of Jessops making steel in Sheffield as far back as 1774. Although chairman of one of the world's great steel industries, William Jessop never participated very actively in business life, and avoided public positions.

The hardware firm of Douglas & Prowse, Halifax, has dissolved partner-

ship. The members were Captain Douglas, Halifax, and W. H. Prowse, Murray Harbor. The former has resumed his position as traveler with Stairs, Sons & Morrow.

Mr. John Warren, of the sales department of Frothingham & Workman, Limited, Montreal, is spending his vacation at Port Louis, which is at the head of Lake St. Francis. Mr. Warren is spending an enjovable holiday trip which will end in a few days.

Mr. T. W. Mahon and wife, of Hintonburg, were visitors in Montreal this week. Mr. Mahon is a progressive hardware merchant in that town, and while in the city paid a visit to the office of Hardware and Metal. Mr. Mahon visited the paint trade of Montreal.

The hardware business carried on by J. R. MacPhail on Granville street, Vancouver, will be transferred by him to L. E. P. McAdam, late of Dunedin, New Zealand, on September 1. The business will be extended and enlarged and its capital increased. Mr. J. L. Johnson, an experienced hardware man, will be manager.

The injunction obtained by the Imperial Hardware Co., Toronto, against several of its directors, restraining them from taking possession of the company's property under a bill of sale for $1,500, has been continued. The company claimed that the bill of sale was merely security for a loan. The defendants are G. G. M. Davison, H. A. Coxall, and F. A. Hoar.

Mr. J. H. Ashdown left Winnipeg last week for the east on business in connection with the transportation commission. Accompanied by C. N. Bell he will inspect a number of Georgian Bay ports, and will later proceed to the Maritime Provinces. Sittings of the commission will be held at St. John, N.B.; Halifax, N.S.; Sydney, C.B., and Charlottetown, P.E.I.

Among the visitors to the Montreal paint and oil trade this week, were J. A. Paquin, St. Eustache, Que.; J. P. Brown, hardware merchant, St. Chrysostone, Que.; C. Leblanc, hardware merchant, Joliette, Que.; C. Thoret, hardware merchant, St. Timothy, Que.; E. T. Codere, hardware merchant, Sherbrooke, Que., and R. Logan, hardware merchant, Allan's Corners, Que.

Mr. G. J. S. Morison, of the Metallic Roofing Co., left for Winnipeg this week, to take charge of the company's new plant at that place. Mr. Morison has had ten years' experience in the firm's head office, at Toronto, and he is well qualified to undertake the duties of his new position. Before leaving for the west Mr. Morison was presented with a pair of gold cuff links by the Toronto office staff of the Metallic Roofing Co.

Mr. C. C. Ballantyne, of the Sherwin-Williams Co., of Montreal, returned from his trip to Great Britain with the Canadian Manufacturers' Association on Saturday morning, July 15. Mr. Ballantyne accompanied the touring association on their trip throughout the provinces, but owing to the necessity of returning to business he could not manage to take advantage of the invitation given by the Department of Trade and Commerce in Paris. Mr. Ballantyne reports having enjoyed himself thoroughly, and is high in his praise of the way each member of the association was received by the people across the water.

Profits that go to other tradesmen would come to you if you brought "Eastlake" Metallic Shingles to the attention of intending builders more aggressively. Why not get after these people?

The advantage of "Eastlake" Metallic Shingles over wood shingles is such a simple story of fact that prospective builders have but to listen to be convinced.

Their fireproof qualities, resistance to rust, storms and lightning, and their longer wear appeal direct to the pocketbook.

The free samples which we will gladly send you, make it very easy to get orders, when a prospective builder is once made to realize how much better "Eastlake" Metallic Shingles really are than wood shingles.

There's money in this trade.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada 304

We also manufacture:
"Metallic" Ceiling and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (Stone, Brick, Etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, July 21, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

A VERY successful convention of the Retail Hardware Association is expected on Wednesday and Thursday of next week. Secretary McRobie has sent out notices to the trade inviting them to the convention, but as his mailing list may not be complete he wishes it to be understood that every retail hardware man in the West is welcome to the convention.

* * *

Winnipeg wholesale houses have no reason to complain of "midsummer dulness," and every establishment in town seems to be working at full pressure to turn out orders. The demand for building supplies is enormous—much larger than in any previous year. Next week the exhibition and the Retail Hardware Association's Convention will bring many retailers to the city, and increased activity may be expected in some lines. Prices throughout are steady.

* * *

Screen Wire Cloth—Price is steady at $1.55 per 100 square feet.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, perroll	$1 20
30 " "	1 50
36 " "	1 80
48 " "	2 40
60 " "	3 00
72 " "	3 60

Wire—Staple and special lines of wire and fencing are still selling well. Prices continue as follows:

Barbed wire, 100 lb.	$2 85
Plain galvanized....6 to 8	3 39
" 9 2 50	2 90
Plain galvanized....10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire....10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
" 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Demand is light at present. We quote as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent., "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Moving in very large quantities. Base price: $2.85 per keg.

Cut Nails—Base price $3 per keg. Very few selling.

Screws—In good demand at unchanged discounts. We quote:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat "brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.

WALL COVERINGS

We always have a large and well assorted stock of

BURLAPS

on hand, and are agents for the celebrated

FAB-RI-KO-NA

Dyed Tapestry Burlaps.

Write for samples and prices.

Orders filled same day as received.

G. F. STEPHENS & CO., Limited

PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 00 to 18 co

Files—We again quote as follows:

"Arcade"	70 and 10 p.c.
"Black Diamond"	60 p.c.
"Nicholson's"	62½ p.c.

Building Paper—Selling in very large quantities. Prices are nominally as follows:

Anchor, plain	55c.
" tarred	70c
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—There is considerable activity in all lines of arms and ammunition, many orders being received now for Fall delivery. Discounts continue as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—Price is 20 cents per lb. for small quantities.

Iron and Steel—There is no special activity in the local iron and steel market. Quotations continue as follows:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—The market is reported very active at following prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—All the leading brands are in active demand. Prices are steady and are quoted as follows:

Apollo, 16 gauge	4 co
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Selling briskly at prices quoted last week:

ROOFING.

(Lengths 3 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins. 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto. 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—The advance in white lead is now general, and it is being firmly maintained. Turpentine and linseed oil are steady at prices quoted before. General business is still very active. We quote:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls.	0 02½
" in kegs	0 02¾
Turpentine, pure in barrels	1 00
Less than barrel lots	1 05
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—We quote:

16-oz. O.G, single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
6 to 100 "	

COMMERCIAL TRAVELERS' TAX.

THE commercial travelers, that is that section acting for foreign houses having no place of business in the Province of Quebec, continue to wax wroth over the tax of $300 which the Province of Quebec has placed upon them.

The Dominion Commercial Travelers' Association have also taken the matter up and have been in correspondence with the Quebec Government on the subject. Mr. Wadsworth, the secretary of the association, when interviewed by a representative of Hardware and Metal, stated that, as yet, no direct action had been taken. A deputation appointed by the association had, however, interviewed the Government on March 30 of this year. Since then considerable correspondence has passed between the Government and the association.

Mr. Wadsworth went on to say that the association was not endeavoring to assist foreign travelers, but salesmen who, while they represented foreign firms, were members of the association, though residing outside the province.

HEATING CONTRACTS.

Desrosiers & Charette, St. Boniface, Man., have recently secured a contract to instal in the St. Norwood Catholic Church a system of Pease Economy heaters according to plans submitted by the Pease-Waldon Co., of Winnipeg. The system will be similar to that installed last season in the St. Pierre Church.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST., WINNIPEG, Manitoba

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

FOR STORAGE IN WINNIPEG

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

WIRED GLASS

The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

ASK FOR VEST POCKET MAP OF MANITOBA

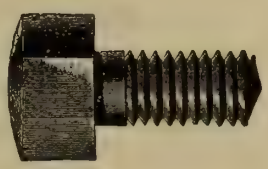
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

SPRINGS

ALMOST ANYTHING IN THIS LINE

Small DROP FORGINGS

Submit Samples or Specifications for Prices.

THE WALLACE-BARNES CO., - - BRISTOL, CONN.

PAINT, OIL AND BRUSH TRADES

NEW USE FOR GLASS.

A PRACTICAL inventor and scientist, M. Garchey, known all over France, has made a very interesting experiment in Lyons. He has discovered an entirely new method of melting all kinds of old glass and transforming it into material as hard and serviceable as Belgian blocks. In 1898 he obtained permission from the municipal authorities of Lyons to pave a portion of one of their main streets with this new material, and thus prove to the world the value of his discovery. The street selected was a principal thoroughfare, which was under continuous and heavy traffic, and yet the glass is still as sound as when first put down.

M. Garchey claims for "ceramo-crystal," as he calls it, that it can be manufactured at a much more reasonable figure than any other reliable building material now on the market in Europe or America, and that it is practically indestructible. It is also highly attractive and artistic in appearance, and M. Garchey fully expects to see it taking the place of the building materials now in use.

ABOUT LEAD POISONING.

THE lead poisoning of painters, which causes the dreadful condition of colic, weakness of the wrist muscles and paralysis, is now under discussion in the legislatures of Europe; whether to prohibit or not to prohibit the use of white lead paint, on account of its terrible effect on some painters. This leads to the question: Is there any pigment that could be used as a substitute for white lead? No! The question then arises: What causes some painters to be poisoned, while others are immune? Is it turpentine alone, as some painters assert? No! Carriage painters (of whom I am one myself) work in close varnishing rooms, where the air is saturated with the vapor of turpentine from the applied varnish and paint, and suffer nothing like lead poisoning. Neither do others who are exposed to the same fumes.

Is it due to turpentine evaporating from applied lead paint? No! Carriage painters apply white lead with some turpentine, and breathe the vapors from it while at work in closed rooms. They also, after the paint hardens, sandpaper the paint off and breathe the dust without being poisoned.

What, then, causes the white lead colic?

The durable form of white lead is partly basic, being a compound of the carbonate and the hydrate of lead, somewhat soluble in water, the hydrate constituent readily uniting with acids to form salts. This basic white lead in its union with oil (lead paint), and still more readily in its union with turpentine, is to some extent exhaled by evaporation into the air, its presence being readily recognized by the sense of smell, and affects painters generally who indulge in alcoholic drinks during working hours, or who from any other cause have a "sour stomach."

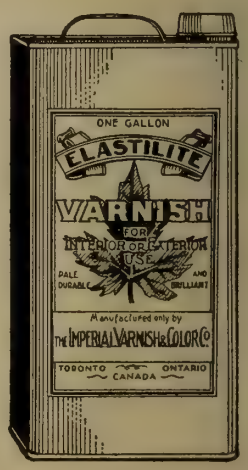
The action is as follows: When liquor is taken into the stomach it is warmed up to about 100 degrees F., and ferments to vinegar. The vinegar in the stomach, as well as the vapors thereof, carried by respiration into the lungs, unites chemically with the lead inhaled with the turpentine vapor, to form that deadly poison acetate (or "sugar") of lead. This passes in very minute quantities into the blood, which deposits the poison in various parts of the system, where it accumulates, to manifest itself finally by laming the muscles and producing painters' colic and local paralysis. During my experience of more than sixty years working with paint, I have observed that painters afflicted with lead colic were invariably drinkers of liquor during working time. This habit should not be indulged in, if one would escape that terrible calamity, lead poisoning, for which there is little or no remedy.—L. Matern, in Drugs, Oils and Paints.

MINERALS USED AS PIGMENTS.

There are a number of mineral substances that are mined and prepared primarily for use as pigment, says Joseph Hyde Pratt in Mineral Resources. These are the iron ores, hematite and limonite, which are ground and used in the manufacture of metallic paint, and which are not included under the production of iron ores; ocher, clay and other earths containing iron which are used for yellow and brown pigments, such as ocher; umber, sienna, etc.; barytes (or heavy spar) used for white pigment; slate or shale; and graphite. Other minerals that are directly used in the manufacture of paints are asbestos and soapstone, which have been utilized principally in the manufacture of fireproof paints and paste. Besides these minerals that are used in the natural state there are a number of other substances included under the head of mineral paints that are manufactured products, such as the various lead pigments, white lead, red lead, litharge and orange mineral.

STOP BAD HABITS,

buying varnish without a reputation. Stock Elastilite Varnish, with the highest reputation, established on quality, that has always pleased the people. Equally good for inside or outside.



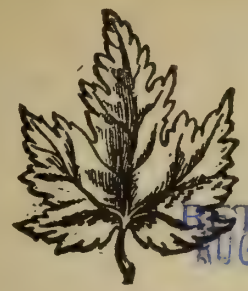
The Imperial Varnish & Color Company, Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.



Trade Mark, Registered.

MAPLE LEAF BINDER TWINES



GILT EDGE, 650 ft., Pure Manila

GOLD LEAF, 600 ft., Manila

SILVER LEAF, 550 ft., Standard Manila

MAPLE LEAF, 500 ft., Standard

The manufacture of these Brands is based upon the knowledge and experience of experts in the Binder Twine business and governed by our determination to make the goods the very best in the market.

In connection with our manufacturing system, it is our constant aim to improve in every detail essential to the making of first-class Binder Twine.

This, briefly, accounts for the combination of good working qualities found in **THE 4 MAPLE LEAF BRANDS**, the perfection of uniformity, great length, evenness and strength, which has made them so popular.

These Brands are trade-builders, friend-makers, self-advertisers—for the Dealer who sells them.

When interested in Binder Twine, kindly remember us and Our Four Brands. No trouble to get started with us. We are ready to meet you. Write or wire your enquiry, and expect our best attention.

Orders filled by prompt shipment from Brantford, Toronto, Winnipeg and Brandon.

THE BRANTFORD CORDAGE CO.,

BRANTFORD, CANADA. ***Limited***

BRANT-LAC

A varnish and stain in one coat unequalled for quality and service. Furniture looks as good as new when



Brant-Lac

has been applied. It is just as efficient for woodwork, floors, etc. In all colors and quantities—just the varnish for a steady trade.

SEND FOR PRICES

SCARFE & CO.,

Manufacturers of Fine Varnishes, etc.

Brantford, Canada.

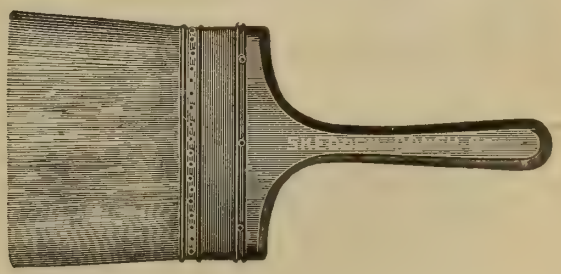
THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

NO USE

of handling other brushes when

Skedden Brushes

are to be had. Just as cheap. Twice as good. Every



brush guaranteed and stamped "SKEDDEN." Our catalogue will be of service. Send a post card for it.

The Skedden Brush Co., Limited, Hamilton, Ont.

Toronto Office—57 Queen Street East.

Phone Main 3431. F. W. KNIGHT, Agent.

The....

Real Test

OF A LIQUID PAINT IS

How it Wears

Those who have used

"ANCHOR"
and
"ENGLISH"

LIQUID PAINTS

during the last

30 YEARS

tell us they have given perfect satisfaction.

If you handle these goods your customers will stay with you.

They are the only liquid paints in which the White Lead used is

Brandram's B.B. Genuine

BRANDRAM BROS & CO BRANDRAM'S B.B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, July 21, 1905.

SOME of the local wholesale dealers report a usual quietness of trade, which is natural at this time of year, while others maintain that the receipts of this month are just as large, and in some cases larger than those of previous months. The recent increase in the demand for Paris green is nothing short of wonderful, and already some of the leading manufacturers and dealers are reporting an absence of stocks. This is especially noticeable with the Canadian article, and should the present demand continue no doubt the situation will have a dark appearance to the home manufacturers.

The white lead situation still continues to have an unsettled appearance, and nothing definite can be formed regarding the future market. Some local dealers report that their customers are short of stock and are constantly forwarding orders for immediate shipment. No doubt stocks in some quarters are very short, as numerous inquiries have been received on the local market during the last few days inquiring at the delay in forwarding orders. Other wholesale dealers state that their customers are holding off until they see which way the market will move. At any rate no large orders are being booked, and it is estimated that every person is buying small amounts—from hand to mouth, as it were.

Turpentine has a somewhat better appearance, and though prices have been fluctuating during the week the outlook respecting the future market is much better. The handicap caused by the shortage of labor to reap the crop has been partly overcome, and the daily receipts in the South are much larger. Castor oil has been fluctuating considerably on the foreign market of late. The market has assumed a much easier appearance, and a decline has been the result.

Canadian Paris Green — Barrels, 17 1-4c.; arsenic kegs, 17c.; 50 and 100-lb. drums, 18c.; 25-lb. drums, 18 1-2c.; one pound packages, 19c.; half-pound packages, 21c.; one pound tins, 20c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Pure English Paris green, petroleum barrels, 15 1-4c.; arsenic kegs, 15 1-2c.; 50 and 100-lb. drums, 16c.; 25-lb. drums, 16 1-2c.; one pound paper boxes, 17c., one pound tins, 18c.; one-half pound paper boxes, 19c.; one-half pound tins, 20c. Terms, 2 per cent. off thirty days, or ninety days net from date of shipment.

Turpentine—Single barrels 90c. per gallon; two to four barrels, 89c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels, 51c.; five to nine barrels, 50c.; boiled, one to four barrels, 54c.; five to nine barrels, 53c. f.o.b. Montreal. Net 30 days.

Ground White Lead — Best brands Government standards, $5.50 to $5.70; No. 1, $5.25 to $5.45; No. 2, $5 to $5.20; No. 3, $4.75 1-2 to $4.95; No. 4, $4.50 to $4.70, all f.o.b. Montreal.

Dry White Lead—Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure, 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil — 8 to 9c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—Trade continues quiet. No change is expected until before the close of navigation. Our quotations are as follows: American prime white 14 1-2c., American water white 16c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, July 21, 1905.

LOCAL dealers report the biggest business on record. The demand for Paris green continues very strong, and, if it keeps up at the present rate, some of the firms will soon have a shortage. Orders are abnormally large, and are rapidly diminishing the stocks. Paints are selling in great quantities, and the whole trade situation is most satisfactory. The usual "midsummer dullness" has not yet manifested itself.

The glass situation remains the same, and though little is being imported there is every expectation that orders will be met. The settlement of the great glass strike in Belgium will not relieve the Canadian market this season, as it will

THERE IS NO OTHER MIXED PAINT

on the market that will give beauty, durability and general satisfaction like

New Era House Paint

It will cover more surface, last longer, hold its color better than any other paint you can buy. Weather changes do not affect it. This is a good article to stock up. We have a Catalogue.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros.

Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.

617-621 Austin Ave., CHICAGO, ILL.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.



A Popular, Profitable and Seasonable Line to Handle.

Dennis' Flexible Steel Wire Door Mats

DENNIS WIRE AND IRON CO.

Send for Catalogue. LONDON, ONT

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Get your GLUES from

The GROVE CHEMICAL CO., Limited

Appley Bridge, Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter.

SCHROEDER & STADELMANN

OBERLAHNSTEIN, A/M RHINE, GERMANY

ESTABLISHED 1862

MANUFACTURERS OF

TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc.

SPECIALTY

YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.

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ER'S
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SELL
ISLAND
CITY
PAINTS

THIS IS THE HOUSE OF QUALITY

P. D. DODS & CO. Vancouver, Winnipeg Montreal, Toronto

2

out of every

3

Painters in Canada use exclusively the painting material made by the

CANADA PAINT COMPANY

It comes as natural for a progressive hardware man to mail his Paint and Varnish orders to the Canada Paint Company, as we go to Church to Pray, to Bed for Sleep or to the Stream to Fish ! !

From start to finish the Canada Paint Company manufacture every item on their list. Colors, Varnishes and Paints suitable for every class of work. Do not look elsewhere for better paints. They are not to be found. The best paint is made by the Canada Paint Company by Canadian Workmen, Canadian Capital and for the Canadian Trade.

THE CANADA PAINT COMPANY LTD

take some months to catch up to orders already on hand.

Turpentine remains at last week's figures. An effort is being made in some quarters to stiffen the price, but for the most part the figures given below will hold.

The linseed oil situation makes it doubtful whether the Canadian makers will crush even this year, as there is still plenty of foreign oil offering, at a price which would give only a very small margin on domestic goods. Dealers who prefer the Canadian oil are closely watching the situation.

We quote prices:

White Lead—Ex Toronto, pure white \$5.50 to \$5.75; No. 1, \$5.12 1-2; No. 2, \$4.75; No. 3, \$4.37 1-2; No. 4, \$4.10 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, \$4.25.

Red Lead—Genuine in casks of 560 lbs., \$5.25; ditto, in kegs of 100 lbs., \$5.50; No. 1, in casks of 500 lbs., \$4.75 to \$5; ditto in kegs of 100 lbs., \$5.25.

White Zinc—Genuine French V. M., in casks, \$6.50 to \$7; Lehigh, in casks, \$6 to \$6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to \$1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, \$2.60 to \$2.80; white. \$2.65 to \$2.90 per barrel; No. 1 (orange), \$2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 54 to 56c.; boiled, 57 to 59c.; 5 to 9 barrels, raw, 55 to 56c.; boiled, 58c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrels, 87 to 90c.; 2 to 4 barrels, open; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. \$1.65 to \$1.75; pure linseed oil, \$2 to \$2.10; bulk in barrels, \$1.50; pure, \$1.95 to \$2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, \$2 per barrel.

RETURNED AUG 29 1905

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

Are you handling our



STEEL FEED TROUGHS?

If not we can make you an interesting proposition as our **NEW TROUGH CATALOGUE** and other literature are now ready to assist him trade. We supply you liberally with them and give exclusive agency. Let us hear from you.

STEEL TROUGH & MACHINE Co., Limited
TWEED, Ontario

SEALED TENDERS addressed to the undersigned and endorsed "Tender for alterations, Custom House, Toronto," will be received at this office until Monday, July 31, 1905, inclusively, for alterations to the Custom House, Toronto, according to plans and specification to be seen at the Department of Public Works, Ottawa, Ont., and at the office of Messrs. Curry, Sproatt & Rolph, 90 Yonge St., Toronto.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent. (10 p. c.) of the amount of the tender must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By Order,
FRED GELINAS,
Secretary,

Dept. of Public Works,
Ottawa, July, 10, 1905.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

(30)

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for additions, &c., Post Office, Calgary," will be received at this office until Monday, August 7, 1905, inclusively, for additions and alterations to the Post Office, Customs, &c., building at Calgary, N.W.T., according to plans and specifications to be seen at the Department of Public Works, Ottawa, Ont., and at the office of Paul Paradis, Esq., Resident Engineer, Calgary, Alta.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent (10 p.c.,) of the amount of the tender, must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, July 5, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it.

(29)

TRADE MARK

This design a guarantee of quality.

WATERPROOF WRAPPING PAPER

For Express and Long Distance Packages. Put up in rolls 36 in. wide, 250 and 300 yards in a roll. Clean paper on both sides—waterproof substance in the centre—therefore it will not soil or stain delicate goods, as ordinary waterproof paper will. Practically odorless. May be used either for case lining or wrapping packages.

SAMPLES AND PRICES WITH PLEASURE.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

It is now quite evident that the Belgians are far behind in filling orders, and anxiety on the part of the wholesale dealers is much more prevalent. Small amounts are arriving with each ship, but these are not always of the sizes which are most commonly required. In fact much that is being received is of the larger size, which, before it can be sold to the retail merchant, has to be cut and sold at a small loss to the wholesale dealer. Some of the pessimists are inclined to believe that the demand for this Fall will clean everything off the local market, but those who are viewing the situation from a practical standpoint fear no such result and maintain that receipts which will be much larger from now on will supply all that is required this Fall. Prices, although no change has taken place, are very firm. There is a strong tendency for the continuation of these strong conditions. Our quotations are: First break, 50 feet, $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 fe et,$4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

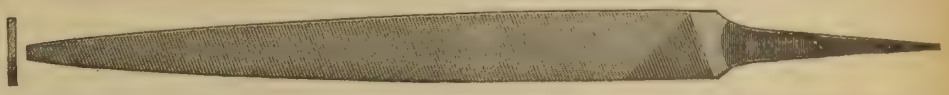
SHORTAGE OF PARIS GREEN.

The last few days has shown an extraordinary demand for Paris green, especially in the district west of Belleville and down to the Maritime Provinces. This marked increase in the demand has resulted in one of the best known manufacturers of the Canadian article, the Canada Paint Co., of Montreal, stating that their stocks are practically exhausted. If any readers of Hardware and Metal have an excess of stock and are not desirous of carrying the same over until next season, the Canada Paint Co. will only be too happy to hear from those merchants so that they may be in a position to indirectly supply those merchants who are in need.

Globe Brand Files and Rasps

WARRANTED

Possess all the merits of the Best Hand-Cut Files. For sale by all prominent Hardware Dealers.

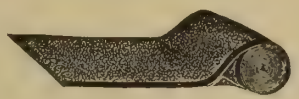


Thirty years' experience has taught us how to produce a Perfect File, consequently we are justified in giving our customers an absolute warranty with our product.

NICHOLSON FILE COMPANY

FACTORIES: Providence, R.I., Paterson, N.J., Beaver Falls, Pa., Anderson, Ind., Port Hope, Canada.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

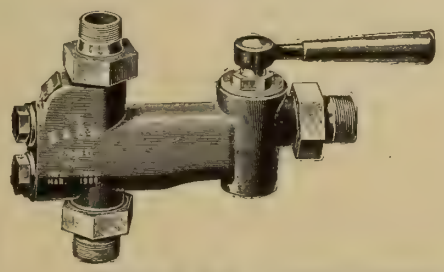
ASK YOUR JOBBER FOR

GILBERTSON'S COMET

Brand Galvanized Sheets

They are of uniform quality. There are none better made, but the price is low compared with other leading brands.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts.

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

ANTI-TRUST SHOVELS!!



Dirt Shovels, Coal Shovels, Scoops, Spades.

Also Sidewalk Scrapers, Snow Shovels, and Furnace Scoops.

Write for our Illustrated Pamphlet

F. E. KOHLER & CO.
CANTON, OHIO, U.S.A.

The Hardware Specialties Mfrs.

SOL-A-RINE

The Great Polish



For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, LIMITED

MANUFACTURERS OF

Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

Agent:

JOHN FORMAN, 644 Craig Street
MONTREAL.

How is your supply of

YORK

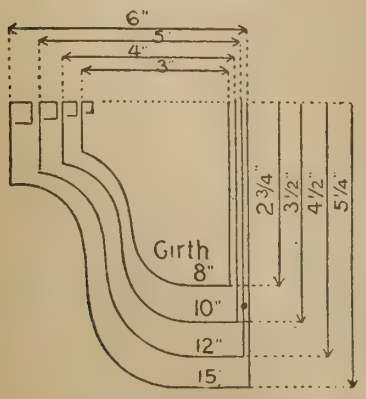
Metal Polish? Running down low? Stock up. It's cheap and reliable, and knows no rival.

ANGLO-CANADIAN SUPPLY CO.

3 Wellington St. E., TORONTO

O. G. EAVETROUGH

(SQUARE BEAD)



We supply the above in Round or Half-Round; also **Conductor Pipe,** Plain or Corrugated. Ten-foot lengths. At lowest market prices.

A full stock of Tinsmith's Tools and Supplies.

E. T. WRIGHT & CO., Hamilton, Ont.

STOVES AND TINWARE.

THE CARE OF GAS STOVES.

IF the asbestos of stoves or fire-places becomes discolored or blackened from the gas smoking, as it frequently does, the thing to do is to sprinkle the feathery fiber with common table salt; then light the gas and let it burn the same as usual, says a recent issue of What to Eat. The sooty appearance of the asbestos departs like magic and the mineral soon resumes its natural whiteness again. It happens, too, that the tiny apertures through which the gas flows become gummed and partially filled in; when such is the case run a hat pin through the holes, or a round toothpick, and it will readily free them.

It is important also to give particular attention to the gas range if the best results are to be obtained, and this is especially true where it is in constant service for cooking. Things inclined to boil over quickly, like milk or coffee, should be watched to prevent it happening, as they clog the burners and corrode the iron and zinc linings, causing them to rust and get a stained, unsightly appearance. About once or twice a week, according to the use of the range, the burners should be lifted out, turned upside down, and lightly tapped to knock out any dust or soot that might have lodged in the circular aperture that supplies the flame. A hat pin is good for picking out any particles that resist tapping. When not using keep the lids on the stove.

A NEW SAFETY KETTLE.

Mr. A. Ellinger, of Harrogate, Eng., has produced a novelty in the shape of the safety kettle. In this invention the lid is mounted on a high dome on one side of the kettle. The inventor's idea is that with this construction there is no danger of scalding the hand with the steam escaping from the lid. Moreover, the kettle can be more easily filled, either when it is on or off the stove. It is impossible also for water to run out of the top of the kettle when it is tilted over to pour from the spout. The lid cannot fall on the back of the hand when using the kettle, nor will the kettle boil over.

ITEMS OF INTEREST.

CONTRACTS have been secured by the James Smart Mfg. Co., Brockville, to heat and ventilate the Y.M.C.A. Building at Brantford and the high and public schools at Aurora. Five Kelsey generators will be used on the latter job.

Belleville will expend $15,000 in extending its gas plant.

Are you pushing stove polish? It's a good line at any season of the year.

Many dealers are making a success of selling stoves on monthly payments. Monthly calls keep them acquainted with their customers.

Frank expects to have an electric light plant shortly, as the Canadian Metal Co. are canvassing the town and find that 2,000 16 c.p. lights will be required to supply the wants of the citizens.

The contract for heating and ventilating the new Separate School at Wallaceburg has been given to the James Smart Mfg. Co., Limited, Brockville, manufacturers of Kelsey warm air generators.

Put out a sign, "Old Stoves Taken in Exchange," and pay enough for the old stove to induce the customer to buy from you. Then fix up the old stove and sell it for what you can get for it. You should get a profit on both transactions.

Every stove salesman should know the line he sells from top to bottom and be able to advise the best fuel to secure the most favorable results. Not a bolt or nut, door or damper, should exist without his being able to explain what it is there for. Such knowledge impresses a customer favorably. Have you the knowledge?

When you get anything really new in the way of a stove, let the people know. Be enthusiastic about it and you will soon communicate your enthusiasm to others. Many people that have not kept pace with the improvements in stove-making the past few years do not know what a difference there is between the stove of to-day and that of ten years ago. Show them.

A feature of the trade this year is the early orders for repairs, it being evident that local dealers are learning to urge their patrons to bring in their stove and furnace repair work during the Summer, so that they can be done satisfactorily before the Fall rush. This is a good thing as it not only assures the owner of the stove that it will be ready when it is needed, but gives the repair man much more time to order the parts needed or make the changes.

Any dealer that expects to sell furnaces should familiarize himself more or less with the principles of heating. He should be able to tell what kind of a furnace is best suited to each sort of a building, whether it should be hot air, hot water, steam or a combination. He need not be an expert in the matter, but he can easily have enough knowledge to talk to the owner of the building intelligently on how to heat it. After he has decided what system is best some good reliable manufacturer will furnish him the plant all ready to install if the specifications are sent in.

Many stove men do not like to do a second-hand business, as they think it hurts the trade in new goods, says the Hardware Trade. It will not if properly managed. The second-hand stoves can be sold to people wanting stoves only for a short time, to those wanting stoves for Summer cottages or for camping out, to people who will not buy new stoves. If anyone wants a new stove and comes in to look at one, he is not likely to switch off and buy an old one. The merchant can make good money by taking the old stoves in exchange, fixing them up and selling at the best price possible. Of course, too much must not be allowed for them in trade.



Sterne's Asbestos Stove and Furnace Cement

No other cement as good, no matter at what price. We will send any quantity on approval. Money for you selling this cement.

Get Prices at once.

G. F. STERNE & SON, MANUFACTURERS, BRANTFORD, ONT.

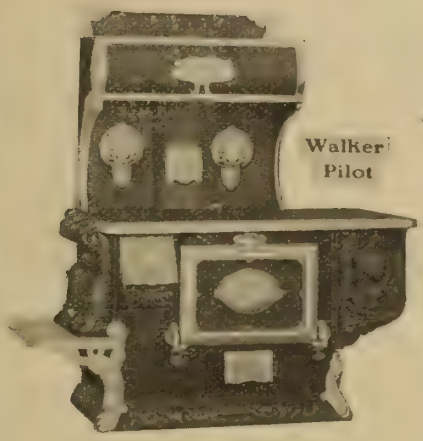
Accurate Fitting

We have 300 styles of **Fire Bricks** made from the highest grade of fire clay, **every one accurate fitting,** ensuring thorough satisfaction. We also are equipped to quote you low prices on A1 quality of **Furnace and Stove Cement** and **Stove Castings.** Catalogue on application. Drop us a post card.

JONES BROS., - Bracondale P.O., Ont.

THE

Walker Pilot Steel Range



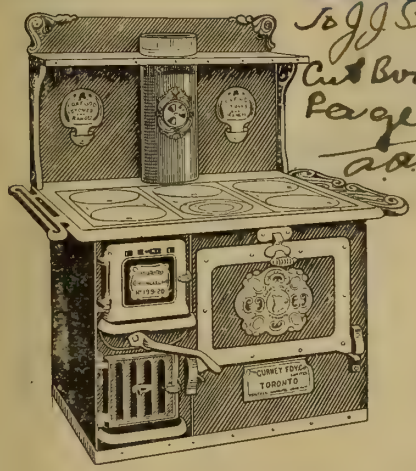
This new range, now one year on the market, is everywhere giving the best of satisfaction.

It is replete with all modern features and contains every practical device in the way of utility and convenience. The dealer's profits are large. Retail prices compete with other ranges.

SEND FOR CATALOGUE AND PRICES

THE WALKER STEEL RANGE CO., LIMITED
GRIMSBY, Ont.

RETURNED
AUG 21 1905
To J J Sibbons
Cut Booklet
Page 22
Canada



Preliminary profit or permanent profit—that's the question that confronts the dealer.

Permanent profit and satisfaction are inseparable always and both are assured to buyer and seller alike if you handle the

Oxford Chancellor Range

Practical dealers observe at once that the Oxford Chancellor is honestly built and of the best flat steel plate. There is no stinting of rivets, the asbestos interlining is perfect and the beauty and finish of the entire Range most attractive.

Pressed steel oven racks, detachable water tank, large ash pan and wood or coal burning grates are some of its features.

WRITE FOR PARTICULARS

THE GURNEY FOUNDRY CO., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal
The Gurney Standard Metal Co., Limited, Calgary

REGISTERED SUPERIORITY PURITY TRADE MARK DURABLE AS THE PYRAMIDS

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

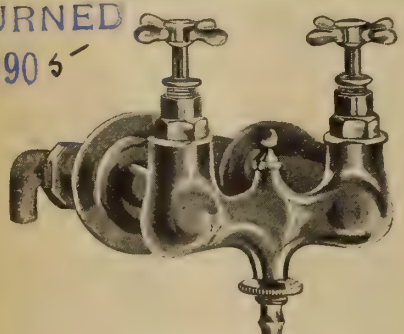
of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

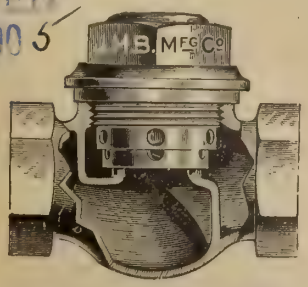
THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory: *Port Hope, Ont.*

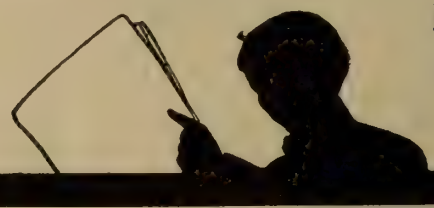
Sales Office: *50 Colborne St., Toronto.*



The J M T Double Bath Cock.
It stands the most wear.



The J M T Cushion Check Valve.
Try one where your check "hammers" or "pounds." They're all right.



A POINTER

When in need of Plumbing or Steam Goods write us.

We make the kind that are durable.

Many light-pattern goods are upon the market which reduces cost but, unfortunately, also reduces quality.

THE JAMES MORRISON BRASS MFG. CO., LIMITED, TORONTO

HEATING AND PLUMBING

PAST AND PRESENT PLUMBING.

Extract from a paper read before the Toronto Master Plumbers' Association by Mr. George Clapperton.

THE Chinese long before the Christian era used lead and soldered lead and other materials together. To think that the Chinese were the pioneers of our trade may not be pleasant to many of us, but it nevertheless is true. But the Chinese were not the only ones which used lead about this time, for we find Archimedes, a Greek philosopher, who lived 200 years before the Christian era, used lead pipe.

We find it stated in the Bible that lead is a lasting metal for letters, and that David used leaden pipes; that in the ancient cities of Asia, Egypt, Greece and Syria lead pipes were used. Taking Archimedes for the first plumber, we are 2103 years old; quite a respectable age. While this may seem a long time it would fade into insignificance when we compare it with the Chinese, who used lead nearly 5000 years ago.

History tells us that there was such a man as a lead worker, but does not tell us that he had a helper who was to be an apprentice to the trade, so that we will consider his helper as a laborer or handy man. The explanation, no doubt, will account for a lot of the lost art, if I may call it such, for none of us would care to dispute the fact that the ancients knew secrets about which we know nothing. To thoroughly understand this one has only to turn up some of the old masters and see what wonderful wisdom and skill the ancient plumber displayed in the use of metals and hydraulics.

Sheet Lead.

As we have no records of pipe being drawn by the ancients, it will be fair to assume that they first cast their lead into sheets and then formed them into pipe, burning or soldering the seams. This must have been the style of pipe used by Archimedes; besides, we read of lead being used as leaves for books. The Westminster Abbey and St. Paul's Cathedral have cast sheets of lead for roofs. The former was built in the thirteenth century. King's College, Cambridge, built in the fifteenth century, has cast sheets for a flooring between ceiling and roof.

The first records we have of sheet lead being rolled was in the year 1670, when a patent was issued to Howard & Watson, and known as an engine and rollers for drawing lead into sheets. This machine did its work with cold rollers. Afterwards, in 1804, Dodds patented a machine which worked with hot rollers. Burr followed him, using rollers heated by hot water. Since this time lead has been rolled in a very similar way and I am told is rolled in much the same way to the present day, only substituting steam for hot water. Rolled sheet lead was first used for sheathing ships.

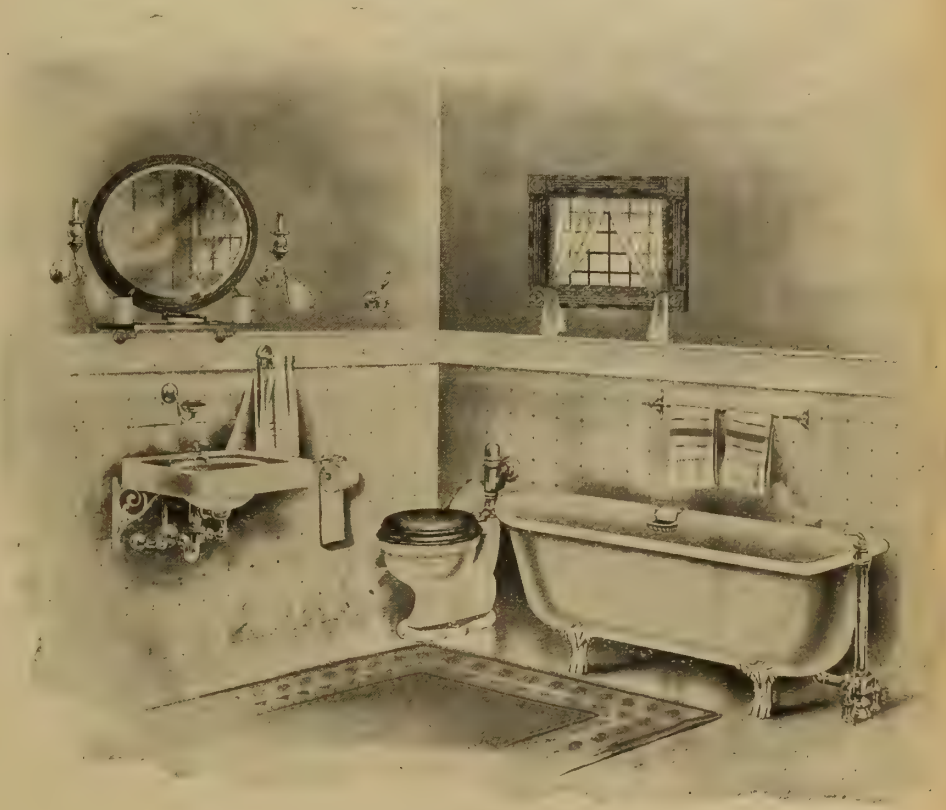
Lead Soil Pipes.

This kind of soil pipe has been used in the eastern cities, especially in Rome, almost from the earliest recorded time. They were used in France long before they became known in England. Sir John Harrington was the great advocate of lead soil pipes in England, and he lived during the reign of Queen Elizabeth, which was from 1558 to 1603. A. D. So his advocacy must have been prior to 1603, or 300 years ago; but lead soil pipes must have been used long before this, as we find one Robert Brocke obtained an English patent for casting lead soil pipe in the year 1539. These were made in short lengths of 18 inches and 3 feet long, slightly tapered, and then joined together by burning. By this means they had a pipe resembling our present pipe, but not as good.

After this they cast the lead pipe very thick, and then drew it through a die. This enables them to make it any required thickness. This way came into use about 1800. I have no doubt but Brocke copied this idea from Braham's patent, for he invented a machine for pressing a pipe through a die, thereby getting a pipe which very much resembles the drawn pipe of to-day. His machine was worked by hand and he worked or used the lead while it was in its molten state. In 1820, or about 20 years after Braham's patent, we find a man by the name of Burr patented an improvement on Braham's machine by applying the hydraulic press to it, thus enabling him to do his work easier. He worked his lead while it was hot, but in a solid state.

Then came Hague, who patented a press, one driven by a powerful screw and compound cog wheel. Since these there appear to have been no improvements of note for making drawn pipe, for the machine of to-day appears to be worked similarly to Burr's machine.

While these machines appear to have been doing good work, it took a number of years to displace the old soil pipe made from sheet lead and seamed lengthwise, but the start having been made, nothing appears to have impeded the steady progress and we passed from hand made pipe to machine pressed pipe, then to cast iron, copper and, now, wrought iron soil pipes, which brings us up to the present day with soil pipe.



"Walrous" Perfection Bathroom.

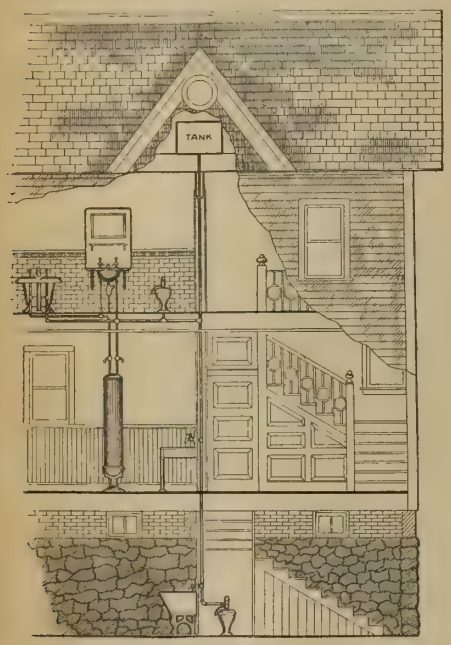
Solder.

Next let us see about the metal used to mix solder—namely, tin. This metal is contained in nearly everything the plumber has to do with. Here we can go a long way further back than we did with sheet lead, for we find that the Chinese have records of its use as far back as 2200 B.C., which is nearly 5000 years ago. Besides, we know the Egyptians used it. In Malacca tin was found in very remote ages; also soldering lead pipes is mentioned by Vitruvius.

The ancient plumber not only knew

how to do his work, but, unlike the plumber of to-day, took advantage in soldering of the capillary action of the solder, for we read that their soldering was so neat that it could not be seen. They were in the habit of tapping the lead and letting the solder sweat underneath, more especially in cistern work, where the water was liable to eat away the tin, as they called it, in some isolated cases. This way is still used for chemical work.

Solder is one of the materials which has changed but little during the last 5000 years, and before passing away from it it is but fair to say that the ancient plumber not only mixed tin and lead together to form his solder, but it often contained lead, tin, bismuth, mercury and cadmium. By adding or combining the first four of these together in proper proportions the combined metals will melt with 122 degrees of heat, or only 22 degrees more than your blood heat, or 90 degrees less than would boil water. When you consider the finest solder we use—that is, half and half—re-



Installation in Private Residence.

quires 370 degrees of heat to melt, you will not wonder how the ancients did such fine work.

The Earliest Trap.

Let us look back to the all important article—namely, the trap. We find that the earliest trap which has been located was taken out of the Lothbury Old Church, built by the famous architect, Sir Christopher Wren. This trap bears the date of 1678 A.D., 225 years ago. It was for a water closet and made of a "four-square" shape, of the style commonly called "D" traps. While this would not be copied by our modern plumber, still this one was well made, and by means unknown to the writer the bottom was increased over one-half in thickness, which is more than could be said of all the hand-made traps of more recent date.

Some of you no doubt will be skeptical about this date, but when you remember that sheet lead was rolled in 1670, or eight years before this trap was made, it will no doubt remove that doubt. But the ancients did not call everything placed under a fixture by the word "trap." They called our present "S" trap a siphon and used it for siphon purposes only. As far as I can find out a trap was used first to keep back gases in chemical work, so they have not changed their use in all these years as far as keeping back gases is concerned.

AIR-CLEANING SYSTEM.

An apparatus has been installed in an office building, recently erected in Pittsburgh, whereby, in connection with the heating and ventilating plant, the air is washed and all dust and soot removed before it is put into circulation. In ordinary heating and ventilating systems, a fan is usually employed to draw in the outside air. This air, after being warmed by a steam coil or other heater, is then circulated throughout the building. In a laboratory at Washington the air is first filtered through a fine cloth, but in the Pittsburgh building, the washing device consists of a metal supporting frame, filled with broken coke, over which the water trickles. As the air is passed through the coke, the water washes out the small particles of coal, soot and dust, carrying them to the bottom of the apparatus, where it is possible to remove them from time to time. A constant supply of air for the building is obtained through the ventilating flues, owing to a small pressure which produces a leakage outward. The plant has proved most successful.

DESIGNING OF FIXTURES.

In no line of useful wares entering into the furnishing and decorating of a house or building of any kind has greater or more rapid strides been made than in the designing and making of fixtures for gas and electric illumination.

It is not many years since the introduction of quality, appropriateness of design and finish, rather than bulk or massiveness, became a feature of fixtures for illumination, and there has been a steady advance and development, so that to-day the gas and electric fixtures are as correct features in appropriateness and harmony of design as are the other interior fittings and furnishings.

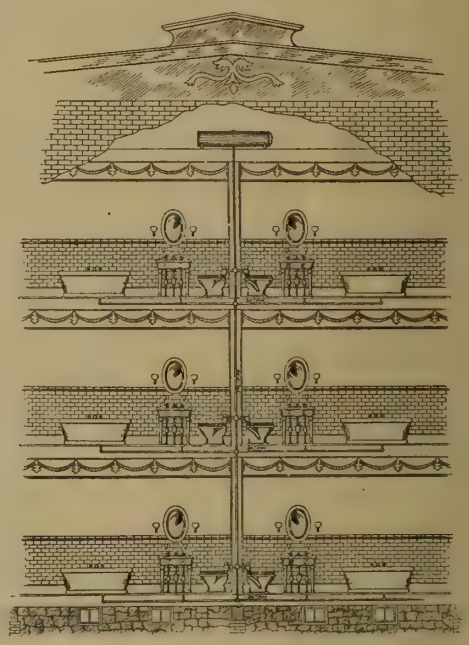
Not only the fixtures must possess these truly artistic features and excellence of design and finish; but even in glassware accessories that are used with them, such as the globes, shades and imitation candles, must also possess the high qualities of harmonious design as do the fixtures on which they are to be used.

But a few years ago the highest example of a globe for a gas fixture, no matter what design it was an example of or how costly, was that known among dealers as a "Cut Crown," this being the highest type of a gas globe at that time. What a changed condition (and for the better) exists at the present time. Now the glassware used with lighting fixtures must possess character and appropriateness both as to the shape of the globe itself as well as the decoration placed upon it, and be in harmony with the fixtures—just as the fixtures must partake of the architectural and decorative features of the interior where they are to be placed and used.

American manufacturers engaged in these two lines can well feel a pride in their achievement, and the high class of goods produced by them; and also be congratulated for their continued effort in the application of real art (a much abused word) to their productions; thus keeping in close touch with and catering to the rapidly growing taste for and development of all that is "true art," as applied to the articles they manufacture—true allies of other lines devoted to the furnishing and decoration of interiors—each of which, in its line, makes possible "The House Beautiful."

WATROUS FIXTURES.

ILLUSTRATIONS showing suggested methods of installing fixtures in private residences and in apartment houses are given this week, together with a view of a "Watrous" Perfection Bathroom, manufactured by the Watrous Co., Chicago, Ill. The strong feature of this company's water closets is the aquameter, which is an automatic,


Installation in Apartment Building.

slow-closing valve for flushing and, as its name implies, is a water measure.

In construction the aquameter is based on entirely new principles, which are illustrated and described in a neat booklet which will be sent on request to any reader who mentions this paper. It can be attached direct to service pipe from the city main or storage tank and works equally well under high or low pressure. Owing to its construction it is largely used on cars and steamships, but it is also adapted for use in residences, office and public buildings.

The illustration showing the installation in a residence is suitable for a supply from the city main or from a service tank. Direct pressure connection is recommended for new work, or in old buildings where the supply pipe from the main is large enough to discharge sufficient water to flush a closet direct, in which case the tank and piping above the highest closet will be dispensed with.

In apartment buildings or flats a storage tank is recommended where the supply from the street main is not large enough to flush a closet direct, and is also very desirable in high-pressure

TRADE PENBERTHY MARK.

A QUARTER OF A CENTURY ON THE MARKET.

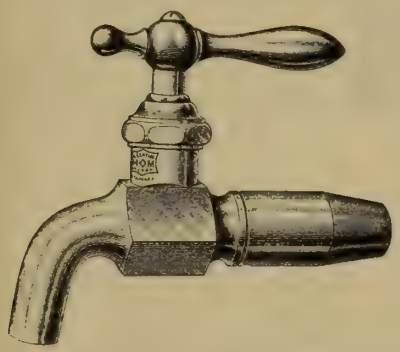


AUTOMATIC INJECTOR

Penberthy Injectors have enjoyed the confidence of the public for the past twenty years; due to the fact that they have been found to do all that is claimed for by the manufacturers. Every dealer handling these goods feels that he has something strictly reliable.

MUELLER FULLER WORK

STANDARD GRADE BIBB



Fuller balls last longer in some bibbs than others because the seat is better shaped and there isn't the tendency to drag and become rough.

The seat in Mueller Fuller Bibbs is so shaped that when the ball is drawn up it slides over an evenly bevelled surface until it comes to the full stop. It goes into the seat without friction or unnecessary wear.

Mueller Fuller Bibbs are made in plain and hose patterns and with tail pieces for all styles of type connection. The bibb illustrated is the plain pattern with lead pipe tail piece.

Each bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

Good Goods Create Good Trade



This is so well established a fact that none will attempt to gainsay it.

The tradesman who adheres resolutely to the policy of handling the best of everything, soon finds out that he has gained an enviable reputation and that the same is bringing business to his doors.

This is why we so persistently advise you to adopt

The NATURO CLOSET

in your business. Perhaps you are doing a fair amount of business? What of it? Don't you want to do more?

There is no closet sold to-day that can compare with the NATURO for convenience, cleanliness and general sanitariness. It alone will tend to keep the users in good physical condition. No other closet has so "selling" a feature.

Let us send you our illustrated Catalogue. You'll see for yourself why it is the very best.

THE NATURO COMPANY

C. H. MUCKENHIRN, President.

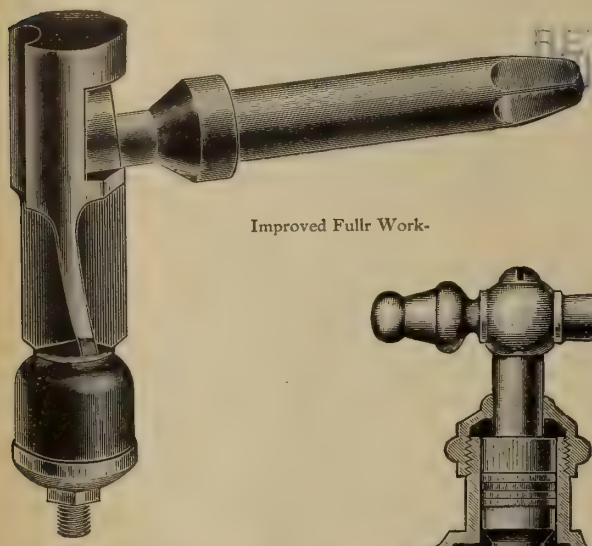
Salem, N.J.

towns; all the fixtures being supplied from this tank, the pressure is reduced and repairs incident to high-pressure connection avoided. The certainty of always having a supply of water on hand during the temporary shutting off of the usual street suply is also an important consideration.

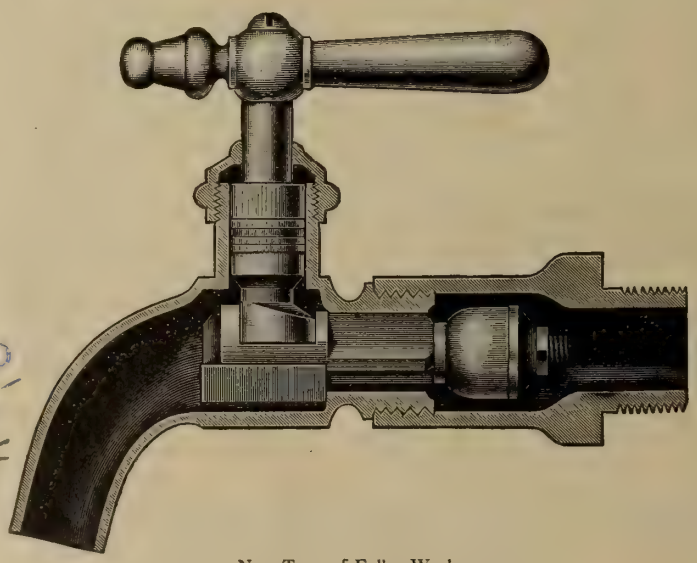
OBJECTIONS TO FULLER WORK OVERCOME.

The cuts below furnish a dissected view of a new line of Fuller work presented by the United Brass Mfg. Co., of Cleveland. Owing to the many annoyances the trade has had with Fuller work, the new line will be welcomed.

Having a heavy, solid eccentric made of hard metal, an easier action is assured, which in turn minimizes the friction and distributes what friction remains over a large surface, thus making



Improved Fullr Work-



New Type of Fuller Work.

RETURNED AUG 2 1905 To Owner Cut Book 38 Page 54

itself less felt. The stem and ball travel in a grove, which accurately guides it to a direct centre, thereby overcoming all hammering and rattling. By virtue of this absolutely accurate action, the use of a hard hot water ball is permitted, thus overcoming swelling and the many tedious jobs of packing.

The absence of a trap in the bibb assures the perfect drainage of all water, and in this manner eliminates the odious breakage of eccentric caused by the contents of bibb trap freezing. The pressure of water against eccentric is uniform at all stages of use, which prevents self closing. Basin cocks also contain these workings.

Traveling representatives of the above firm report having turned many compression towns into Fuller, which is most logical, as all plumbers prefer the simplicity of Fuller action, and doubtless would have adopted same long ago, had it not been for the many trying annoyances hereby overcome. This firm will be glad to furnish catalogue and discounts on request if Hardware and Metal is mentioned as the paper in which the offer was made.

COOKING BY ELECTRICITY.

THERE is, perhaps, no better illustration of the great flexibility of the electric current for commercial and domestic purposes than its use after it has been transformed into heat. The numerous advantages of electrically equipped heating and cooking apparatus, such as the riddance of smoke and soot, no vitiation of the atmosphere, instant heat at the exact place where it is wanted, no fuel or large cooking range, no labor in making or maintaining the fire, no waste of heat, perfect regulation of temperature, no danger from fires or explosions, cleanliness, have all been recognized by those interested in the introduction of electricity into home and workshop for a number of years, but well-grounded causes are responsible for the somewhat limited but nevertheless growing use of electrically equipped cooking and heating apparatus.

Primarily, the rate charged for current has been almost prohibitive, but it is being constantly reduced on account of the improvements in general machinery, the extension of the central station system of distribution, the increase in the number of water power and isolated plants and because central station managers are beginning to realize the fact that electric heating apparatus are current consumers during those hours of the day when their station load is light.

The householder also has become accustomed and attached to things electrical and is more willing to supplant his gas stove by an electric stove or electrically heated pot, similarly to his willingness some years past to substitute the gas stove for the coal range. To do the requisite work with such utensils, excepting, perhaps, the iron, current costing in most cases less than one cent is consumed.

In the "Prometheus" system no wires are used. The heating device itself consists of a strip of mica on which a layer of metal has been deposited, or, more properly speaking, fired. This conducting strip is protected by another piece of mica, and the whole is enclosed in a metallic casing. This unit of "heating



Complete Electric Kitchen Equipment.

element" can be painted to any desired resistance. The paint is an alloy composed of non-oxidizable metals, ensuring the element's life. The element may be either straight or circular according to its usage, and may be inserted into or removed from a piece of apparatus with the greatest ease by an unskilled person in case of a breakdown; an advantage heretofore denied by any other known method.

The utensils themselves are equipped with the heater, thus dispensing with a stove, which means not alone the purchase of one piece of apparatus, say, a pot or chafing-dish, instead of a pot or chafing-dish and stove on which to place it, and by actual test it has been shown that eighty-seven per cent. of the heat sent into a utensil is utilized therein for the heating of the food. This may be illustrated by the fact that a pot in which water is boiling may be held in the palm of the hand, showing that the heat does not escape, but is retained in the pot, the only place where it is wanted. This in turn means not alone a saving of time, for the greater heat ensures quicker action, but if a gain is no object, less current is required to do the same work as that done by any other method in which a stove is used. The latter, as is well known, is a very inefficient piece of apparatus, which only transmits about thirty per cent. of the heat generated in it to the food in the cooking utensils. The remainder of it escapes into the surrounding atmosphere, goes up the chimney and heats up the stove itself and the air space between it and the utensils.

The system was first developed in Europe, and has been in exclusive and successful use in Germany for ten years. In Austria, the well-known Siemens & Halske Co. have introduced the system, and in Switzerland, England and France it is extensively used for domestic and commercial purposes, being exploited by separate corporations in each country. In the United States, the Prometheus Electric Co., 41 Cortlandt street, New York, has developed during the past three years a line of apparatus suitable for this market, and a number of these are shown by the accompanying illustration.

We make Electric Fixtures, Sockets, and Cut-Outs

Munderloh & Co

Electrical Supplies of all kinds. MONTREAL.



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

UNITED FULLER WORK

INSTALLED BY LEADING PLUMBERS EVERYWHERE

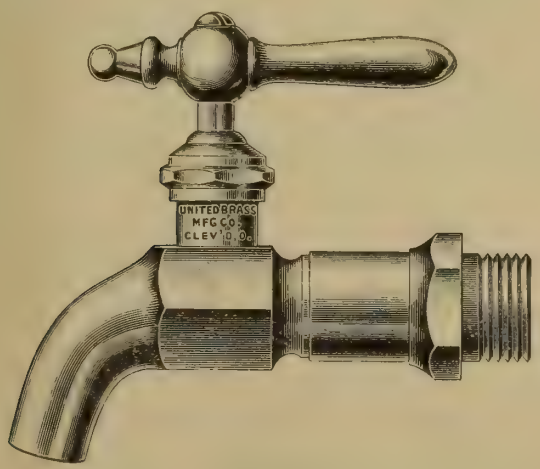


Fig. A-114

We Manufacture a Complete Line of High Grade

STOPS and STOP and WASTE COCKS, COMPRESSION WORK, FULLER WORK, SOLDERING NIPPLES, UNIONS, VALVES, ETC.

WRITE FOR CATALOGUE AND DISCOUNTS.

United Brass Manufacturing Co.

CLEVELAND, OHIO, U.S.A.





DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

Plumbing Markets

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 24, 1905.

GENERAL quietness of other markets has not as yet affected the plumbing trade. In fact, the demand continues to be as active as ever. Possibly there may be a small decrease in the local demand, owing to the carpenters' strike, but the increase in the demand throughout the provinces more than balances the whole demand to the good. Iron pipe fittings are much firmer, and an advance may take place shortly. American manufacturers have supplied the local dealers with these fittings at a very low figure, but as the trade in that country is much better this year they find selling at the old prices. Canadian Rolling Mills are keping up well with the demand for iron pipe. All the local supply houses report that they have a good supply on hand.

The demand originating from all parts of the lower provinces for all manner of goods is remarkable, and it is easily seen that the amount of business transacted this year will surpass anything accomplished in former years.

Range Boilers—Demand continues to be steady. Prices continue unchanged. Our quotations are as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The recent advance in pig lead will probably have some material effect upon the price of lead pipe if the demand continues to be as strong as it is at present. Demand is active and conditions very firm. Our quotations are as follows: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—There is some talk of American manufacturers advancing the price. If this takes place it will mean an advance on this market. Prices are firm. Our quotations are as follows: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—The demand remains as active as ever, and local jobbers are finding it somewhat difficult to fill all orders on time. Not that the pipe is scarce, but the sudden increase in the demand has taken them unawares, and as a result they have not prepared themselves to meet these conditions. The demand is general, originating from the country as well as from the cities and towns. Prices are firm, but no advance is anticipated. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 1-2 per cent.; 3-8 inch, 62 1-2 per cent.; 1-2 inch, 72 1-2 per cent.; 3-4 inch, and upwards, 74 1-2 per cent. Discounts on galvanized pipe: 1-4 inch, 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—In active demand, and steady prices are the most notable features on this market. Our quotations are as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, July 21, 1905.

PRICES generally in the plumbing trade have had no fluctuations during the past week. Business, however, has ben most satisfactory, and the brisk demand gives promise of a better July than last year. Orders coming in indicate that building operations now under way are approaching completion, and the finishing is now being done by the plumbers. Many old residences are having their plumbing renovated, and are installing modern sanitation. Lead pipe is in brisk demand, while business in soil pipe and fittings is so strong that the foundries are short on car lots, though able to ship small orders. There is also a good demand for iron pipe, but the supply is quite equal to it, and no shortage is expected.

Lead Pipe—Demand is brisk, and large orders are being filled by all the jobbers. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—The orders for these goods are so large that foundries are finding difficulty in shipping car-lot orders from the west. Prices are unchanged. We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Though the demand is brisk, the supply is quite adequate, and all orders will be filled. Our quotations are as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—No fluctuation in price is reported. The discount of 15 per cent. continues.

Galvanized Iron Range Boilers—Business is quite satisfactory, with prices stationary. Our quotations are as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Sales continue heavy, but are being met by a good supply in all quarters. Our quotations are as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—A good demand is reported at last week's price. We quote: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware—Large sales are being made. It is said that many old buildings are adopting newer methods in plumbing, thus creating an active demand for these goods. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

BUFFING ROOM PRACTICE.

THE buffing room in the brass department at the new Angus shops of the Canadian Pacific Railway, Montreal, presents an interesting illustration of recent advance in the removal of dust from buffing and grinding wheels. Here a Sturtevant exhaust fan with a special form of Sturtevant hood enclosing the wheels insures the withdrawal af all of the dust and fine chips. This system maintains a perfectly clear atmosphere within the room, separates the chips from the dust and prevents the discharge to the outer atmosphere of dust-laden air with the attendant disagreeable results.

RAMSAYS BARN PAINTS



Make money in Barn Paints. Put it to your farmers. Put it strongly; it will mean money and friendship for you.

Ramsays Outside Paints, or Barn Paints, protects the barn, gives it a touch of color, and at little cost. Don't talk house paints for the barn. It will lose you the order. Talk Ramsays Barn Paints, at 10c. a gal. It will bring orders and profit.

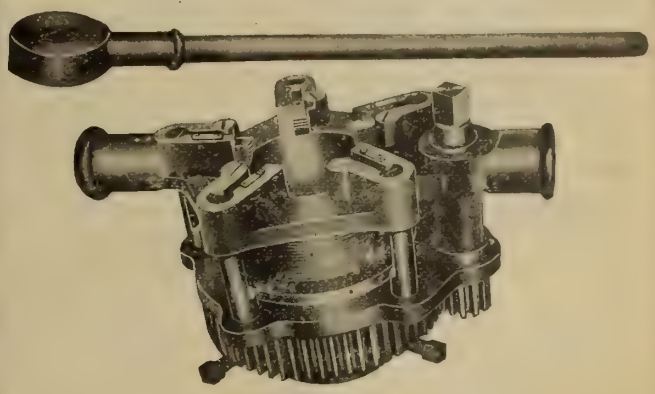
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A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Paint Makers

The "Toledo" Adjustable Threading Device

A new principle in hand-power pipe-threading.
Threads pipe from 2½ inch to 4 inch, inclusive.



No. 2.

This tool weighs but 60 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.

Ask your jobber about them; if he don't know, write us for Catalogue and Discounts.

THE TOLEDO PIPE THREADING MACHINE CO.
Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

This machine is especially adapted for making nipples. The Vice Jaws are held in T. slots at the end of the jaw holders; they are made of tempered steel with teeth of M. form, and can be sharpened without drawing the temper. Capacity of machine from ¼ to 2 inches inclusive.

Catalogue on request.

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



KERR'S GENUINE WEBER GATE VALVES

have many imitations, but none equal the "real" article, made by us. Be sure you get "Kerr's." Every valve made of the best red metal, and beautifully finished.

The KERR ENGINE CO., Limited

MANUFACTURERS

WALKERVILLE, ONT., CANADA

A HARD SOLDER TABLE.

The usual solders employed are made of tin, copper, zinc, antimony, and lead. Their proportions and resulting melting-points are approximately as follows :—

Solders.

Used for	Anti-mony	Tin	Copper	Zinc	Lead	Approximate Melting Point
Lead	—	1	—	—	1	304°
Tin	—	1	—	—	2	361°
Pewter	—	2	—	—	1	2 0°
Brazing (hardest)	—	—	3	1	—	600°
Brazing (hard)	—	—	1	1	—	500°
Brazing (soft)	—	1	4	3	—	400°
Brazing (very soft)	1	2	—	—	—	350°

ITEMS OF INTEREST.

It is said that there are at the present time 330 towns lit by acetylene, of which 121 are in the United States, 80 in France, and 54 in Germany.

In the Kingdom of Hungary there are four villages provided with complete acetylene installations, while the number of private plants is estimated at over 3,000.

Harvesting by electric light has been introduced into Australia, we are told. The companies have been harvesting over here for a good many years!

A Brussels paper announces that the General Electric Co., of New York, has amalgamated with a Japanese lamp manufacturing firm to form a new company with headquarters in Tokio for the manufacture of electric lamps. The company employs about 20,000 hands in America, and does a large business in Japan, China, and the Philippines.

The large number of applicants refused plumbing licenses in New York City is shown by the president of the examining board of plumbers in his report to the mayor, in which he states that during the quarter ending March 31st, 1905, out of 122 applicants examined 29 were granted certificates, 47 were rejected and 46 had the results of their examination pending.

There are many more bathroom fixtures than there were a few years ago, little useful things are constantly being added to this line. There are towel racks of various kinds, sponge holders, tooth brush holders, tumbler holders, soap holders, bath tub seats, mats for putting in the tub to prevent slipping, shower baths to be attached to the faucet, soiled towel holders, etc., etc. These are the little things in which there is a good profit.

AUGUST 3 THE DATE.

Buffalo plumbers are to pay a return visit to the fraternity in Toronto on Thursday, Aug. 3. The place has not been chosen as yet, but Toronto ball grounds are being considered, as a game of ball and other sports are on the bill of fare. A jolly time is looked for.

PLUMBING GOSSIP.

Good progress is being made in the renovating of the plumbing showrooms of Amiot, Lecours and Larioiere, at No. 520 Craig street, Montreal. All partitions have been torn down and the building has been extended some forty feet to the rear. The showroom is being decorated in pretty colors, and when everything is placed in order it is expected that it will be one of the nicest

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing British and American Manufacturers. Correspondence invited from firms wishing to be represented in Canada.

BRONZE POWDER AND LIQUID

is used by every steam-fitter. Ask your supply house for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co. LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

IDEAL Woven Wire Fencing



MAKES MONEY FOR YOU

Your customer, the farmer, wants a fence that can be put up quickly and easily just when he wants it. Hand made fences cost too much when you figure the time it takes to build them, to say nothing of the hard work.

Why not sell "The Ideal," the best woven wire fence made? You can build up a permanent trade that will pay you as much as any line you are handling. Other hardware merchants are doing it. Why not you? The Ideal will give satisfaction to your customer and make him your friend.

Have you seen the Ideal? Let us send you a sample and catalogue showing why Ideal fence made from No. 9 hard steel wire throughout is the strongest and the best value.

Ask us about the Ideal all metal farm gate.

The McGregor-Banwell Fence Co., Limited,
WALKERVILLE, ONT.
Merrick, Anderson & Co., Winnipeg, Man.
Sole Agents for Man. and N.W.T.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

showrooms of its kind in Eastern Canada. Much work, however, is yet to be accomplished before everything will be in shape to admit the public, and probably the first of August will have passed before this company has realized its ideas respecting a model plumbing showroon.

* * *

Mr. R. J. Cluff, Toronto, visited Hamilton on Thursday.

* * *

Toronto master plumbers enjoyed themselves at Lorne Park on Friday.

* * *

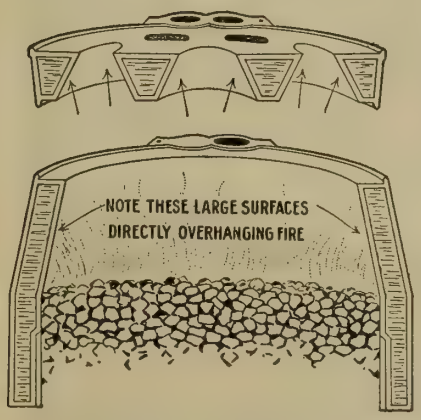
The new water curtain for protection from fire, which has been installed by Gurth & Co., of Craig street, Montreal, was tested this week and found to be satisfactory.

* * *

The recent strike of the carpenters' union has proved detrimental to the master plumbers of Montreal. Those who have large contracts for outside work are suffering, especially from the inactivity in the building trade. Although the contractors are pushing ahead and are obtaining men, yet the number of men employed now is not as large as the number employed before the strike began. Hence, under these conditions, the buildings are not progressing as rapidly, and therefore the master plumber is kept waiting until the buildings advance to such a stage, allowing the plumber to instal the pipe, baths, and other articles necessary for the comforts and sanitation of the future inmates of the building.

Heat in a boiler must be quickly transmitted to the water or it gets away altogether—goes up the chimney.

The Oxford Boiler lets very little heat get away. Slanting firepot walls over the fire and



bell-shaped flues in the large lower water section retard the heat as it impinges on them in its upward rush, transmit it to the water within and utilize it more fully than any other boiler made. Steel Push Nipples make metal to metal joints that never leak and our hollow grate bar assures perfect combustion and easy separation of dead ashes from live coals.

The Oxford Boiler is the perfection of household heating apparatus. Your trade wants the best. ***Send for Catalogue.***

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, P.Q.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

FINE PIECE OF WORK.

JOHN ROUND & SON, LIMITED, of the Tudor Works, Sheffield, have had on exhibition at their London showrooms a beautiful and unique silver trophy recently designed and executed to the order of Muratti, Sons & Co., Limited, of Manchester and London, who offer same for competition amongst the Motor Cycle Unions of Ireland. The artist responsible for the design and modelling is Mr. R. Strachan Douglas, and a glance at the photograph, which we produce herewith, shows that the idea represented is a winged figure of victory seated on a motor cycle. With one hand she steers and controls the machine, while with the other she holds forth the laurel wreath to the victor. The figure is modelled with fine artistic and aerial feeling, and a very happy touch is given by the happy features of the female motorist. The technical construction of the machine is ideal, for it is a correct model in every detail. It demanded the most cunning silversmithing in its production. A splendid impression of speed is given by the rolling cloud of dust and the fluttering ribbon on the laurel wreath. The silver part of the trophy rests on a well proportioned and tastefully moulded abony plinth with winged shields around it for the names of the winners. On the obverse of the plinth is a very well executed panel in raised lettering bearing the words "The Muratti Trophy." The whole thing stands 36 inches high, weighs 375 ounces, and is valued at about £200 sterling. It has taken over three months to complete the trophy. The intention of the donors to make this the finest motor trophy in Great Britain is now an accomplished fact, and it certainly reflects the greatest credit on the manufacturers and all concerned in its production.

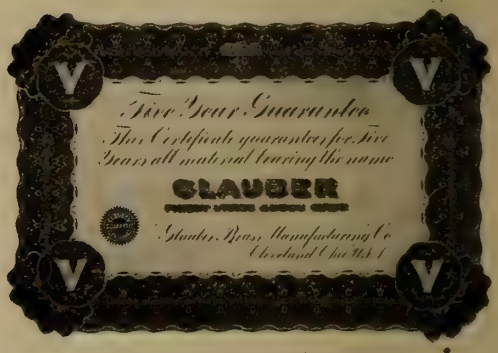


"A Fine Piece of Work."

While on view the trophy was surrounded with many other choice objects in sterling silver and electro-plate. The house of John Round & Son dates back to 1847, and many of their designs are of the old Georgian and early Victorian period, now so much in favor amongst those who appreciate that simplicity and dignity of design which characterizes the old pieces of Sheffield plate that are now becoming scarce. All the work in connection with the production of their many different lines is done by their own workmen from the manufacture of the metal to the finished article. The working and polishing of ebony, and the designing and carving of ivory handles for carvers, dessert knives, etc., might almost be regarded as a business in itself.

A VALUABLE GUARANTEE.

The half-tone cut herewith illustrated is a copy of a most beautiful and attractive lithographed certificate of a five-year guarantee of their goods, which is being sent out by the Glauber Brass Mfg. Co., Cleveland, Ohio. It is quite a novelty to so strongly indemnify purchasers and users of their goods against any defects for five years, and shows the greatest and utmost moral confidence the Glauber Co. must have in their product. Master plumbers who have had trouble and constant annoyance with defective brass goods should look upon this five-year guarantee as an end to the constant perplexing and distressing annoyance given them by defective brass goods. A five-year unreserved guarantee should strongly appeal to the public, and all master plumbers will do well to write Glauber Brass Manufacturing Co. for further data and particulars, mentioning Hardware and Metal.



Glauber's Five Year Guarantee.

BOOK REVIEWS.

"**The Modern Ironmonger.**"—A guide to the management of the business of a Twentieth Century hardware dealer, being the second of the Ironmonger series of handbooks, published by the Ironmonger, 42 Cannon street, London, England. Price, five shillings net.

While the English books on modern merchandising are not so useful to Canadian hardwaremen as the works published on this side of the Atlantic, the volume under review is certainly a valuable one for anyone in touch with English methods as well as for any who can assimilate information and use it to suit local purposes.

The book is tastily bound in art cloth and its 340 pages are replete with illustrations, diagrams and tables suggesting methods of storing and displaying goods, filing accounts, keeping sets of books suitable for the hardware trade, etc. The first section deals with the shop and fittings, the third with general suggestions as to details, the fourth with tables and formulae, and the fifth with special departments and side lines. Each section is thoroughly covered and the whole comprises a work which is probably the best yet written in the Mother Country.

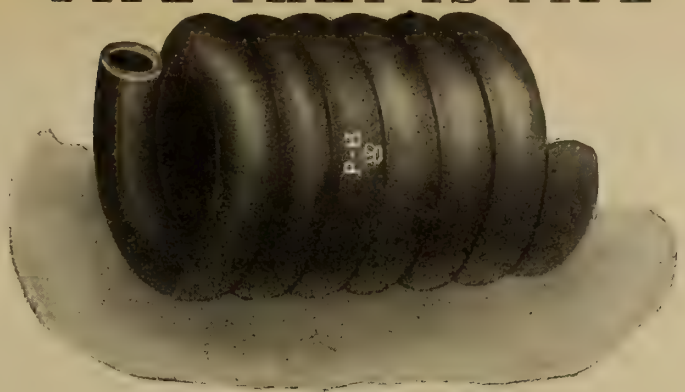
PIPE THAT IS PIPE

THIS IS OUR BRAND

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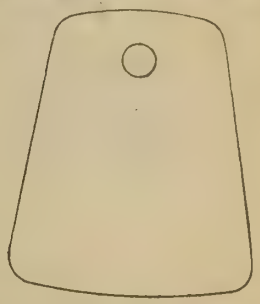
You Want It.

See that You Get It.



BLACK AND GALVANIZED.

THIS IS OUR TAG



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Are You Aware

That the

METALLIC ASH SIFTER

is the only up-to-date, low-priced sifter on the market. Every wire in the bottom is folded in by ***Our Patent Double Lock Fold,*** which makes it impossible for a strand of the wire to get loose. Our circular will tell you about this sifter.

C. M. CUTTS & CO., Sole Makers, Toronto Junction, Ont.

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

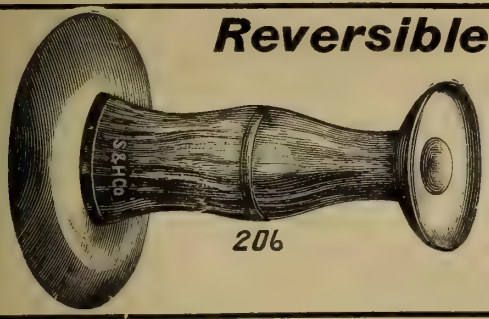
WE MAKE THEM.

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American Shearer Mfg. Co., Nashua, N.H., USA

Wiebusch & Hilger, [illegible] New York representatives, 9-15 Murray Street.

Reversible Hog Scraper



ORDER YOUR STOCK AT ONCE.

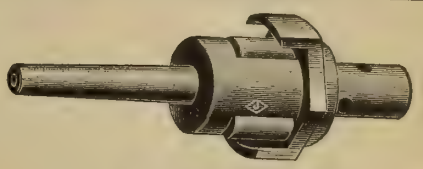
A perfect tool for scraping hogs. Made of 22 gauge galvanized sheet steel, hardwood handle. Ask your dealer or jobber for No. 206 Hog Scrapers, or write for circulars.

SMITH & HEMENWAY CO.

Manufacturers Cutlery and Hardware

296 Broadway, - NEW YORK.

Dept. 206.



JARDINE'S

Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.

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No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

The Manufacturers List Co., - - - Toronto.



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POSITIVELY NON-HAMMERING

PATENTED and MADE BY

GLAUBER, CLEVELAND OHIO, U.S.A.

SPRINGS

for Electrical Apparatus, Valves, Threshing Machines, Brake, Pole, Gate and Door Springs.

Also any kind of Coiled Spring made to order.

OIL TEMPERED WIRE.

J. A. HENDERSON, - MONTREAL

Board of Trade Building

THESE BRANDS

CYCLONE
JOLIETTE
BLACK DIAMOND

OF

TARRED FELT
CARPET FELT
DRY SHEATHING
TARRED SHEATHING
RESIN SIZED SHEATHING

are manufactured by us. Great care has been taken in the past, with the result that their superiority is being easily recognized. When you purchase again you should

THINK THIS OVER

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

July 21, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$32 00 $33 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Doubl Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

I Allaway's Best"—Standard Quality.

I C	4 50
I X	5 50
X	6 50

Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 25 7 50
" " 26 "	7 75 8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	

T. Firth & Sons, tool steel—	
Speedicut	0 60
Annealed speedicut	0 65
Self-hardening	0 36
Best tool steel	0 12
Warranted	0 09
Best sheet steel	0 12
B K. Morton & Co.—	
"Alpha" high speed	0 65
" annealed	0 70
"M." Self-hardening	0 50
"J" quality	0 18
"I" "	0 14
"BC" "	0 09
Jonas & Colver's tool steel	0 10 0 20
" "Novo"	0 65
" " annealed	0 70
Chas. Leonard	0 08 0 09
Crucible Steel Co.—	
" Rex high speed steel	0 65 0 75
" Self-hardening	0 45 0 50
Crucible Special	0 17
" Silver steel	0 13
" Black Diamond	0 10 011
Sanderson's Crucible steel	0 08 0 09
" Superior "	0 12 0 13

BABBIT METAL.

Syracuse Smelting Works:	
Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:	
Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	(count 40 p.c.
Jack chain, brass, single and double, dis-	

COPPER.

	Ingot. Per 100 lb.
Casting, car lots	16 25 16 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60		21 00
Plain, 14 oz		22 00
inned copper sheet		24 00
lanished		32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 41½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb.	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb.	3 50	3 75
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 06½
Sheets, 3 to 6 lb. "		0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	0 09½

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft. 3 in. rolled rim	$18 00		16 00
5 feet "	19 00		17 00
5½ " "	20 50		18 50
6 " "	23 25		21 25
Plate E II			
4½ feet 2½ in. "	16 75		14 75
5 " 2½ "	17 50		15 50
5½ " 2½ "	19 00		17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, " 2nd "			7 50
" 127 E, " 1st "			5 70
" 127 E, " 2nd "			4 80
" 128 E, " 1st "			5 60
" 128 E, " 2nd "			4 70
" 129 E, " 1st "			5 40
" 129 E, " 2nd "			4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 77
1¼ "	7 88
1½ "	9 45
2 "	12 60

Malleable Fittings—Canadian discount 35 pe cent. American discount 20 to 25 per cent

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c.
Cushion work, discount 50 per cent.
Fuller work, discount 65 per cent.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 55 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, dis count 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 " "	" 1 90
No .7 Fuller's	" 2 20
No. 4½, "	" 2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $31; 5 and 10 per cent. discount.

Patent Compression Cushion, bath cock, No. 2208	2 25
Square head brass cocks, discount 55 per cent	
" " iron " " 60 "	
Thompson Smoke-test Machine	$25.00

RANGE BOILERS.

Copper, 30 gallon	" 22 00
" 35 "	" 24 00
" 40 "	" 28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND EBONY HANDLED RAZORS



FULLY WARRANTED

Manufactured from finest Clauss hammered steel.

Hardened by our secret process,

Honed and set ready for use.

Crocus-finished back, tang and shoulder.

High blue-polished blades.

CLAUSS SHEAR CO.

169 SPADINA AVENUE

WRITE FOR TRADE DISCOUNT

TORONTO, - ONTARIO

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.	Per lb
Bar, half-and-half, guaranteed	0 17½
Wiping	0 15½
Refined	0 16¼

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 50
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.	
Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.		
Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon		1 20
Second qualities, per gallon		1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints		1 35
Canada Paint Co.'s pure		1 25
Toronto Lead & Color Co's pure		1 25
Sanderson Pearcy's pure		1 20
Standard Co.'s "New Era."		1 30
Francis-Frost Co.'s "Ark" B'd		1 25
" British Navy deck		1 50
Henderson & Potts's "Anchor"		1 35
Ramsay's paints, Pure, per gal.		1 20
" Thistle, "		1 00
" Outside, bbls	0 55	0 65
Island City House Paint		1 25
" Floor "		1 25
Sterling House Paint		1 20
" Floor "		1 10
National		1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from assorted to 1 gal., $2.50.		

GLUE.

Common		0 08½
French medal	0 16	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb. 0 07½ 0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 25
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross 7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz. 2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.
Button's imitation per doz. 5 00 9 00
man " 0 60 0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

When You See
"RED STARS" and "ANCHORS"

You're all right, providing they appear on the Tarred Felt, Ready Roofing and Building Papers you sell. Those are Paterson's Registered Brands and stand for **Perfection** so far as it can be attained in the manufacture of the above kind of goods.

The Paterson Mfg. Co., Limited
Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	3 80			5 06
26 to 40	4 00			5 44
41 to 50	4 50			6 56
51 to 60	4 75			7 50
61 to 70	5 00			8 62
80	5 30			9 38
85				10 75
86 to 90				12 30
91 to 95				15 00
96 to 100				18 00
96 to 100				18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ½-inch	per gross	9 00
Rope, ⅝ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2½ 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch		4 50
" 5-inch		6 00
Zenith		9 00
Lane's covered—		
No. 11, 5-foot run		8 40
No. 11½, 10-foot run		10 80
No. 12, 10-foot run		12 60
No. 14, 15-foot run		21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)		3 75
" " 1¼ x 3-16 in(100 ft)		4 75

HARVEST TOOLS.

Discount 60 per cent.

S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz.		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb.		0 06½
" 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05⅝
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up		3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned c 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz.		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75
Japanning, 50c. per doz. extra.		

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in.	" 6 00 to	6 50
Daisy, 8 -in.	" 5 25 to	5 75
Philadelphia, 7½-in.	" 6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."
Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent
Russell & Erwin, steel rim ...per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ..... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

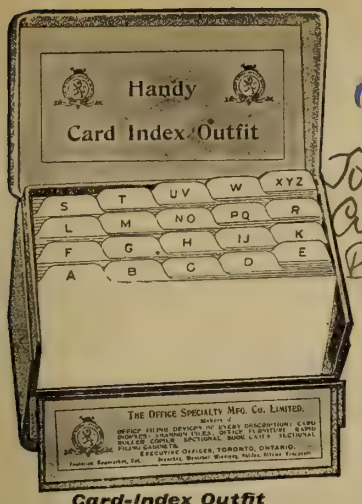
PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent
Wood, fancy Canadian or American 37½ to 40 per cent

A BARGAIN IN CARD SYSTEM

A Brain Box for 90c.

RETURNED JUL 22 1905



Card-Index Outfit

RETURNED JUL 22 1905

Following Out Book 31 Page 25

HERE'S the Offer:

1 Cloth Box
150 5 x 3 Linen Cards
1 set Daily Guides, 1-31
1 set Monthly Guides, Jan.-Dec.
or 1 set Alphabetical Guides, A. to Z.

All for 90 CENTS
Prepaid

Just to demonstrate what a wonderful **Time, Trouble and Thought** Saver our Card System is, we make you this offer. Money refunded if it doesn't satisfy you.
There is nothing in business furniture we do not make.
School Desks and Metal Work a specialty. **Call, Phone or Write for Catalogue.**

THE OFFICE SPECIALTY MFG. CO., Limited

Factories, NEWMARKET. **97-105 Wellington St. West, (near York) TORONTO**

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros " Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅜ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set		0 75
" No. 50, nickle-plated, "		0 80
Common, plain.....		4 50
" plated		5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete.....each 0 75 2 75
" frame only.....each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting 4 75
Hand Sets, Perfect 4 00
X-Cut Sets, " 7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cenc.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.
Bench, wood .....per doz. 3 25 4 00
" iron ..... " 4 25 5 00
Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 22	9 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 6 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c. "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. 4 and 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots. fo

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

nd, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

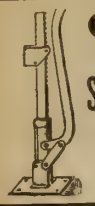
WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

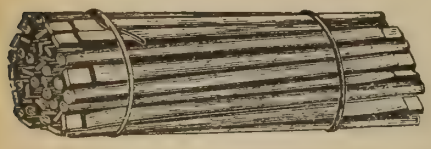
Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.



COVERT MFG. CO.
Troy, N.Y.
Steel Carriage and Wagon Jacks
Harness Snaps, Chain, Rope and Web Goods, etc.
SOLD BY ALL LEADING JOBBERS.



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.
Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty o heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.



HOLDS WATER LIKE A SPONGE
Being light and elastic; as it is made of cotton.
The Tarbox Mop Cloth
holds water like a sponge. Is adapted to ***The Tarbox Self-wringing Mop,*** or any other mop. Can be wrung with scarcely any effort. Has a great sale as extras. Two grades, Nos. 1 and 2, at popular prices.
Your Jobber Sells Them.
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Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

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We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

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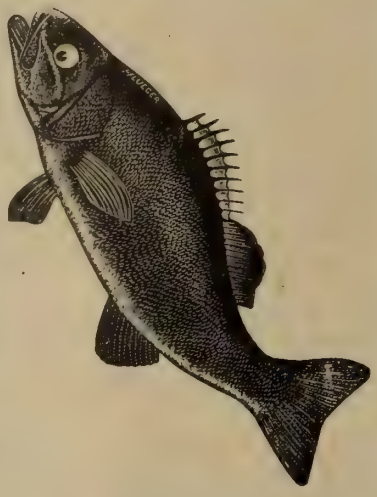
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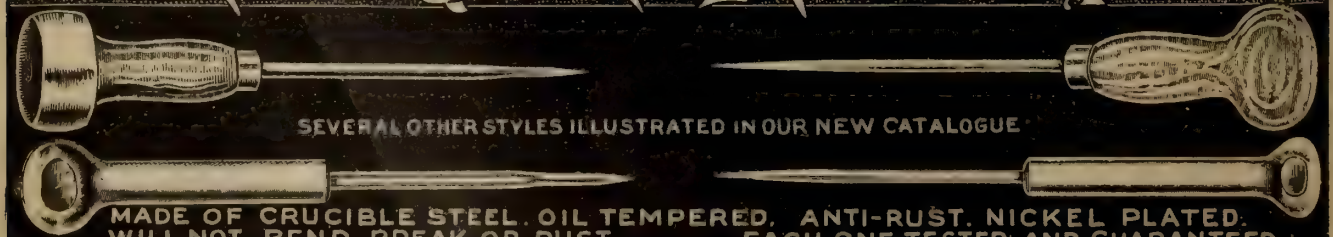
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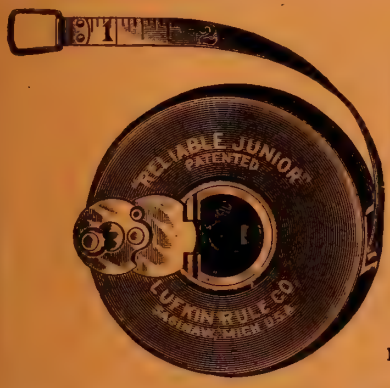
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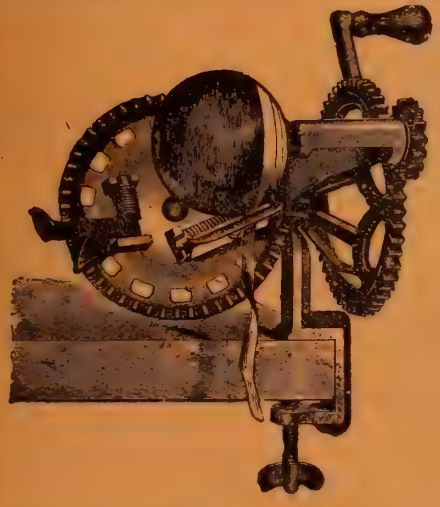
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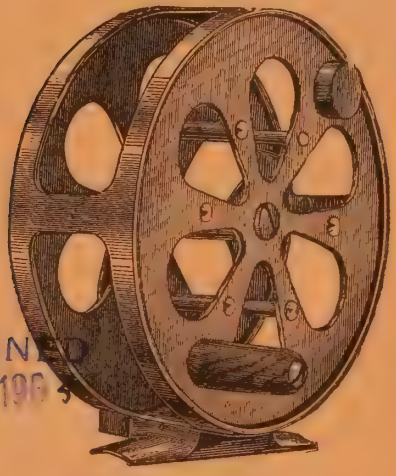
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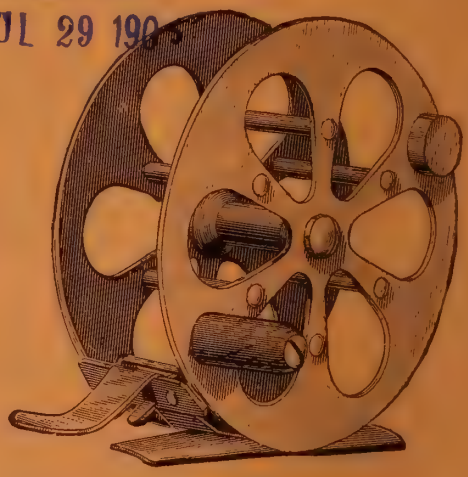
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459-461 BROADWAY, NEW YORK.

Portland Cement
Ready Roofing
3 ply
Saturated Tarred Felt
7, 10, 16 oz.
(RED CROSS BRAND)
Dry and Tarred Sheeting
Roofing Cement
Block Pitch

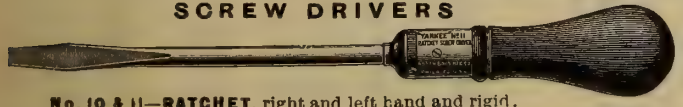
Large Stock. ***Close Prices.***

THOS. BIRKETT & SON CO., LIMITED
WHOLESALE HARDWARE MERCHANTS
OTTAWA, ONT.

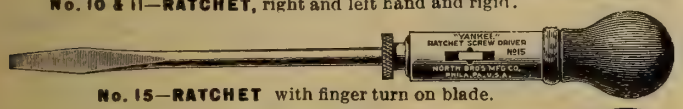
Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

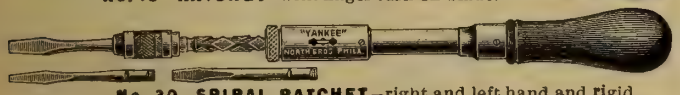
SCREW DRIVERS



No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET—right and left hand and rigid.
No. 31— " " " (heavy pattern)
No. 20— " " " right hand only.

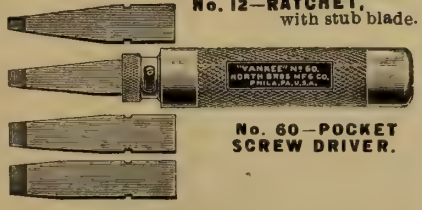


Chuck and 8 Drill Points, for spiral ratchet screw driver.

No. 12—RATCHET, with stub blade.



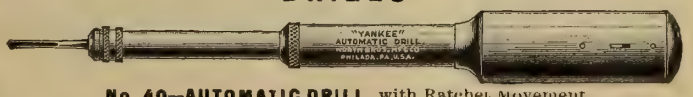
Countersink, for spiral ratchet screw driver.



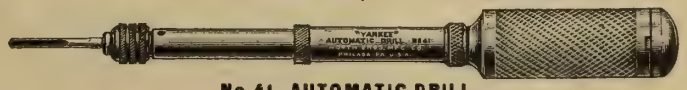
No. 60—POCKET SCREW DRIVER.



DRILLS



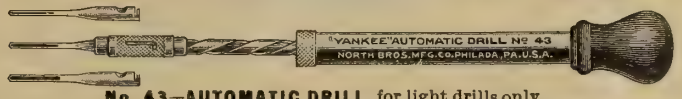
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No 50—RECIPROCATING DRILL, for wood or metals.

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

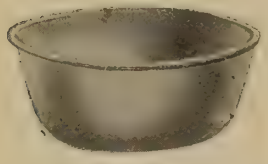
Davidson's Cereal Steam Cooker and Vegetable Boiler



Stew Pan with Enamel Cover



Wire Egg and Vegetable Boiler



White Cereal Dish

Using the well known application of Steam in a novel and convenient manner.

The inside Cereal Dish being suspended in the Stew Pan by means of a useful wire basket; is always surrounded by steam, ensuring the perfect and hygienic cooking of the contents.

The Wire Basket has many additional advantages, as it can be used for either boiling Eggs or Vegetables, and having wire handles at the sides it is very easy to handle.

The inside Cereal Dish is readily removed, and can be used on the dining table in a plated receptacle, or without, as this dish is always supplied in White Enamel only.

SIZES AND DESCRIPTION

No. 13—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; One 3 quart Cereal Dish.
No. 15—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; One 5 quart Cereal Dish.
No. 35—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; Two Cereal Dishes, one each 3 and 5 qt.

Made in "Premier" and "Colonial" Enamelled Steel Ware.

The Thos. Davidson M'f'g Co., Limited

MONTREAL

GALVANIZED SHEETS

"Gordon Crown" "P.F. Crown"

None Better **Lots Worse**

Enquiries solicited for shipment from stock or for import . . .

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

GEMS

CAN BE YOURS IF YOU

TAKE OUR ADVICE AND HANDLE A LINE OF MEAT CHOPPERS

THAT ARE UNEXCELLED IN

QUALITY, FINISH AND PRICE

The GEM FOOD and MEAT CHOPPER is a kitchen necessity throughout the whole year

RETURNED 061 62 7

NICELY TINNED—IT WILL NOT RUST

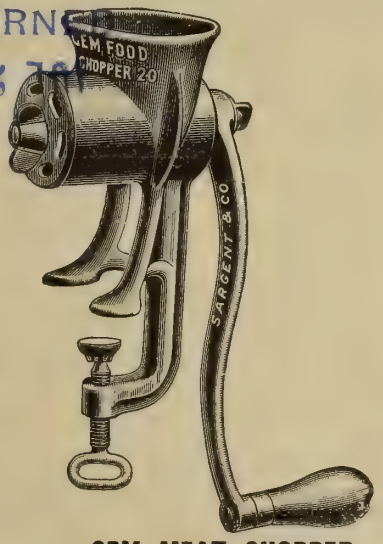
CHOPS MEAT, BOTH RAW AND COOKED

CHOPS VEGETABLES AND ALL OTHER FOODS

THE CUTTERS ARE SELF SHARPENING

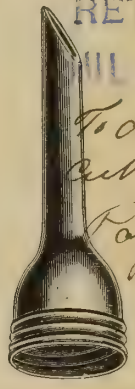
MADE OF STEEL; THEY CANNOT BREAK

EASY TO CLEAN AND EASY TO OPERATE



GEM MEAT CHOPPER

RETURN



STUFFING ATTACHMENT FOR CHOPPER

WE HAVE COMING A CARLOAD OF "GEM" CHOPPERS, WHICH IS THE LARGEST CONSIGNMENT OF THIS CLASS OF GOODS EVER SHIPPED TO ONE FIRM IN CANADA. THIS PLACES US IN A POSITION TO FILL ALL ORDERS, LARGE or SMALL. DO NOT BE WITHOUT AN ARTICLE THAT SELLS EVERY BUSINESS DAY IN THE YEAR. MAKES THE HOUSEKEEPER'S WORK EASIER, SAVES TIME AND MONEY.

ORDER NOW. WE QUOTE LOW. WE SHIP QUICK.

We also stock ALEXANDERWERK CHOPPERS, all Nos., Tinned and Enamel.
Also Enterprise Meat and Food Choppers, all numbers.

LEWIS BROS., LIMITED

WHOLESALE HARDWARE MERCHANTS

ADDRESS ALL COMMUNICATIONS TO MONTREAL

OTTAWA, TORONTO, CALGARY, VANCOUVER.

Best on the Market

FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

IN CASES

Table Cutlery, etc.

SOLD BY

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

DOMINION WIRE MANUFACTURING CO. LIMITED

MONTREAL AND TORONTO

NOTICE!

We beg to advise our many customers that notwithstanding the TRADE REPORT in issue June 10th, page 37, we are in a position to EXECUTE PROMPTLY all orders for the following goods:

Barb Wire, Galvanized Wire, Wire Nails,
Wood Screws,
Bright and Galvanized Fence Staples,

—also—

Steel Wire Barrel Hoops

MADE IN CANADA

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using **ALUMINUM WARE**

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

CATALOGUES TO TRADE ON APPLICATION

CANADIAN ALUMINUM WORKS, LIMITED
CHAMBLY CANTON, QUE.

Give that man a **UNION PLANE** when he asks you for a

GOOD PLANE

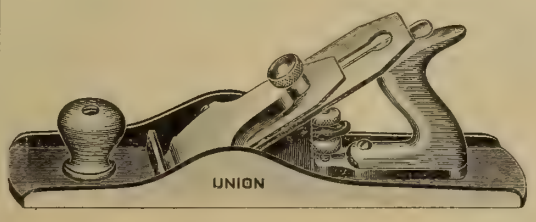
They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever adjustment and Solid Frog

Patented.



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

New Britain, Conn., U.S.A.

GOLD MEDAL AWARDED 1904

BY SPECIAL APPOINTMENT
SWORD CUTLERS
TO HIS MAJESTY
THE KING

WILKINSON'S CUTLERY

TABLE KNIVES
DESSERT KNIVES
CARVERS IN CASES

RAZORS
POCKET KNIVES
SPORTING KNIVES

made of the FINEST SWORD STEEL by

WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, 204 St. James Street, MONTREAL

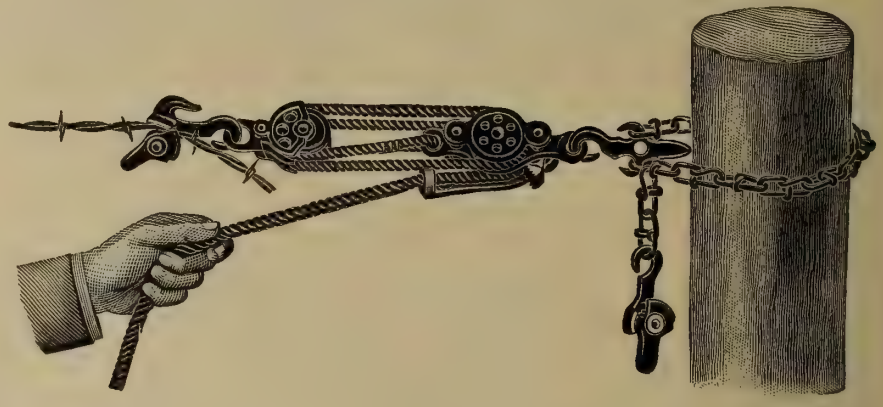
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



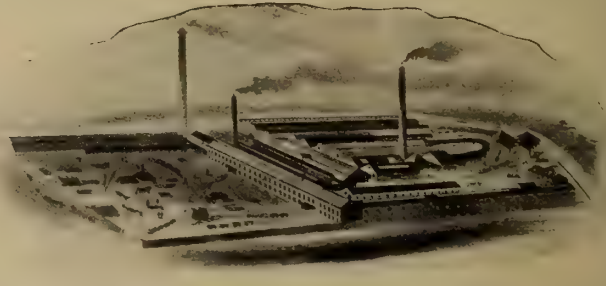
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.

TRADE MARK
WIND MILL
BEST BEST

LARGEST MAKERS OF

GALVANIZED SHEETS

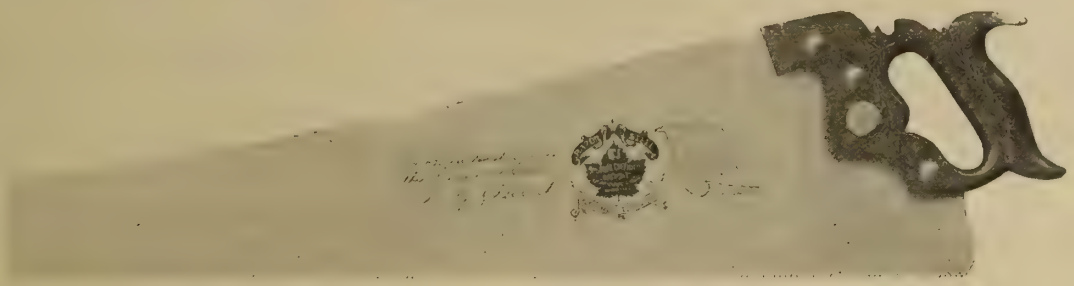
IN ENGLAND

The sheets made by John Summers & Sons, Ltd., in one week, if laid end to end, would measure over 400 miles in length, or equal to the whole length of England.

Agent: F. Hankin, Montreal

Canada Leads the World in the Manufacture of

HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.

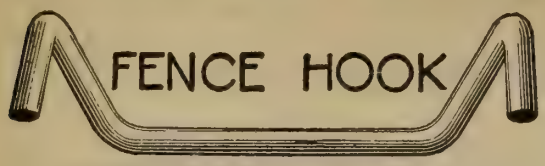


No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

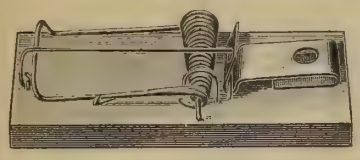
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.

LITITZ, PA.

GLAZIERS' DIAMONDS

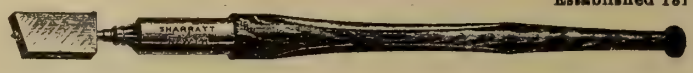
Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

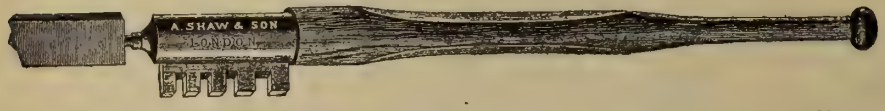
Established 181

ALSO Lead Vices, Carbon Tools, Etc., Etc.,



Agents for Canada: A. Ramsay & Son Company, Montreal

GLAZIERS' DIAMONDS



Ahead of all others in quality and workmanship. If sparks of fine quality, set by experts, are what you require, buy Diamonds of A. Shaw & Son's make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED **HEINISCH** SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO. NEW YORK OFFICE, 155 Chambers St NEWARK, N.J., U.S.A.

SEYMOUR SHEARS

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK



Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

COVERT MFG. CO.

Troy, N.Y.



Auto Screw Jack

Harness Snaps, Chain, Rope and Web Goods, etc.

FOR SALE BY JOBBERS AT MFRS. PRICE

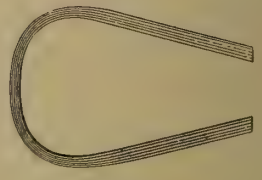
CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

GUELPH AXLE WORKS

THE GUELPH SPRING & AXLE CO. LIMITED

GUELPH, ONT.



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

MAPLE LEAF

STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

GREENING'S PATENT

GREENING'S



COW TIES

These cow ties have stood the test for years.

Undoubtedly the best and strongest on the market.

It will pay you to handle only the best.

A complete line of all sizes ready for shipment.

FOR SALE BY ALL JOBBERS

THE B. GREENING WIRE CO.
LIMITED

HAMILTON, ONT. MONTREAL, QUE.

Dillon Hinge-Stay —Fence—



Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

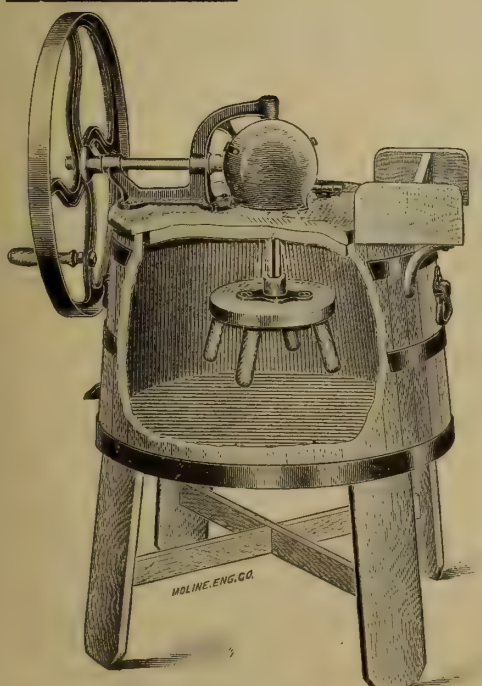
OWEN SOUND WIRE FENCE CO., LIMITED,

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) Montreal and Winnipeg

1905 Ocean Wave Washer



Accident Proof! Dust Proof!

SPECIAL FEATURES:

1st. Covered Gearing
which can be opened instantly to expose working mechanism.

2nd. Improved Dasher.
We do not use **wooden** Dasher Pole.

3rd. Mechanical Movement Most Simple ever Constructed.

4th. The Best Seller
because it is more attractive than others.

Sold to only one dealer in each town.
Trial Order will convince.
Write us.

VOSS BROS. MFG. CO.——————DAVENPORT, IOWA, U.S.A.

The "Perfect" Knife Handle

Screw Driver has more merit than any other screw driver we have ever handled.

It is made of **drop forged steel.**

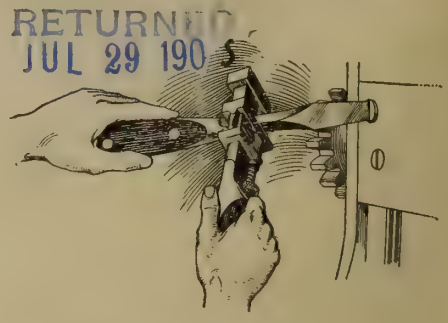
The illustrations show its construction and manner of use.



Ordinary Pattern showing also the Drop Forged Blade

Machinists' Pattern





Our travellers will quote you, or write for prices

Frothingham & Workman, Limited

WHOLESALE

Hardware and Iron Merchants

Montreal, Can.

Nearly a century in the hardware trade.

John Round & Son, Limited

Manufacturing

GOLDSMITHS and SILVERSMITHS

Contractors to

H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS

ESTABLISHED 1847

Tudor Works:

SHEFFIELD, England

and

112 HATTON GARDEN, LONDON



14540.—FRUIT DISH.

Manufacturers of all Kinds of

GOLD, SILVER

ELECTRO PLATE ON NICKEL

and BRITANNIA METAL GOODS

Silver and Plated Cutlery

Steel Cutlery, Oak and Inlaid Goods

With Silver and Plated Mounts



31197.—E.P.N.S. CAKE BASKET

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; F. H. ANDREWS & SON, Quebec, P.Q.; GEO. WOOD, London, Eng.

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

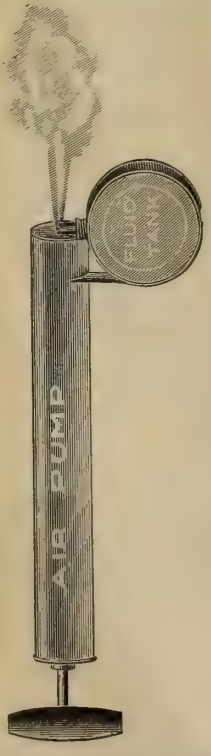
Sales Branches and Warehouses:

122 Granville St., Halifax, N.S.	Imperial Bank Building, Montreal, Que.	Front and Yonge Sts., Toronto, Ont.	89 Princess St., Winnipeg, Man.	403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED

KEMP'S SPRAYERS

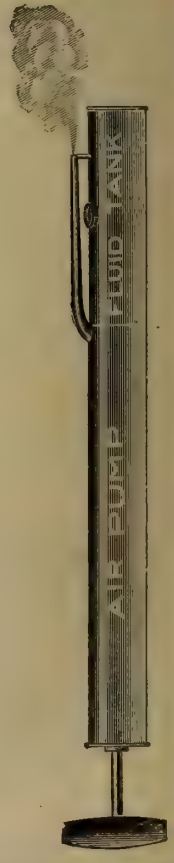


The Deluge Sprayer can be supplied with either tin or copper reservoir, as required.

These Sprayers are unexcelled for spraying bushes, plants, potatoes, vines, also horses, cattle, etc.

We carry a large stock and can make prompt shipment.

Prices are low and we will be pleased to quote you.



KEMP MANUFACTURING GO., TORONTO, CANADA

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KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

GAS AS A FUEL FOR HOT-AIR HEATING

By R. S. THOMPSON, New York.

FOR cleanliness, convenience of management and economy of labor, gas is the ideal fuel. I believe the day is not far distant when the householder would no more think of fitting his cellar with coal in order to supply his house with heat than he would of putting a slaughter house in his cellar in order to supply his family with meat.

So obvious are the advantages of gas as fuel that on the introduction of natural gas, most people in the gas regions who had hot-air furnaces made haste to have the grates taken out and gas-burners put in. They had their cellars cleaned up and their coal-bins taken away.

First Experimen's Unsatisfactory.

In a large proportion of cases, after a trial for a single season, they made equal haste in having the gas-burners taken out, the grates put back and their coal-bins fitted up again.

So generally unsatisfactory was the result of the attempt to use natural gas in hot-air furnaces, that it became a generally accepted idea throughout the gas regions that gas was adapted only for use in stoves and was entirely unsuited to hot-air furnaces.

And yet there is no scientific reason why gas cannot be as successfully used in hot-air furnaces as in any other form of heating apparatus.

The difficulty arose from lack of proper consideration of the conditions requisite in using a new fuel. Furnace men were putting new wine into old bottles. The result was that the old bottles (funaces) were spoiled and the new wine (natural gas) was wasted.

Gas and Coal.

There is a wide difference between a gas fire and a coal fire, each developing the same number of heat units per minute.

With coal, there is a bulk of intensely heated carbon throwing off radiant heat in great quantity, consequently the firebox and combustion-chamber of the furnace become intensely heated by that radiant heat and a comparatively small amount of this highly heated surface will heat a large amount of air.

There is comparatively little radiation of heat from the pure blue flame produced by the perfect combustion of natural gas. The heat produced is principally contained in the gaseous products of combustion. Owing to the dilution of these products with the nitrogen from the air and with the excess air usually admitted, this temperature is not very high. One of the principal products of the combustion of gas is water in the form of steam, and this contains in latent form a large amount of heat.

In the combustion of one thousand cubic feet of natural gas there will be produced from eighty to one hundred pounds of water in the form of steam. This steam will contain from eighty to one hundred thousand B. T. U. as latent heat which cannot be utilized until the steam is condensed into water by lowering its temperature below 212 degrees.

The attempts to heat a building with steam, allowing the live steam to escape uncondensed into a chimney, would be no more extravagant or unscientific than the attempt to heat with gas while allowing the live steam produced by the combustion of the gas to escape uncondensed into the chimney.

Economical Hot-Air Heating by Gas.

In order to use gas successfully and economically in hot-air heating, the following points are necessary:

1. A burner which will secure combustion of all the gas which passes through it and will not permit the production of carbon monoxide, or as it is commonly called, "carbonic oxide gas."

2. A sufficient amount of surface exposed to the products of combustion on one side and to air at a temperature very considerably below 212 degrees on the other, and so arranged that the products of combustion will be reduced to a temperature below 212 degrees before leaving the furnace.

3. A sufficient quantity of air passing through the furnace to take the heat from the products of combustion without itself becoming sufficiently heated to impair its power in extracting heat.

4. Provision for getting rid of the water of condensation.

We will consider these points in order.

The Burner.

There has been much unscientific talk on this subject. The heat is in the gas, not in the burner. If a burner secures the combustion of all the gas which passes through it without the production of carbon monoxide, it has done all that can be done. Talk about burners which burn large quantities of air is all nonsense. A cubic foot of gas in complete combustion combines with a fixed quantity of exygen. This quantity can be neither increased nor decreased. If the quantity of air supplied is insufficient, part of the gas will be unburned. If the air is supplied in excess of requirement, the excess of air will not be used. If more air is mixed with the gas than required, combustion will be imperfect and part of the gas will be unburned.

A Perfect Gas Flame.

A perfect gas flame is a clear blue and perfectly transparent. A white or yellow flame, or a milky-blue flame indicates imperfect combustion. Sometimes a gas flame seems blue, but by holding an object on the other side it will be found it is not transparent. This indicates imperfect combustion.

If the flame "blows" or "lifts" away from the burner it shows too much air and consequently imperfect combustion.

If the fire "streaks up" in long, ragged flames, there is imperfect combustion.

If any portion of the burned gas mixes



Maritime Wholesalers Automobiling at Digby, N. S.



Maritime Wholesale Hardware Association at "The Pines," Digby, N. S.

with the fresh gas, it poisons the latter and there is imperfect combustion, for a small amount of carbon dioxide mixed with gas renders the whole mixture incombustible.

The best gas fire is obtained by a large number of small jets so arranged that each jet will be fed with pure air and that the burned gas from one jet cannot become mixed with the fresh gas issuing from another.

A gas fire should have a supply of air in addition to that which is supplied through the mixer. It is impossible to supply enough air through the mixer to secure complete combustion, and one of the most common errors in setting gas-burners is the attempt to exclude all other air.

Should Not Be Excess of Air.

On the other hand, if an excess of air is supplied it will unduly reduce the temperature of the products of combustion.

It is a mistake to attempt to "hold the heat back," by tightly closing the damper in the smoke-pipe. When this is too tightly closed the poisonous products of combustion are retarded too long in the furnace and poison the fresh gas issuing from the burner. The way to avoid loss of heat to the chimney is to take the heat out of the products of combustion and then let them escape freely. When the heat has been extracted the sooner they are carried away the better. By actual test, with careful measurement of the heat units utilized in the air, I have found that more heat units were utilized with a free outlet to the chimney than with the damper tightly closed. In the latter case the smoke-pipe was cooler, but the total number of heat units developed per thousand feet of gas was less, showing that much of the gas was unburned.

Size of Mixer.

Considerable scientific knowledge, skill and common sense are required to properly adjust a burner and mixer so as to secure the proper mixture of gas and air and the proper pressure in the burner. A three-quarter inch mixer will, in some burners, carry in more air than an inch and a half mixer in others. No rule can be given. I have secured a perfect fire with a three-quarter inch mixer, using one hundred feet of gas an hour, and I have had other cases where not more than fifty feet of gas an hour could be burned with an inch and a quarter mixer. A burner adjusted for one locality may not work properly in another, as the composition of the gas and the pressure in the mains differ. The supply pipes should be of liberal dimensions, especially if long, as the friction in the pipes will reduce the pressure, and a low pressure at the mixer means an imperfect mixture of gas and air, and, in consequence, imperfect combustion.

The Surface.

It is impossible to give any hard and fast rule in regard to the amount of heating surface required, as there is much difference in the efficiency of surfaces, and so much depends on the quantity and temperature of the air carried over these surfaces. The problem is to extract the heat from the products of combustion, and no amount of surface will do this unless that surface is exposed to a constant current of air at a temperature considerably below 212 degrees. In general I have found that, with a liberal air supply, there should be about one square foot of surface for each cubic foot of gas burned per hour.

Air Supply.

This is not so difficult to estimate. Natural gas is a product of uncertain chemical composition, and this statement is even more true in regard to most artificial gas, but a good quality of natural gas should contain about one thousand B.T.U. to the cubic foot. This would heat about five hundred and fifty cubic feet of air one hundred degrees. It would therefore appear that the amount of air passed over the heated surfaces should be from three hundred to five hundred cubic feet for each cubic foot of gas consumed. The greater the amount of air and the lower its temperature when passing over the heated surfaces, the more complete will be the exhaustion of the heat.

This raises an interesting question as to what disposition should be made of this air after it is delivered to the room which I will consider later.

Disposing of Water of Condensation.

This is one of the most difficult problems in connection with the use of gas as fuel. A thousand cubic feet of gas weighs about thirty-seven pounds, and if of high quality contains from nine to eleven pounds of hydrogen, but as each pound of hydrogen in the gas combines during combustion with eight pounds of oxygen from the air, there is a production of nine pounds of water for each pound of hydrogen contained in the gas, and a thousand cubic feet of good gas will produce from eighty to one hundred pounds of water when burned. To allow this water to escape in the form of steam at a high temperature, involves, as already shown, a great waste of heat. To utilize this heat by cooling the products of combustion to the point where the steam will be condensed, involves the problem of disposing of the water of condensation.

Water Mechanically Carried Off.

By proper construction of the burner and regulation of the air supplied to the fire, a large portion of this water can be mechanically carried off through the chimney in the form of mist which is suspended in the air after the latent heat has been removed, but some of it will, under some conditions, form into drops, run down the inside of the chimney and drop from the furnace.

Therefore, every chimney used for a gas fire should be perfectly straight and lined with tile, and provided with an opening at the bottom for the escape of the water.

In several cases I have provided for a gas furnace a special chimney made of gas pipe from three to six inches in diameter, according to the size of the furnace, with an inch and a quarter pipe at the bottom connected with a drain.

Sick Furnaces.

The furnace itself should be provided with some small openings to drain off the water, though, of course, the arrangement of these will depend on the construction of the furnace. I have been called to "sick furnaces" where the trouble was that the lower flues had become completely filled with water. I was called to one case where the furnace was connected with the chimney by means of a smoke-pipe thirty-five feet long. This pipe near the chimney was close to a window. I found the trouble was due to a careless janitor who had left this window open and the pipe at this joint had become completely closed with ice.

Corrosive Water of Condensation.

Most natural gas contains sulphur, and this when burned in connection with hydrogen produces sulphuric acid. The water of condensation is, therefore, usually quite corrosive. It will eat the mortar out of chimneys, hence the necessity for lining them with tile. It will corrode iron, so the smoke-pipe should be of heavy iron and coated inside and out with some acid-resisting paint. It should be kept in mind that the products of combustion of natural gas are not corrosive while hot. Corrosion begins only when these are sufficiently cooled to cause condensation of the steam. The more perfect the operation of your furnace, the more trouble you will have with condensation. Complete absence of trouble from this source is usually an indication that the furnace is ineffective.

Much Air Needed.

I referred to the problem of disposing of the large amount of air which, in using gas, is required to extract properly the heat from the products of combustion. With a furnace burning one hundred cubic feet of gas per hour this would require from thirty to fifty thousand cubic feet of air per hour. The large amount is preferable.

But a family of six persons would require for the most perfect ventilation but ten thousand eight hundred cubic feet of fresh air per hour, so if all this air that is poured into the house is allowed to escape at a temperature of 70 degrees through the windows or drawn off by a ventilating stack, there will be an enormous waste of heat.

To my mind, there is but one proper solution of this problem. Return to the furnace all the air supplied in excess of the amount required for thorough ventilation.

This would require additional expense in the installation of the system. But any system of hot-air heating is defective which does not provide means for the exhaust of the waste air as well as means for the supply of warm air. A perfect system of hot-air heating should include double piping; that is to say, one set of pipes for the supply and another set of pipes for the exhaust.

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AN ALL-STEEL REFRIGERATOR.

THE refrigerator shown herewith is made by the Metal Stamping Co., Jackson, Mich. The refrigerator is made throughout of galvanized and cold rolled steel. It is cylindrical in form and has two metal shelves, shown in Fig. 2. The shelves revolve on a central post, making access to any article on them most convenient by revolving the shelf. The shelves may also be quickly raised, lowered or removed. When they are removed or are cleared of contents the interior can be readily cleaned by a stream from a hose, or by the use of a cloth. Claim is made that the circulation of air from the ice chamber above to the provision chamber below is so scientifically planned that the provision chamber is kept so free from moisture that matches may be stored in it without injuring their igniting quality. The round form of refrigerator is commended by its maker, not only because a cylinder embodies the maximum storage space in a given size, but because it has no corners in which unsanitary matter can find lodgement.

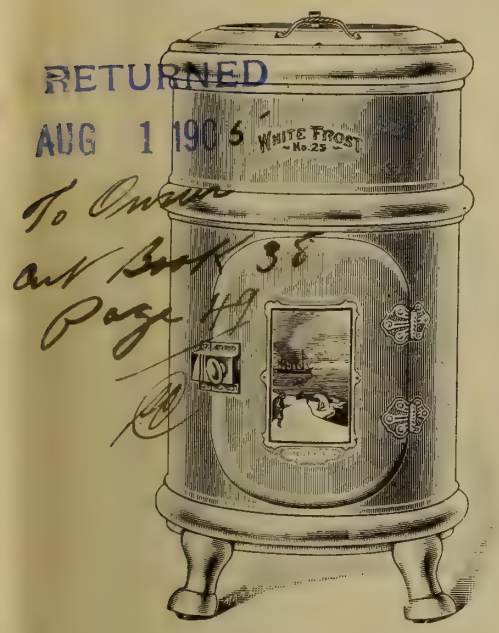


Fig. 1.—The Refrigerator Closed.

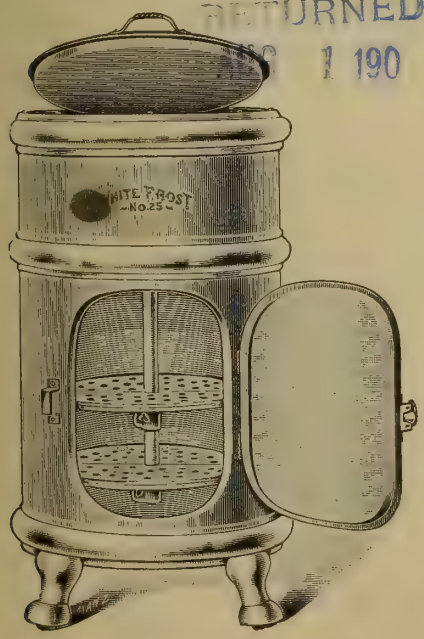


Fig. 2.—Interior of All-Steel Refrigerator.

The space between the outer and inner walls of the refrigerator is filled with maltha and asbestos insulation. The absence of any wood or other absorbent material in the interior or exterior of the refrigerator eliminates warping or shrinking and prevents molding or decay, making this refrigerator practically everlasting. Claim is also made that a material saving in ice is effected. Externally the refrigerator is attractive, being finished in white enamel, richly decorated.



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ELECTRIC CO. REORGANIZING.

PLANS for the reorganization of the Sayer Electric Co., of Montreal, are under way, and the firm will be known in future as the Sayer Electric Limited, with a capital of $100,000. Arrangements are being made to secure the building on the northwest corner of Beaver Hall Hill and Craig streets facing Victoria square. The securing of this building will allow Mr. Sayer to go into the manufacture of electrical specialties and supplies much more extensively. He also purposes going into general electrical contracting for all classes of work.

Mr. Sayer has been connected with this line of business for some time, having started as messenger boy with T. W. Ness in 1890. After four years he accepted a position with the Montreal Electric Co. In 1896 he started in business for himself at No. 60 Victoria square, where he remained until 1899. In 1900 he again started for himself under the name of the Sayer Electric Co., which has continued until the present reorganization. The old company was recognized as one of the largest electrical contractors in eastern Canada, and although this particular branch of the business enjoyed a marked increase last year, Mr. Sayer is looking forward to transacting business of a volume such as has never been attained in the history of the firm.

SEASONABLE SUGGESTIONS.

Push your Summer goods now. Dress your window with them.

Keep your name before the public.

Yes, it's warm, but keep at it just the same.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

857. A South African importer desires quotations per lb. c.i.f. Cape Town for Manila binder twine, in 4-lb. balls.

859. A Birmingham manufacturer of locks and brassfounders' goods wishes to do business with Canada.

865. A Welsh firm manufacturing enamelled slate mantelpieces and slabs make inquiry respecting the demand for these goods in Canada.

867. A Japanese importing firm wishes to be put in communication with the manufacturers of wire nails, wood screws and galvanized iron wire, with a view of importing same into Japan.

PROFITS IN SMALLWARES.

In dull periods the right goods to advertise which are always a matter of importance become your most pressing need. Not only is it then especially difficult to tempt first purchasers, but also is it difficult to keep old customers regular in their buying.

Aside from the direct profits low priced goods are known to yield, it is among them that merchants find the most desirable leaders for use in creating Summer trade.

There are several reasons for this fact. In almost every line there are 5 and 10-cent items. With no other class of goods, therefore, can more wants be appealed to than with them.

The very smallness of the price makes the goods alluring not only to those who are forced to spend dimes carefully, but also to those who are willing to be convinced that worth can be had for less than they are able to pay.

By arranging the smallwares on tables, by displaying them in the windows and other points of advantage, and by advertising them judiciously, it is surprising how large the total sales will amount to.

IMPLEMENT DEALERS' TROUBLES.

AN implement dealer, probably more than any other retailer, has an opportunity to realize how much in the way of a guarantee the average buyer expects for his money. One of the difficulties encountered by the dealer in agricultural implements, says Hardware, is the fact that the machinery he handles is much of it of a rather complicated nature, and it goes into the hands of men who are not machinists. Most dealers try to overcome this by sending out a competent man to set up and start the machine. Of course, it works all right while he is there to keep everything in first-class order. After he goes away, and the farmer is thrown upon his own resources, the trouble begins.

Nine out of ten farmers will agree with the statement that the very point at which they have their most serious trouble is one the book of directions skips entirely or describes under names confusing to one who is totally unfamiliar with that particular machine. It is so very simple to the manufacturer that he overlooks a lot of things the user wants to know. Usually it is the little things that make the trouble, and they are always hardest to locate. More than once the writer has sat on the questioner's bench and figured on mechanical equations containing twice as many unknown quantities as a well regulated algebra will permit, while inwardly cussing the fellow who ought to have said less and told more.

It seems to be a different problem for the man on the roof to see things from the standpoint of the fellow just starting up the ladder. There is no question, however, but that a large proportion of the machines sent out on trial, and which have been condemned, are less at fault than are the men who give instructions as to their use. The fact that the expert can run the machine does not count with the farmer so long as he cannot run it himself; also he wants instructions covering the difficulties he himself encounters; in other words, he wants them written from the user's rather than the manufacturer's viewpoint.

One big general agent for agricultural machinery has undertaken to solve the problem for himself in a unique way and get next the troubles of his customers. With each machine sent out goes a card which, when properly filled out by a purchaser, is good for payment on repairs up to a certain amount (depending upon machine purchased.) Before the card is honored it must be filled out with a statement of the customer's troubles, if any, in getting satisfaction out of the machine before accustomed to it; what point of the instructions seemed most incomplete; in short, a brief history of the buyer's trouble equation. By comparing these cards the dealer is frequently able to locate points wherein, under the directions sent out by the manufacturers, there is particular danger of dissatisfaction, and to guard against that point accordingly.

In the case of a number of machines he has found enough complaints regarding some minor and overlooked part to warrant him in issuing supplemental directions of his own. Then, too, these cards are a wonderful help to the expert starter in showing him at just what points of management he should be specially careful to instruct the buyer. Often the point seems trivial and unimportant, but when these incoming cards from the frequency of their complaints show that there is a general demand for instruction at this point, the lesson gathered from the cards is counted more to be relied on than the pre-conceived opinions of the seller.

I am not at all sure but there would be less friction between buyer and seller, less frequent complaints, and fewer returned goods, if dealers would generally adopt this conscientious effort to see things from the buyer's standpoint in other lines of the trade as well as in agricultural machinery.

With the increase of the use of electric lighting the hardwareman in the smaller cities is becoming something of an electrician. Whenever a plant is put in he certainly should be the first to carry the supplies and do wiring as it is strictly in his line of business. Electric bells and short distance telephones come under the same line and can be worked where there is no electric plant.

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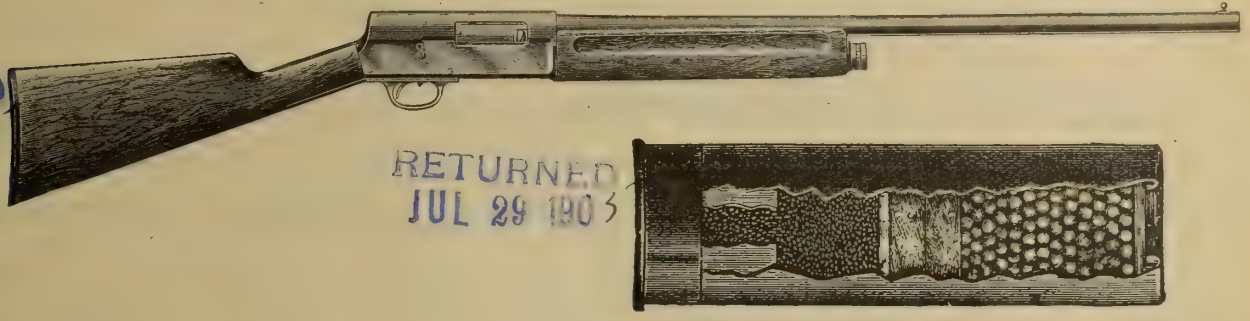
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BUILDING AND CONSTRUCTION

THIS YEAR'S BUILDING BOOM.

ALL signs have favored the expectation that the present year will witness great, if not record-breaking, activity in building construction. Of course, it is hard—in fact, well-nigh impossible—to set definite limits to the total expenditure in this line in the country as a whole. The reasons for this are obvious. Municipal statistics, except in a comparatively few exceptions, are naturally vague. Even where, as in the case of the larger cities, there is a registry of the building permits and estimated cost of construction, there is the doubt, first, as to the statistical accuracy of the detailed estimates and, second, as to the ultimate carrying out of the entire volume of the work planned. There is the highest authority, for instance, for the statement that in some wide areas only two-thirds of the work projected for one year is actually carried out in that period. Then, again, there is the possibility always that widespread labor troubles may not only discourage possible building, but may actually check or hold up work upon which more than the initial steps have been taken.

Despite these drawbacks, however, there is a natural desire to set some measure to the probable scope of building activity in this country during the ensuing year. Bradstreet's has, therefore, endeavored to take steps to this end, and, while making the fullest allowances for all these diverse influences and drawbacks, a conscientious effort has been made to get a line on the proportions of 1905 building. The results obtained indicate an expenditure of $445,000,000 in 108 cities and towns in the United States, the returns being necessarily partial and not entirely conclusive of possible later special development, but are, nevertheless, indicative of a decided drift toward activity in all kinds of construction during the present calendar year. It is estimated that these figures cover only about three-fourths of the buildings being erected, the total being figured at $600,000,000 for the entire States.

A fair estimate of the cost of an average building is probably 40 per cent. for material and 60 per cent. for labor; but if half is allowed to each of these items, a total of $300,000,000 for material, such as lumber, brick, stone, iron, hardware and paint is possible, and a like sum must be credited to labor.

Canada's building development is even greater than that of the United States, the development in the larger cities and the western districts being marvelous. The putting into circulation of the vast amount of money as a result of this activity is bound to be felt by all sections of the community, but by none so much as the hardware trade, which now supplies the major portion of the articles called for in the construction of modern buildings.

Ten thousand dollars have been appropriated by the M.C.R. to be expended on a new building in St. Thomas.

BUILDING NOTES.

The new Winnipeg Normal School building is now under way.

An extensive cement plant is to be located at St. Peters, N.S.

A. B. Holly is building a fine new brick residence at St. John, N.B.

R. Thompson and R. Martin are erecting new residences at Fort Frances, Ont.

Within ten days, building permits to a total pf $47,725 have been issued in Edmonton.

New business buildings to the value of $130,000 have been contracted for in Brandon.

The Grand Valley Railway Co. will erect a station at Glenmorris in the near future.

A large new store and office building is being erected for Joseph Maw on Main street, Winnipeg.

R. Beyers will build a brick house at the corner of Minto avenue and Huron street, Hamilton.

Mr. Wm. Grayson has commenced the erection of a $12,000 one-storey brick block at Moose Jaw.

The Merchants Bank have purchased a fine site at Arcola, Man., and will erect a three-storey brick block there.

The contracts have been awarded for building two more storeys to G. F. Stephens & Co.'s warehouse, Winnipeg.

Moncton, N.B., is enjoying the greatest building boom in the history of the city. New structures and improvements now under way make a total expenditure of $200,000.

L. Bazin will construct a $4,000 building on Hermine street, Quebec, and Lieut.-Col. Boulanger will erect one to cost $3,500 on Champlain street of the same city.

Fraser Bros., Strathcona, have received the contract to build a 30,000-bushel elevator at Ponoka, and a flour mill and elevator for the Alberta Flour Mills Co. at Edmonton.

A large addition is being built to Gordon, Ironsides & Fares' abattoir, Winnipeg, and it is the intention of the firm to double the capacity of their establishment this year.

An apartment house is about to be erected at St. John, N.B. Mr. D. R. Jack, who is pushing the scheme, has secured subscriptions for nearly all the capital stock, which has been fixed at $100,000.

Contracts for the factory building of the Cone Power and Gas Machine Co., Limited, have been let at Galt, and work has been begun on the building, which is 80x40 feet. The work will be put through with the utmost despatch.

Cement from the new cement works at Sydney is being used in the construction of the post office at Antigonish, N.S. It is much whiter in appearance than the ordinary cement, sets very quickly, but does not get so hard as the foreign cement.

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Water Proof Floors for Malt Houses, Breweries, Slaughter Houses Cheese Factories, Cellar, Stable Floors, etc.



Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables—"Machinery," Newport.
Emlyn Engineering Works
NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand"
OF PORTLAND CEMENT.
Prices on application.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

Don't Forget the Name...
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

WORK AND PRICES RIGHT
GALVANIZING
ONT WIND ENGINE & PUMP CO.
TORONTO, ONT. LIMITED

...FULL STOCK...
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

Sydney Cement Company began on July 10th. This is the first cement (Portland) to be manufactured east of Montreal in Canada. The new plant has a capacity for five hundred barrels per day of twenty- four hours.

The Merchants Bank will open up a branch at Napinka, Man., about the first of August. The citizens and farmers of that district have decided to erect a $5,000 building, the lower storey of which will be used by the bank, and the upper storey as a town hall.

Messrs. Alloway & Champion, Winnipeg, are erecting a two-storey bank building near the new C.P.R. depot, Winnipeg. The ground floor will be used for the purpose of the firm's banking business, while the second storey is being fitted up for general offices.

John Hanbury, of Brandon, Man., has started up the largest planing mill in British Columbia at Elks, and will handle lumber from the saw mills along the Crow's Nest road. Mr. Hanbury will make a specialty of getting out material for ready-made houses for settlers in the Northwest.

A twelve thousand dollar building is to be erected at the corner of St. James and Fulford streets, Montreal, by Mr. George Lanouette. The building is to be three stories in height, 60 feet square of brick and stone. The first floors will be occupied as stores and the upper flats will be used as dwellings.

Building operations in Montreal have now reached an almost terrible pace. The recent strike of the carpenters has not affected the trade in any way, a number of men having returned to work, and these in conjunction with the non-union men are able to keep the operations on all new buildings well under way. A few days ago the plasterers went out on strike also, but this strike, like many others of late, shows a disheartening spirit on the part of the men who were called out with the result that over half are yet at work. On Sherbrooke street alone, buildings, three million dollars in value, are being erected. Club houses, religious buildings, and hospitals are the most prominent on the list. These three classes alone amount to over two million, five hundred thousand dollars.

——

MONTREAL BUILDING PERMITS.

D. L'Ecuyer, dwellings, Labelle street, St. Denis ward, $1,800.

A. Trudel, dwellings, Prefontaine street, Hochelaga ward, $2,750.

The J. W. Paterson, shed, St. Hubert street, St. Denis ward. $1,600.

H. Chartrand, dwellings, corner of Comte and Huntly streets, $2,500.

L. D. Morin and Fils, dwellings, Morean street, Hochelaga ward, $2,000.

Walter M. Lowney Co., factory, William street, St. Ann's ward, $62,000.

L. Clemens, dwelling, Christopher Columbus street, Duvernay ward, $2,500.

United Shoe Machinery of Canada, alterations to factory, 837 Lagauchetiere street, $20,000.

P. D. Dods & Co., warehouse, St. Patrick street, St. Gabriels ward, $5,000.

Rev. Jos. Charette, dwelling, Sherbrooke street, Lafontaine ward, $8,000.

Geo. Lanouette, dwellings and stores, corner of St. Jacques and Fulford streets, $12.000.

——

TORONTO BUILDING PERMITS.

John Kirkey, stone dwelling, Dufferin street, $1,000.

Geo. McGee, brick dwelling, Havelock street, $2,000.

Mrs. L. Oetzel, dwelling, Beatrice street, $2,200.

W. J. Hopkins, dwelling, Hampton avenue, $1,000.

A. Maas, three brick dwellings, Denison square, $7,000.

Andrew Bates, brick dwelling, Dovercourt road, $4,000.

Racey Tumb, brick dwelling, Rusholme road, $3,200.

C. W. Watson, dwelling, Gladstone avenue road, $1,800.

Eleanor Jackson, brick dwelling, Van Horne street, $2,000.

Mrs. Bell, rough-cast dwelling, Lansdowne avenue, $1,500.

Dan Stone, rough-cast dwelling 13 Dagmar avenue, $1,500.

J. J. Walsh, four brick and stone

The Varying Building Conditions

require many different types of

MAXIMUM LIGHT GLASS

In order that we may be able in every case to do effective work, we have in stock twenty-one angles of **Maximum Light Glass.** This product can be cut, glazed and mounted in lead, copper or iron intersecting bars, from architects' special designs. Our booklet will be of immense value to you.

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

dwellings, corner Maynard avenue and King street, $18,000.

C. M. Eserv, one pair brick dwellings, Gerrard street east, $6,000.

Mrs. J. McDonald, brick dwelling, Roxborough street, $3,000.

Chas. Baxter, brick veneer dwelling, 42 Emerson avenue, $1,200.

Mr. Holliwell, one pair brick dwellings, Grange avenue, $4,000.

John Buie, brick store and dwelling, 146 Montrose avenue, $2.200.

J. Singer, four stone and brick dwellings, Kendall avenue, $16,000.

Andrew Bates, one pair brick dwellings, St. Clarens avenue, $4,000.

Francis Farewell, one pair brick dwellings, Sheridan avenue, $4,000.

John Ross Robertson, brick residence for nurses, Elizabeth street, $60,000.

Waters and Elliott, three brick veneer dwellings, Lansdowne avenue, $5 000.

J. W. Lee & Co., brick and stone factory, Jefferson avenue, $9,000.

G. W. A. Faircloth, two brick stores, 64 and 66 Richmond street east, $6,500.

R. S. Henderson, brick factory, corner King street and Pacific avenue, $30,000.

W. A. Caesar, one pair brick dwellings, Wallace and St. Clarence avenues, $4,000.

Jas. White and Geo. Gaynor, two pair brick dwellings, Bloor street west, $8,000.

John A. Alexander, one pair brick and stone dwellings, Roxborough street west, $4,500.

W. Beauchamp, three brick and stone dwellings, corner Bathurst and Herrick streets, $6,000.

.LEWIS BROS.' NEW QUARTERS.

Raising the flag signalized the occupation last week of the new home of Lewis Bros., Limited, by this enterprising company, the event marking a new era in the history of the business. So systematically was the removal from the old to the new quarters conducted that business was not interrupted in the slightest, there being a place for everything and little time being found necessary to put everything in its place. An attractive circular, giving some information respecting the new building, has been mailed to the trade by the company.

TIN PLATE COMBINATION.

The chief tin plate bar makers of South Wales, finding that owing to the undercutting which has been going on for the past year or so, it was impossable to run their works with a sufficient margin of profit, met at Swansea recently to draw up articles for the formation of a combination to fix a satisfactory price-scale. In the future the prices agreed upon at this meeting will be adhered to by all parties to the agreement. Some of the largest buyers on hearing of this transaction declared that prices would either fall to a lower point than they are at present, or else "dumping" on the part of American manufacturers would take place upon the coast of Wales.

SATISFACTION

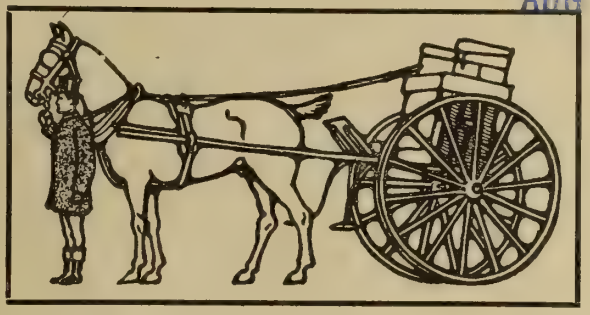
to the Consumer means profit to the Dealer.

Trade goes where it is served best. If you have what the consumer wants, you get his business.

Profit in it for you and satisfaction for him.

We believe in the same principles.

RETURNED
AUG 2 1905



In the manufacture of

HORSE SHOES

we study what the farrier wants—the shape, finish, material, etc.

We aim to give him a Shoe best adapted to the purpose. More sold than all the other brands tells its own story.

They cost him a few cents more per keg, but they're cheaper in the end and better for the owner.

It's a case of where only the best is good enough. Order by the brand,

THE MONTREAL ROLLING MILLS CO.

J.C.M.

Galvanized Sheets for Corrugating are best. Submit your enquiries by mail or cable to

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

A New Revolver!



MODEL 1904

H. & R. Double Action
Model 1904
38 Caliber
also 32 Caliber
6 Shot.

A solid frame revolver following the pleasing lines of our famous H. & R. Automatic, and which we are supplying in place of the American Double Action, as made by us for more than twenty years.

SPECIFICATIONS

32 caliber; 6 shot; 2½ inch barrel; weight 16 oz; C. F. S. & W. cartridge; also S. & W. Long and Colt New Police Cartridges.
38 Caliber; 5 shot; 2½ inch barrel; weight 15 oz.; C. F. S. & W. cartridge.
FINISH—Nickel or blue. We can also furnish with 4½ and 6 inch barrels.

Harrington and Richardson Arms Co.
Worcester, Mass., U. S. A.
Makers of H. & R. Single Guns. ***Catalog on Request***

AT HOME TO YOU

We are at home to you at the Winnipeg Exhibition and we hope you will call and see our display. As a heating contractor you can't help being interested in the Pease Line.

We are exhibiting our

"Florence" Boilers
"Pease Economy" Boilers
and our
"Pease Economy" Furnaces
FOR COAL OR WOOD.

Our policy of sales through agents will interest you. Give us a call.

Pease-Waldon Company, Limited
WINNIPEG.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE Toronto Shipbuilding Co. are expected to have three new steamers ready for the Toronto harbor fleet by May 1, 1906. One is for the Niagara Navigation Co., and the other two for the Toronto Ferry Co. It has not yet been decided whether the two latter will be side-wheelers or screw steamers, but they will have a carrying capacity of about 2,000.

The Cincinnati Typewriter Co. are looking for a Canadian location.

An effort is being made to boom Stocton, Maine, and make it a rival of St. John, N.B.

The Edison Portland Cement Co. have increased their capital stock from $11,000,000 to $12,000,000.

It is announced that the G.T.R. will officially take over the Canada Atlantic Railway on September 1.

The Marconi Co. are investigating the possibilities of operating between Fort William, Winnipeg, St. Paul, Duluth and Owen Sound.

The newly-organized Standard Wire Fence Co., Limited, of Woodstock, will be ready to commence operations some time in September.

Fowler's Canadian Co., Limited, Hamilton, a branch of the Swift Co., of Chicago, will enlarge their plant at a cost of about $70,000.

Advices from the west state that the Kootenay district is now producing copper on a large scale, cheaper than anywhere else on the continent.

The big Eddy saw mill at Revelstoke, B.C., was burned to the ground last week. The loss will be heavy but the company intend rebuilding at once.

A contract for the construction of two breakwaters at Rondeau harbor has been given to the Pacific Construction Co. The price is in the vicinity of $110,000.

S. P. Hodgson, of Swan Lake, Man., has let the contract for a 100-barrel flour mill and 30,000-bushel elevator, to the Willford Manufacturing Co., Minneapolis.

The James Warnock Co., Galt, Ont., will devote all their factory space to the manufacture of tools, and will replace their spring plant with a modern tool plant.

A recent addition to the industries of the west is the Moose Jaw Show Case Co., of which Mr. A. Radley, formerly of the Dominion Show Case Co., Toronto, is the head.

The Electrical Development Co. of Ontario have decided to extend their line westward to London, touching at Brantford, Paris, Ingersoll, Woodstock and intermediate points.

Steel rails for the Guelph-Goderich extension of the C.P.R. are being sent out from the Soo works. They are of the 85-pound class, which insures a good roadbed for the new line.

Messrs. Mayhew and Gladstone, at the head of English capitalists, have obtained a free site from the Sydney, N. S., City Council for the $12,000,000 shipbuilding enterprise which they are promoting.

Messrs. Stetson & Cutter, a leading lumber firm of St. John, N.B., have taken a lease of the Mispec pulp mill at that place and will shortly instal new machinery to increase the capacity from 7,000 to 10,000 tons.

Frederick Doty, of the Goderich Engine Works, has purchased the hull of the recently burned steamer City of Collingwood, and will rebuild it. The steamer Lincoln, burned at Sandwich two months ago, is also being rebuilt at the same place.

A company, backed mostly by American capital, and with headquarters in Cleveland, Ohio, are looking for a local factory in which to manufacture a special line of brushes. It is likely that Brantford, Ont., will secure the factory, which will employ a large number of hands.

The Montreal Suspender and Umbrella Co. have asked the town of Arnprior, Ont., for a factory building and exemption from taxation for ten years, in consideration of which the company will commence the manufacture of their goods and will employ a large number of hands.

The first annual report of the Lake Superior Corporation (the Soo industries) is a very satisfactory one, but this result has been achieved largely on account of the very favorable conditions under which the subsidiary companies have been working. A good deal has yet to be accomplished at the Soo.

Messrs. Fleming, of the Phoenix Foundry, St. John, N.B., have been awarded the contract by the Department of Public Works, Ottawa, for the construction of two steel scows for the dredge Geo. McKenzie. These scows will be one hundred feet long, twenty-two feet wide and eight feet deep, and will have a carrying capacity of two hundred cubic yards. They will be the first steel scows built in St. John.

Companies Incorporated.

The surrender of the charter of the Perth Electric Light Co., Limited, has been accepted.

The Horse Shoe Quarry Co., Limited, have been granted the right to increase their share capital from $40,000 to $100,000.

Concretes, Limited, of Toronto, have been incorporated with a share capital of $40,000, for the purpose of constructing roadways, sidewalks, buildings, etc. The directors are C. Curtis, W. H. Peppin, and J. A. Milne, all of Toronto.

The Guelph Stove Co., Limited, of Guelph, share capital $200,000, purpose to manufacture and deal in stoves, furnaces, boilers, heaters and metals of all kinds. The directors are J. Brown, M. Kelly, F. Nunan, C. Kloepfer, and F. T. Coghlan, all of Guelph.

The Ontario Transmission Co., Limit-

ed, Niagara Falls, Ont., have been incorporated with a share capital of $1,000,000, for the purpose of developing water power, etc. The directors are J. S. Lovell, W. Bain, E. W. McNeill, S. G. Crowell, W. F. Ralph, all of Toronto.

The Bond Hardware Co., Limited, of Guelph, have been incorporated with a share capital of $100,000, for the purpose of carrying on the business of hardware merchants. The directors are: J. M. Bond, W. G. Bond, T. A. Keating, J. S. Millar, and F. R. Bond, all of Guelph.

The Toronto Sand Lime Brick Co., Toronto Junction, have been incorporated with a share capital of $40,000, for the purpose of manufacturing brick and doing a general business in sand, lime, gravel, cement, etc. The directors are G. H. Large, J. Schultz, and J. S. Proctor.

The Steel Concrete Co., Limited, of Montreal, have been incorporated with a share capital of $200,000, for the purpose of carrying on a business as engineers, contractors, etc. The directors are: J. L. Harrington, E. A. Wallberg, and W. F. Boggis, of Montreal, and H. Fisher and J. Murphy, of Ottawa.

Eastern Coal Co., Limited, of Toronto, have been incorporated with a share capital of $500,000, for the purpose of carrying on the business of a mining, milling, reduction and development company. The directors are: J. S. Lovell, E. W. McNeill, R. Gowans, S. G. Crowell and W. H. Blake, all of Toronto.

Ogden Oil Co., Limited, of Windsor, have been incorporated with a share capital of $50,000, for the purpose of mining and boring for oil, gas and other mineral products, etc. The directors are: W. W. Taberner, of Chicago, Ill.; F. Rehm, of Detroit, Mich.; J. W. Hanna, J. Wigle, and J. R. Dixon, of Windsor.

The Spider Lake Mining Co., Limited, of Windsor, have been incorporated with a share capital of $1,000,000, for the purpose of carrying on the business of a mining, milling, reduction and development company. The directors are: H. D. Keller, A. H. Rochey, J. E. Burgess, C. L. Brumme, all of Detroit, and A. R. Bartlet, of Windsor.

Wallingford Bros., Limited, of Ottawa, have been incorporated with a share capital of $45,000, for the purpose of carrying on the business of a mining, milling, reduction and developing company. The directors are: F. Cornu, of L'Ange Gardien, Quebec; E. Wallingford, F. S. Shirley, the Hon. Napoleon Antoine Belcourt, and M. I. Hickson, all of Ottawa.

The Ontario Transmission Co., Limited, of Niagara Falls, Ont., have been incorporated with a share capital of $1,000,000, for the purpose of developing water and other powers for the production of electric, steam, pneumatic, hydraulic or other power or force. The directors are: J. S. Lovell, W. Bain, E. W. McNeill, S. G. Crowell, W. F. Ralph, all of Toronto.

The Beaver Mica & Mining Co., Limited, of Sundridge, have been incorporated with a share capital of $50,000, for the purpose of carrying on the operations of a mining, milling and development company. The directors are Joseph Pinkerton and J. J. Jackson, of Township of Strong District of Parry Sound; J. Herrgott, of Sundridge, and J. H. McCurr of North Bay.



No. 14. OSHAWA, ONT. JULY 29, 1905

A STORY

Pedlar's **"Perfect" Metal Lath** sustains the same relationship to the plastered wall or ceiling as does the keystone to the arch; that is, it holds the whole thing together. A hundred years ago, the "split-board" lath was the article used in the construction of the most pretentious buildings of the time. Later on came the sawed wood lath, which, while a vast improvement upon the "split-board," has always been objectionable because of the staining and cracking of plaster which are inseparable from the use of wood lath.

Within comparatively few years, the fire hazard incident to the closely-built sections of our large cities, necessitated improved methods in construction and set thinking men to work out the problem of fire-proof buildings, which resulted in the production of woven wire fabric for lathing purposes. This was followed, later on, by the expanded metal process, that is, the slitting and expanding of large sheets of steel, forming a diamond-shaped mesh. Other and less desirable sheet steel products of various forms have more recently been put on the market, many of which have proved more or less a failure. Then, the cost of manufacturing these products necessitated their being marketed at prices which rendered their general use almost prohibitive.

OF "PERFECT"

It remained for the Pedlar People to solve the problem, less than a year ago, by placing their **"Perfect" Metal Lath** on the market. The improved and rapid-working machinery in use at their factory in Oshawa has revolutionized the expanded metal lath business of the country and this valuable product is now available to the builder of the humble cottage home or the modern skyscraper. The mesh, like the price of Pedlar's "Perfect," is the smallest on the market, and where modern, quick-drying patent plasters are being used, "Perfect" lath is necessary to the securing of satisfactory results. Wide-awake hardwaremen from the Atlantic to the Pacific, are carrying the "Perfect" in stock, and their sales are increasing.

SUCCESS

How about it, Mr. Hardwareman? Do you belong to the wide-awakes? If not, you should get initiated. A postcard will bring you the secret. A sample order will do the rest. We make many other desirable lines which the hardwareman should, and very many do, carry—**Steel Ceiling and Wall Covering, Metal Shingles, Tile, Siding, Cornices, Store Fronts, Ornamental Zinc and Copper Work, Eavetrough, Conductor Pipe and all accessories.**

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

FAIRBANKS' MONTREAL HOME.

Canadian Fairbanks Co., Limited, of which Mr. Henry J. Fuller is president, has finished moving from its old premises at 747-749 Craig street, to its new building at 444 St. James street. This new warehouse has been entirely renovated inside and as it contains double the floor space of the old building, which was 18,500 feet, it gives the company a better chance to display its goods and carry a larger stock than heretofore.

The basement is devoted to valves and fittings of all kinds, neatly arranged in bins. The front part of the ground floor



New Home of the Canadian Fairbanks Company, Ltd., at Montreal.

is used as a show room, where the company has on exhibition samples of the different lines of its manufacture and agencies, including a new Fairbanks-Morse line of gas and gasoline engines, steam pumps and railway equipment, for which it has recently taken the Canadian sales agency.

The offices of the manager, Mr. Rudel, and the sales offices, are also located on the ground floor, other departments located on this floor being the railway supply department, transmission department, steam specialty department, scale department and the company's private telephone exchange. The company has installed a trolley with travelling chain block which enables them to handle the heaviest pieces of machinery with comparative ease.

The first floor is devoted to the offices of the president, secretary and treasurer, also to the advertising and publicity department and the engine and steam pump department, while in the rear of these offices the company's large stock of trucks is kept.

On the third floor is the stock of power transmission appliances such as shafting, hangers, belting, pulleys, clutches, etc., etc. This floor is also devoted to the steam specialty department, such as packings, engineer's supplies, boiler fittings, etc. The top floor is used entirely for scales as all these have to be inspected by the government inspector before being shipped.

The company still retain their warehouses on Oak street, and repair shop at Murray street, and the increased staff and space which they now have is certainly an evidence of the enormous growth of their business in Canada

A hearty invitation is extended by the company to all their friends and customers to call and inspect their new premises at any time, when they will be glad to show the immense stock they are carrying and their facilities for billing orders promptly.

CANADIAN TARIFF CHANGES.

The following memorandum of Canadian tariff changes has been issued by the Department of Customs, to take effect on and after July 7 last :

1. That it is expedient to amend the customs tariff, 1897, as amended by subsequent Acts, to the following effect :

Schedule "A" is amended as follows :

Item 158—strike out the words "dry white and."

The following items to be inserted :

158. (a) Dry white lead, thirty per cent. ad valorem.

158. (b) White lead ground in oil, thirty-five per cent. ad valorem.

Item 187 is repealed, and the following substituted :

187. Cement, Portland and hydraulic or water lime, in barrels or casks, the weight of the package to be included in the weight for duty, twelve and one-half cents per one hundred pounds; in bags, twelve and one-half cents per one hundred pounds, together with twenty-five per cent ad valorem on the bag.

Schedule "B" is amended by repealing item 455, and substituting the following :

455. Settlers' effects, viz.: Wearing apparel, books, usual and reasonable household furniture and other household effects; instruments and tools of trade, occupation or employment, guns, musical instruments, domestic sewing machines, typewriters, bicycles, carts, wagons and other highway vehicles, agricultural implements and live stock for the farm, not to include live stock or articles for sale, or for use as a contractor's outfit, nor vehicles nor implements moved by mechanical power, nor machinery for use in any manufacturing establishment; all the foregoing if actually owned abroad by the settler for at least six months before his removal to Canada and subject to regulations by the Minister of Customs : Provided that any dutiable articles entered as settlers' effects may not be so entered unless brought by the settler on his first arrival, and shall not be sold or otherwise disposed of without payment of duty until after twelve months' actual use in Canada.

2. The exemption from duty of machinery and structural iron and steel for the construction and equipment of factories for the manufacture of sugar from beet root, authorized by section 11 of chapter 11 of the Acts of 1904, is extended from April 1, 1905, to June 30, 1906.

3. The exemption from duty of machinery and appliances of a kind not made in Canada for use exclusively in alluvial gold mining, authorized by section 12 of the said chapter, is extended from July 1, 1905, to June 30, 1906.

4. Section 18 of the said chapter is amended by inserting after the word "production" in the fourth line, the words "or from any British country."

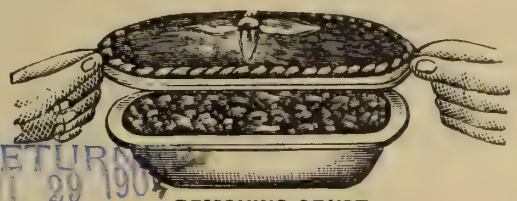
Carelessness is another word for extravagance.

A hardwareman with a repair shop is in a better position to satisfy customers than a mail-order house.

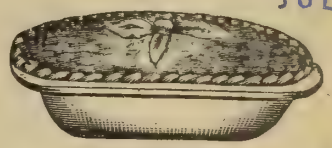
THE M. B. PATENT PIE DISH



COMPLETE WITH RIM



REMOVING CRUST



A PERFECT PIE

RETURNED JUL 29 1905

The M. B. Patent Pie Dish solves a real domestic problem. No more burnt crust or partially cooked fruit or meat. Every cook, amateur or professional, realizes the difficulty of ascertaining under hitherto existing conditions whether the contents of a pie are fully or only partially cooked. The M.B. Patent Pie Dish **Solves the Problem**

ITS ADVANTAGES ARE AS UNDER:

1st. **A perfectly cooked crust.**

2nd. **Perfectly cooked Fruit or Meat.**

3rd. **The Patent Rim acts as a paste cutter.**

4th. **The Patent Rim acts as a Pie Vent and dispenses with the clumsy contrivance hitherto used for that purpose.**

5th **The Patent Rim being made with rolled edge and Enamelled White adds to the appearance of the Pie Dish and makes unnecessary the serviette hitherto used for table decoration. Thus an Enamelled Pie Dish is much superior to a China or Stoneware Dish, since Enamelled Steel heats much quicker and thus causes the paste to rise better.**

MADE IN FOUR SIZES: 10¼ in., 11 in., 11¾ in., 12½ in. *WRITE FOR PRICES.*

SOLE AGENTS: **F. W. LAMPLOUGH & CO., - MONTREAL**



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our Illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES



Buy it Now!

Sterne's Asbestos Stove and Furnace Cement

Never depreciates. Just what it looks like—good. The value is there every time. Prices below par. We will send from 2½ lbs. to 1 bbl. on approval.

Get prices direct from

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

FIRE BRICKS

Over 300 styles, suitable in every sense. Accurate Fitting our specialty. The prices will stand looking into as well as the grade of the clay.

Furnace and Stove Cement and Stove Castings

You are looking for figures on these and we can give them. Write and get catalogue.

JONES BROS., - Bracondale P.O., Ont.

"FAMOUS" BASE BURNER



No. 113 SERIES

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PLUMBERS' CONVENTION.

WINNIPEG will be the Mecca for plumbers and steamfitters from all parts of Canada on August 8, 9, and 10, and if previous conventions are any criterion to draw a forecast by, a goodly number of supply men will be along to give the delegates the benefit of their judgment in all matters pertaining to the trade and in how to get the greatest possible enjoyment out of the least possible time.

Delegates are expected from the salt water regions on both sides of the continent, while the fresh water lakes district will send a fair representation to fraternize with the progressive westerners who are preparing a good time for all comers in the metropolis of the Canadian West. Winnipeg hospitality, as well as Winnipeg water, will be kept on tap in unlimited quantity.

There is much important work to be done during the session and the delegation present should be large and representative. In those districts where organization is strong trade conditions are very satisfactory. A live campaign should be inaugurated to enroll every plumber in Canada into the association, so that the good results of a compact organization will be felt in all parts of the Dominion.

Mr. J. A. Gordon, Montreal, secretary of the National Association, reports that preparations for the gathering are completed, although the programme drafted by the Winnipeg committee has not been sent east as yet. Mr. Gordon expects a good representation from the Maritime Provinces, including Mr. Watson, of Moncton, and Mr. Farquhar, of Halifax. Among these who attend from Montreal will be Messrs. W. R. J. Hughes, J. Laurier, F. Moll, G. C. Denman, Walter Ryan, John Watson, J. A. Gordon and J. Thibeault. The party will travel on the Grand Trunk, via Chicago and St. Paul. Representatives from the Lower Provinces are expected in Montreal about the third or fourth of the month. All of the representatives, including the Montrealers, will leave on the fourth of August, picking up the Ontario men at Toronto and proceeding on together. At Chicago, the fraternal delegates representing the American National Association, are expected to join the party.

Some of the party, including Mr. Gordon, are intending to go on to the coast after the convention is concluded.

ON SPECIAL BRANDS.

FOR some time past the trade journals in the United States have been devoting considerable space to a discussion of the rights of jobbers to adopt special brands for the goods they handle. The question has been taken up at conventions representing the three interests involved—the manufacturers, jobbers and retailers,—and the views of each have been very strongly presented.

From the manufacturers' standpoint, the jobbers' special brand is decidedly a disadvantage, for it completely buries the identity of the firm really responsible for the goods. It is claimed that, as the manufacturer is, in the final count, alone responsible for the quality of his products, it is altogether unfair to him for the jobber, who is simply a distributor, to put a brand on the goods and claim them as his own. As the business success of a firm largely depends upon the reputation of their products, and the manufacturer is altogether unknown to the consumer unless his name appear upon the customer's purchase, it is certainly to the interest of the manufacturer that the jobber's special brand be eliminated.

But the jobber looks at the question from a different standpoint. He claims that, in simply distributing the manufacturers' products, he is investing his capital in building up a reputation for the producing firm. If, however, he can get hold of a good article and distinguish it by his own private brand, he is bringing himself to the notice of the public, and increasing his chance of success. If the consumers ask for a certain line of goods the sales of such goods will grow rapidly, and, if the jobber's name is on them the growth will be to his interest rather than to the manufacturer's.

The retailer considers the matter in a more or less impersonal light. He knows that the dispute over special brands is largely a selfish one, involving only the manufacturer and jobber. The manufacturer wishes his individuality to descend through the jobber and retailer to the consumer, and, in the same way, the jobber wishes the maker and retailer to combine in forwarding the interests of his brand. The objection to special brands, from a retailer's standpoint, is that, owing to the jobber's methods of buying, it will be difficult and, in the case of small firms, almost impossible to maintain a uniform quality in their goods. It is claimed that few, if any, manufacturers will put first quality material into goods other than those which bear the brand of the maker. Furthermore, the branding of goods with the jobber's private mark increases the cost of production and will, consequently, either increase the price to the retailer or lower the quality.

The question at present is undecided. The manufacturers are dead against special brands for the jobbers, and will do their utmost, by combinations and agreements of producing firms, to do away with what they consider an evil. The jobbers will stick to their brands through thick and thin, and threaten, if they are prevented from securing them by the manufacturers, to band together and themselves produce articles for their own distribution bearing their respective brands.

Complications are bound to result if this course is followed, and the situation is being watched with keen interest by the retailers.

INTERNATIONAL STEEL POOL.

STEEL rails are not now a subject for keen competition, as the leading producers in America and Europe have been working together quite closely. It is understood that an arrangement has been arrived at giving to American manufacturers the steel rail trade of the American continent, and that the European manufacturers are to be free from American competition in all other parts of the world except South Africa. The English and French works have the prior right of furnishing rails to their colonies, while the German works are to have prior rights in Norway, Sweden and Denmark. Other international trade is divided among English, German, Belgian and French works.

This arrangement probably means the maintenance of the present prices in countries where rails are produced and higher prices in other countries, while the success of this pool will probably result in a similar arrangement governing other branches of the steel trade.

THE HOLIDAY SEASON.

DURING July and August nature extends an invitation to business men to break away from the strenuous life of modern commercialism and fraternize with the birds and plant life of farm and forest. Nature is at its best at this season, and the influence of the fresh air and Summer warmth, free from the cares of business life, is what is most needed by the man who has been giving his best energies for months or years in developing the business he is engaged in.

It is a good investment to exchange a few dollars for health and happiness, and every man owes it to himself, as well as to those dependent upon him, to take a brief respite from business activity during the warm Summer season. And if this reasoning is correct it applies to the clerk as well as the merchant. A holiday will do the clerk as much good as the employer, and recognition of faithful services by the granting of a week or fortnight's holidays at the employer's expense will do much in encouraging the employe to do his utmost to further the interests of the appreciative merchant.

A fresh, vigorous brain will give better service than a fagged one. The saving of a few dollars now by economizing on a vacation will not pay if it means a break down next season and a heavy doctor's bill to pay then. The Summer is the time of gladness, and it is a paying investment to partake liberally of the opportunities provided for communing with nature. Take a holiday this month and encourage those associated with you in business to do likewise.

COPYING CANADA.

ONCE again the Mother Country has followed the lead of her "Premier Colony" in matters of trade; this time in the formation of an association, representative of British manufacturers and trades interested in export business, to be known as the Manufacturers' Association of Great Britain. The object of the new institution will be similar to that of the Canadian Manufacturers' Association, namely, co-ordinating the various industrial forces and co-operating among the leading manufacturers and merchants, chambers of commerce, etc., to promote and expand British trade in foreign and colonial markets.

The working machinery provides for commercial agents in all parts of the world, similar to the Canadian commercial agency system. These agents will report on openings for trade and local changes and conditions within their respective spheres, and disseminate such information among firms whom it will most benefit. A trade index of British manufacturers will also be compiled in the chief commercial languages of the world, and distributed free to chambers of commerce, mercantile houses, and other business interests at home and abroad. Information regarding the commercial standing of business firms or mercantile houses, railway rates and shipping freights all over the world, will be collected and supplied, and a staff organized capable of corresponding on technical and commercial subjects in any language, and of translating commercial catalogues and similar documents. One of the main objects of the association will be the dissemination of knowledge of British goods in all possible over-sea markets.

MONTREAL JOBBERS PROTEST.

AT a meeting of the Montreal Metal and Hardware Association, held in the Board of Trade on July 20, it was decided to interview the Provincial Government and try and have the law respecting the Quebec tax rescinded.

When the Quebec Cabinet met in Montreal on July 25, they were interviewed by Messrs. G. A. Kohl, of B. & S. H. Thompson & Co., Montreal; J. B. Learmont, of Caverhill, Learmont & Co., and T. H. Newman, of the same company, as a delegation representing the above association.

They protested against the new license tax of $300 on commercial travelers representing foreign firms, which had no quarters in the province. The tax, they argued, would seriously interfere with the wholesale hardware trade of the province, which was largely centred at Montreal, and drive the trade to other centres, such as Toronto. Several foreign travelers had come here, and on finding the new tax in force, had refused to pay it and returned, or gone to Toronto, and declared that any business they did with Montreal merchants must be conducted by mail, so as to avoid the tax.

The effect of the new tax would be to drive trade to other provinces, and in proof of this assertion the delegates produced letters from several English manufacturing firms, stating that no more travelers would be sent to Quebec Province, and if the Montreal merchants wished to do business with them it must be through their agents at Toronto.

Although the Government promised due consideration to the proposals of the delegation, it is felt that the Government will not repeal the Act or change it in any way. Hon. Mr. McCorkill is very firm on the question, and regardless of the harm it will do to the province it will be enforced.

IRON MINING IN NOVA SCOTIA.

COMMENTING on the article reproduced in Hardware and Metal recently from the Halifax Chronicle discussing the conditions of iron mining in Nova Scotia, the editor of the Nova Scotia Mining Record writes:

"In my opinion the result of the policy has been more beneficial than harmful, even though it may have resulted in a lessened production of Nova Scotia ore, which is a debateable point. Under the old poficy which favored Canadian ores and also their products, iron ore mining in Nova Scotia did not increase, but remained in an unsatisfactory condition. For instance, in 1884 the quantity mined was 54,000 tons, in 1896 the quantity raised was only 2,000 greater. The preference given to Canadian ores and their products did not seem to have any appreciable effects as a stimulus to ore mining. Not since iron mining began in Nova Scotia, no matter how favorable the conditions, has the output reached 85,000 tons. Had the old policy been continued is there any likelihood that the output to-day would have been larger than twenty years ago? Not likely. For the reason that outside of Nictaux it was not known where to point to a spot containing a sufficient quantity of ore to warrant the installation of mining machinery. The Government policy complained of may not have benefitted iron ore mining, but it most assuredly promoted iron and steel making, and of the two it is unnecessary to say that the manufacture of the products of iron ore contribute far more, in the number of men employed, in the amount of money paid out, in the capital invested, to the prosperity of the province at large, than the mere mining of the ore. When the Chronicle says that the Government could not have foreseen the effect of its altered policy on the use of native ores, it fails to grasp the fact that not only the Federal but the Local Governments were quite aware that the Dominion Steel Co. was started not with the intention of using the ores of Nova Scotia, but those from its property at Wabana. Had the Government not altered its policy we would not have to-day the large steel works at Sydney, nor a large plant at Sydney Mines. The altered policy must get the credit of being the means of starting the steel industry. When saying all this I still deplore the fact that iron ore mining is at a standstill. While it is well to have steel works using Newfoundland ore, it would be much better if we had works using native ores. And it may be that we may yet mine ore extensively if both Governments alter their policy, if the Local Government will do something to assist in finding the ores, and if when found the Federal Government will make it worth while to develop them."

THE WINNIPEG EXHIBITION.

WHILE it could scarcely be expected that the Winnipeg Exhibition would this year equal the Dominion Exhibition of a year ago, Western Canada's greatest Industrial has scored another success. Winnipeg's Fair occupies the same relative position in the west as the Toronto Exhibition in Ontario, and Fair week is the annual outing of the western farmers, thousands of whom visit the city every year at this time. As it is impracticable to hold the exhibition in the Fall, when the western farmers are busy harvesting and threshing the wheat crop, the Winnipeg Exhibition can not do full justice to the agricultural resources of the country, but, nevertheless, the exhibits of grains and live stock were very creditable, and the prominence of the exhibits of threshing outfits showed the importance of the agricultural interests which are the backbone of the west.

It is to be regretted that the manufacturing and industrial exhibits were not so numerous as in previous years. A number of firms apparently came to an agreement not to exhibit this year, and owing to this shortsighted policy the exhibition was not in some departments so representative as it should have been. This policy is undoubtedly shortsighted, for the benefits derived from attractive exhibits at a big fair, which attracts thousands of visitors, can scarcely be overestimated. The exhibition affords a simple way of obtaining profitable publicity, and all considerations of profit aside, it is an institution deserving the hearty support of all business men.

The exhibition opened on Thursday, July 20, but it was not until Monday that the majority of the industrial exhibits were in place, and even then many of them lacked those finishing touches which were added later.

Dominion Cartridge Co.

The Dominion Cartridge Co. had a tastefully arranged exhibit of cartridges and shells, which did not fail to attract the attention of passers by. The display was arranged in attractive glass cases, and was often pointed out as one of the handsomest exhibits.

Record Foundry & Machine Co.

Although this firm had no separate exhibit, the display of their stoves and ranges constituted the principal feature of the big exhibit of the House Furnishing Co., a new firm about to commence business in a big seven storey building on Portage avenue. R. R. Kinread, the local manager of the Record Foundry & Machine Co., has sold this firm a big order of "Record" stoves and ranges, and a part of the sale was on exhibition at the fair.

Hudson Electrical Supply Co.

This Winnipeg electrical supply firm had a small but tastefully arranged exhibit of electric fixtures and general supplies. It was in charge of Chas. Shipman, the assistant manager of the company.

Pease-Waldon Co., Limited.

The Pease Waldon Co., Limited, secured generous space in the manufacturers' section and made a big display of "Pease Economy" furnaces and "Florence" boilers. The man in charge distributed handsomely printed literature among the crowd illustrating the good points of the Pease line of heating goods. The exhibit was made particularly attractive by the use of palms and the "Made in Canada" sign was prominent.

Jas. Smart Mfg. Co., Limited.

The James Smart Mfg. Co. had a big exhibit of their "Kelsey" warm air generators and furnaces, and literature descriptive of these goods was distributed profusely. But the exhibit was not confined to heating goods—to jump to the opposite extreme, a feature of the display was a fine line of refrigerators. Tools, such as axes and hatchets and lawn mowers, of this firm's manufacture, were prominently displayed.

Clare & Brockest.

Clare & Brockest, the local representatives of Clare Bros. & Co., Preston, Ont., displayed the Clare line of stoves and ranges in attractive style. A big "Born" steel range, which was part of the exhibit, was marked "Sold to R. Adams, Wolseley, Assa." It was a mammoth range which attracted considerable attention.

SUCCESSFUL CONVENTION.

Winnipeg, Man., July 27, 1905.

Although the attendance at the annual meeting of the Western Retail Hardware and Stove Dealers' Association was not so large as at the Winter meeting the convention was nevertheless a pronounced success. Owing to the illness of President Lindsay the chair was taken on Wednesday by A. J. Falconer, and on Thursday by Robert Wyatt. Secretary McRobie's report showed a membership of about 175, although his canvas has only commenced. After a long discussion of the credit evil a resolution was passed recommending the closing of all accounts on November 1st, and the strict maintenance of a cash system until May 1st.

Wm. Gordon, of Winnipeg, gave notice of motion for next meeting that the Manitoba and Western Associations be combined.

After some discussion it was decided to make the Winnipeg retail price list the basis for the association dealers in different localities to add their freight charges after consulting with Secretary McRobie.

The association will meet again in February.

F. R. MUNRO.

Christie Bros. & Co.

Christie Bros. & Co. had a large and very striking exhibit of the stoves, ranges, heaters and furnaces made by the Canadian Heating and Ventilating Co., of Owen Sound, Ont. A big floor space was entirely occupied by this line of heating goods, and the attendant in charge was kept busy distributing literature and explaining the features of the different stoves and ranges. The "Empire King" furnace was a strong feature of the exhibit.

Coltart & Cameron.

Coltart & Cameron, of Winnipeg, had one of the largest exhibits at the fair, and their enterprise was rewarded by the attention which it attracted. A full line of Findlay Bros.' and Copp Bros.' stoves and ranges was on exhibition, and the goods were in charge of those well able to explain their good points. Nickel plated hollow ware, made by the Rome Mfg. Co., and granite ware, made by the Columbian Enameling and Stamping Co., were prominently displayed. The "Paroid" roofing shown by this firm attracted attention among builders, contractors, and hardwaremen. H. E. Kohl, of the Malleable Steel Range Co., South Bend, Ind., was in charge of the exhibit of the malleable steel ranges sold by this firm.

Owen Sound Wire Fence Co.

The Owen Sound Wire Fence Co. made a big display of their Dillon Hinge Stay Fence, and distributed literature referring those interested to their local agents, Caverhill, Learmont & Co.

Winnipeg Paint & Glass Co., Limited.

The Winnipeg Paint & Glass Co., Limited, went to considerable trouble preparing a large and handsome exhibit of the various line which they carry. Ramsay's paints, and Malthoid roofing, manufactured by the Paraffine Paint Co., San Francisco, Cal., were prominent features of the exhibit. Building supplies, sashes and doors were also on exhibition.

Anchor Fence Co.

A small but handsomely arranged exhibit was that of the Anchor Fence Co., showing their various ornamental wire and iron fences and gates.

Merrick, Anderson & Co.

Merrick, Anderson & Co. had a large exhibit devoted exclusively to their "Torrid Zone" steel furnaces, made in Marshalltown, Iowa, and the "Monarch" malleable iron ranges made in Beaver Dam, Wisconsin, by the Malleable Iron Range Co. The exhibit was in charge of P. J. Schwie, who was quite at home explaining the merits of these heaters. Large space was taken in the Manufacturers' Building, and a very attractive display was made.

Munro Wire Works.

The Munro Wire Works made a big exhibit of their various lines, which are now manufactured in their Winnipeg factory. The exhibit was principally confined to the bed springs made by this firm, and the following sign was prominently shown—"The spring that springs and does not sag." Other lines of wire goods were also shown.

Moffatt Stove Co.

This firm made a big display of their stoves, ranges and heaters, on all of which the nickel platings were very prominent, making a particularly attractive exhibit. The Moffatt Stove Co. own the patent in Canada for a new nickeling process, and the superior results of the process were evident in the exhibit. They are paying special attention to the Northwest trade now, and very prominent in their exhibit were a line of "Alberta" heaters specially adapted for the soft coal of Western Canada. Many visitors stopped to admire the handsome "Canada" ranges which, with their bright nickel platings, made a pleasing picture.

Shurly & Dietrich.

In many respects the most attractive exhibit in the Manufacturers' Building was that of Shurly & Dietrich, showing their big line of saws. These were at one end of the building and they were tastefully arranged against a dark background. Signs were neatly painted informing the visitors that "Canada leads

the world in the manufacture of high-class saws."

Stuart Machinery Co.

The Stuart Machinery Co. had a very prominent display of general lines of machinery, machine tools, and power transmission appliances. The Dodge split pulleys occupied a prominent place in the exhibit.

Canadian Iron Wool Co.

The Canadian Iron Wool Co. made an attractive display of pipe and boiler coverings, and heat and cold insulators. A big card bore the device—"The only pipe covering made in Winnipeg."

F. J. C. Fox.

F. J. C. Cox had a display of Alex. McArthur & Co.'s roofing, and also featured prominently the "Induroid" roofing.

Spramotor Co.

The Spramotor Co., of London, Ont., endeavored by means of an exhibit of their goods to persuade the farmers that their use would prevent potato rot. The exhibit attracted considerable attention on Farmers' Day.

Canadian Steel & Wire Co., Limited.

The Canadian Steel & Wire Co., Limited, of Hamilton and Winnipeg, made good use of their opportunity to show the farmers the advantages of their field and hog fences and their farm gates. No pains were spared to make the exhibit attractive and educative.

Winnipeg Ceiling & Roofing Co.

The Winnipeg Ceiling & Roofing Co. made a big display of their ceilings and roofings of their own manufacture. Many visitors were surprised to learn that such high grade ceilings and roofings are "made in Winnipeg."

Gurney Foundry Co.

As usual, the Gurney Foundry Co. had a large and well arranged exhibit of their "Oxford" stoves and ranges. and prominence was also given to their hot air furnaces and radiators. Literature was distributed giving the arguments in favor of the Gurney line of heating goods.

Manitoba Gypsum Co.

The Manitoba Gypsum Co. had an unique exhibit consisting of a miniature house made of their hard wall plaster. It did not fail to excite attention.

A. E. Delins Co.

This firm had a good display of general builders' supplies, asbestos roofing and Monolith sanitary flooring, made by the American Monolith Co., of Milwaukee Wis.

Imperial Oil Co.

A handsome exhibit of lubricating oils was made by the Imperial Oil Co.

BOILER MANUFACTURERS MEET.

ABOUT one hundred and fifty representative boiler manufacturers of Canada and the United States have been in attendance at the 17th annual convention of the American Boiler Manufacturers' Association in Toronto during the past week, the ladies accompanying the delegates being royally entertained by a committee of Toronto ladies, while the delegates transacted the business of the convention. Millions of dollars' worth of plants are represented by those present and the technical subjects discussed have been of the utmost importance to the trade.

One of the association's objects is to secure higher standards of material and workmanship, and thus insure greater safety to the public and to secure the passage of laws making the use of inferior materials a criminal offence.

The associated trades supplying materials to the boiler-making plants also send representatives to the convention and supply a large fund to defray the pleasure features of the gathering. John J. Main, of the Canadian Heine Safety Boiler Co., Toronto, acted as chairman of the local committee having charge of the arrangements, other members being Joseph Wright, W. P. Bull, Wm. J. Guy, Wm. Inglis and T. H. Hamilton.

One really important result of the convention will be the getting together of the American steel manufacturers and the boiler manufacturers, who for some years have been at variance over the quality of steel plates. The A.B.M.A. uniform boiler specifications call for the proportion of sulphur in steel plates exposed to the direct heat of fire or the gases of the combustion not over .025 per cent., but the manufacturers objected to being bound to furnish this grade and thought the boilermen should be satisfied with .035. The boilermakers were willing to recede to .030, but the steel manufacturers have still held out to make it .035. The outcome will likely be a conference between the bodies interested. A committee was appointed to bring this about and have a closer agreement as to the chemical elements of steel and the quality to be furnished by the plate makers. But for the combination, individual plate makers would concede to produce the .025 quality. The quality of steel differs under the conditions of fuel and the places where it is manufactured, and the boilermen do not want the lowest quality to grade the steel. If a plate gives way the boiler manufacturers are held responsible, so they want to maintain the quality of the steel and think if they insist on it they will get it. Although it was argued that the steel men would not sacrifice quality to quantity, it was thought that the cheaper trade was catered to.

Gen. E. D. Meier presented the report of the committee on uniform boiler inspections, reviewing several years' hard work at Washington, endeavoring to get a commission appointed to straighten out the tangle of inspection laws. The Slocum disaster has been a weapon in the committee's hands. The federal laws apply to marine boilers, but the same legislation is reflected in the acts of states and municipalities with regard to land boilers.

John J. Main, of Toronto, told the convention that Canadian manufacturers were affected by the United States laws, and that conditions in Canada itself with regard to boiler inspection might be improved.

Officers were elected as follows: R. Munroe, jr., Pittsburg, Pa., president; J. D. Farasey, Cleveland, O., secretary; Joseph Wangler, St. Louis, Mo., treasurer; M. F. Cole, Newman, Ga., first vice-president; John J. Main, Toronto, second vice-president; John Rourke, of Savannah, third; J. Don Smith, of Charleston, fourth, and G. H. Kittoe, of Aurora, Ill., fifth. The association meets next year in Pittsburg.

The convention closed on Thursday, a banquet being held at the King Edward Hotel in the evening, at which Messrs. W. P. Bull and J. J. Main, of the Canadian delegation, made interesting addresses.

PERSONAL MENTION.

A new hardware store is being opened at Frank, Alta., by Cribbs & Randell.

S. J. Frame, of Jenkins & Hardy, Toronto, is holidaying at Atlantic City.

S. P. Gourlay, plumber, St. Catharines, called on Toronto jobbers this week.

Mr. A. H. Campbell, of A. C. Leslie & Co., of Montreal, spent a few days in Ottawa this week.

Mr. W. Kirkland, of the Kennedy Hardware Co., Toronto, is spending his holidays in New York.

Mr. T. H. Newman, of Caverhill, Learmont & Co., was in Ottawa one day this week on business.

Mr. J. H. Meikle, member of the staff of Caverhill, Learmont & Co., is visiting friends at Rose Point, Ont.

Mr. S. R. Brewer, of the Thos. Robertson & Co., of Montreal, is spending his vacation at Point Au Chene.

Mr. G. A. Kohl, of B. & S. H. Thompson & Co., Montreal, spent a day in the old capital this week on business.

Mr. W. B. Dalton, hardware merchant, of Kingston, Ont., called on the paint and oil trade of Montreal this week.

Mr. Allan Munro, of the Canada Paint Co., of Montreal, is intending to spend his vacation by taking a trip to Glasgow, Scotland.

Mr. Franklin S. Saunders, of the Franklin Saunders Co., of London, England, was a visitor at their Montreal office last week.

Mr. W. G. Jones, treasurer of the Pease Foundry Co., Toronto, who has been in Winnipeg for the last fortnight, returned east on Tuesday night.

Mr. W. A. Woods, of the staff of Caverhill, Learmont & Co., of Montreal, is spending his vacation up in the mountains surrounding St. Agathe, Que.

Mr. W. J. Thompson, the Toronto representative of Caverhill, Learmont & Co., of Montreal, was a visitor to the last named city for a few days this week.

Mr. John McKay, Chatsworth, has purchased the hardware stock of the late George W. Little from Mr. M. McGill, who purchased it from Mr. George McFarlane.

Mr. Geo. R. Munro, of the Canada Paint Co., was in Montreal for a few days this week. Mr. Munro was preparing his samples for another trip on the road.

Mr. E. H. Smith, of the financial department of Lewis Bros., Limited, Montreal, is spending his vacation on a paddling trip up the Rideau Canal and the Ottawa River, returning by the St. Lawrence.

Mr. J. B. Reade, of H. S. Howland, Sons & Co., is spending his vacation at Cleveland, Ohio, while Mr. C. B. Bartlam, of the staff of the same company, is gathering fresh vigor at the Muskoka Lakes.

Mr. H. V. Lawlor, traveling representative in the west for Henderson & Potts Co., Limited, returned to Winnipeg last week from an extended trip on the C.P.R. main line west and as far north as Edmonton. The trip was highly successful as the orders obtained show. This week he has been entertaining the firm's customers at the Exhibition in his own popular style.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 62.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 28, 1905.

MAJORITY of local wholesale hardware houses have withdrawn their travellers from the road and as these people are not cultivating the outside trade, conditions with them are quiet. One or two houses, however, who have not as yet taken their travellers off of the road, report trade as being good, in fact, much better than at this time last year. One wholesale jobber went so far as to say that trade of last week was as good and as brisk as at the busiest season of last year. This speaks well for the trade and no doubt Fall trade will be very active when it once gets under full headway. General builders' hardware has a fair demand. Hand saws, which were unsteady last week, have become much firmer. This change has inspired more confidence in the trade and better and larger orders are the result.

Canadian cement has advanced a little on previous figures. Prices have become firm since the recent change and another advance would not surprise the local dealers. Blacksmith's supplies are beginning to sell better and orders have been received in large numbers.

As this is what is generally termed "the between season," orders are not as large as they might be and it is easily seen that retail merchants are not purchasing anything more than is absolutely necessary, until they find if any changes are likely to occur.

Axes—Orders, for Fall shipment, are being received more freely. As a good season is now approaching the demand is expected to increase. Prices although firm continue unchanged. We quote: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Like axes the trade in handles is improving and better things are expected shortly. Our quotations are as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—A great competition has been in progress for some time and this has kept trade wonderfully active. Good prices are being realized on all sales. We quote: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Jobbers report a quiet trade. No attempt is being made to cultivate or strengthen the trade. Our quotations are as follows: Cold blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—Orders have nearly all gone forward and trade will be quiet until the beginning of next season. Prices are steady and continue unchanged. Our quotations are as follows: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—The forwarding of all orders has concluded on this market also. Trade has become much quieter. This is only natural as the season has drawn to a close. Our quotations are as follows: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—A steady trade and a fair demand are the principal features on this market. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Well assorted orders calling for small quantities of each size are arriving very freely. Trade is expected to remain like this during the rest of the season. We quote: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts— Local dealers in these goods report a good trade. A brisk demand is in progress and some large orders have been booked. Trade has a decided tendency to be steady with firm prices. Our quotations are: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5. Activity rules.

Wire Nails—Prices have become steady and the demand has become more active. The outlook is good, especially for trade in the western part of the Dominion. We quote as follows: $2.10 to $2.20 a keg f.o.b. Montreal.

Cut Nails—No change has taken place. Prices of last week hold firm and steady. Our quotations are as follows: $2.20 a keg f.o.b. Montreal.

Horseshoes—Blacksmiths throughout the country are beginning to stock up their Fall and Winter supplies, so that orders have increased materially during the week. Prices are very firm, but no change is anticipated. Our quotations are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4. $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—Trade has become more active and is expected to brighten up still more within the next few days.

Sporting Goods—Few orders are arriving, although local jobbers are busily engaged forwarding shipments. Prices are firm and steady. No change is anticipated. We quote as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax

Building Paper—Manufacturers report a steady trade. Prices are unchanged.

Cordage—This market has become somewhat quieter. Binder twine, which has been the special feature, has deadened owing to the close of the season.

Cement and Firebrick—Very few large orders have been booked this year. Small jobbing orders are plentiful, but these are all local. Dealers are storing up large quantities of imported firebricks in view of a good trade this Fall. During the week Canadian Portland cement advanced 5c. per barrel. Prices on this cement are very firm and another advance may occur. Other prices continue unchanged. Our quotations are as follows: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—No change is prevalent. Prices are steady. Our quotations are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth— The season has now closed and with the exception of a few assorting up orders, trade is quiet.

Poultry Netting—Jobbers report a quiet trade. A few small orders have been received for certain sizes, which are hard to obtain. Our quotations are as follows: Discounts for two inch nineteen gauge standard, and sixteen

gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges—Orders have become scarce. Retail merchants are well stocked and trade will be quiet until next spring. We quote: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Orders continue to arrive very freely. Local wholesale hardware houses report the volume of business this year much better than in previous years. Figures quoted below are firm. No change is anticipated, the market being steady. We quote the following prices: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Cherry Seeders—A good demand has sprung up for cherry seeders. Prices range from $7.50 to $12.00.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, July 28, 1905.

A SLIGHT slackening off is reported owing to the Mid-summer holiday season, the travelers being off the road, and farmers being too busy to place much business. The jobbers, however, are receiving a large volume of letter orders, and shipments being made are larger than usual at this season. Business from the west is very heavy and from all points optimistic reports are being received of a bountiful harvest.

Despite the lateness of the season, the demand for haying tools has kept up briskly, other goods being in marked demand being cherry stoners, preserving kettles, fruit slicers, and other articles used in the kitchen during the fruit season. Last week's prices remain unchanged.

Sporting Goods—Business is increasing and there is a good demand for guns and ammunition. A good season is expected.

Washing Machines—Trade is satisfactory for this season.

Chain—No change is reported in trade conditions. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Business is good at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand continues active and more goods are moving than expected during the Summer season. The same prices rule.

Barb Wire—Demand is reported good and country merchants are ordering in fair quantity.

Wire Nails—Business remains firm. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—Trade continues satisfactory. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is particularly good for this season. We quote as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonable trade is noted. Prices are the same.

Screws—Business being done is reported large, but stocks are satisfactory. The strong demand keeps prices firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—Trade continues brisk and the warm weather has not decreased the demand materially. Prices continue steady.

Cordage—Sorting up orders are being received in fair quantity. We quote: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—Present quotations are firm with a further advance looked for next month. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is brisk, demand being strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—The general activity in building circles has resulted in a good business being done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool.

Trade in hides and wool is light as usual at this season and there are very few changes to record in the market. Sheep skins have been crossed from our list and rejections added, which are bringing 20c. Unwashed and wool washed fleece are each up 1c. this week. We quote as follows:

Hides, No. 1 green steers, per lb	0 10	
" " 2 " " "	0 09	
" No. 1 green, per lb	0 09½	
" " 2 " "	0 08½	
Country hides, flats, per lb	0 08½	0 08¾
Calf skins, No. 1, selected	0 10	
" " No. 2	0 08	
Lamb skins, each	0 55	
Shorn pelts "	0 45	
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb	0 16	
Wool-washed fleece	0 26	
Rejections	0 20	
Pulled wools, super, per lb	0 21	0 23
" " extra	0 22	0 24

For Manitoba, British Columbia and Maritime Province markets see following pages.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 28, 1905.

WITHIN the past week or ten days the market has assumed a much better appearance. Indeed, orders are being booked which, judging from the appearance of the market at the opening of the season, one would have thought almost impossible. The most favorable report is the heavy bookings of foreign pig iron in the west, especially in the centre and western part of Ontario. Scotch pig iron is in strong demand, the talk this Spring respecting the poor value of imported iron as compared with our own production, being considered street gossip. The largest orders which have been booked this week are those secured from large founders who purpose using the imported article with the home product for welding purposes.

The market in raw metals has attained a very firm appearance, much firmer than in any recent years. Reasons for the continued advance are numerous, but the most likely is the heavy demand. In one or two cases, such as copper, it may be a manipulation of the market, but this is the only case known where these conditions are supposed to exist. The many ways in which galvanized iron and Canada plates may be used to-day has caused a demand which, in volume, is greater than in any previous year.

Pig Iron—Larger orders are being booked and trade, especially in the foreign product, has a much better appearance. Prices are firm, but no change is expected. Our quotations are:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18.00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	delivered	Montreal.
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—Blacksmiths throughout the country districts are now beginning to stock up for Fall and Winter use, so that orders received this week are much larger and more numerous. We quote: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—Trade shows a slight improvement, and with the passing of a few weeks larger orders are expected to be booked. Prices are firm and steady. We quote: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—No change has as yet taken place on this market. Prices are steady and the demand remains nominal. We quote: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2

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CHARCOAL PIG IRON

BRAND "DESERONTO."

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Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc., etc

and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—The demand is showing no let up, and dealers are looking forward to a record breaking business before the closing of navigation. Prices show a decided tendency to remain steady. Our quotations are as follows: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—Orders booked this year show a large increase over previous years. Jobbers find they have to hustle in order to fill all orders on time. Prices are firm but no change is expected. We quote: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—An active demand is still in progress. The demand is increasing, which will make prices much firmer. Our quotations are as follows: Queen's Head, 28 gauge, $4.15; 26 gauge $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra

Black Sheets—Trade remains steady and unchanged. Our quotations are: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The firmness of the market and the scarcity of the article has resulted in many prices being quoted. The figures quoted below, however, seem to be the most accurate. We quote: 13½ to 14½c.

Sheet Zinc—Prices have become firm at the advanced price owing to the scarcity of the spelter. Another advance may occur if conditions do not change. Our quotations are: Cask lots, $7.25; small lots, $7.50.

Tin Plates—The demand has become more active and a good trade is in progress. We quote the following: Cokes, $3.75; charcoal, $4.

Ingot Tin—Owing to the limited output of this metal conditions have become much firmer. A scarcity of labor at the mines is another reason for the change. An advance is said to have taken place at the mines, but as yet no change has occurred on this market. Prices are very firm, and this advance may take place any time. We quote: 34 to 34½c. per lb.

Ingot Copper—Copper still continues to be firm, and although no change has occurred on the price list, prices have become much firmer. We quote the following: 16 to 16¼c.

Ingot Zinc—It is reported that there is a scarcity of the spelter. Such a report as this will doubtless have some effect on the prices. Prices are very firm, and the slightest change may mean an advance. Our quotations are: 6¼ to 6½c.

Pig Lead—Pig lead continues very firm. Orders are being booked but the market shows an absence of confidence which may affect it at a later date. We quote the following: $3.75 to $4 per 100 lbs.

TERNE PLATES

"Dominion" Extra quality, bright finish.

"Dean," The old reliable.

"Canada" Good standard quality.

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Ferrona Pig Iron

And SIEMENS-MARTIN

OPEN HEARTH STEEL

Boiler Tubes—Demand continues to be steady. Prices are firm and unchanged. Our quotations are as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—Warm weather still continues to affect the market and orders from the foundries have fallen off to a noticeable extent. No change is expected until the cooler weather sets in, when larger orders are expected. Our quotations are as follows: Heavy copper and wire, 12 3-4c.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, July 28, 1905.

ADVANCING prices continue to be reported this week, showing a rise of 1 cent on tin, a slight increase on pig lead, and another half cent jump on antimony. Although the Summer season tends to a slackening off there is a general activity noted, buying being heavy on account of the advancing prices. The foreign tin plate markets are strong, and this has a strong influence on the local market. Lead is very scarce and it is difficult to secure it in any quantity. Iron is fairly active with copper unchanged.

Pig Iron—A good business is reported as being done, prices being steady.

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "		18 50
" No. 2, "		18 00
Radnor, at furnace		30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Orders are being booked in fair quantity, the trade for this season being very satisfactory. Our quotations are as follows: $1.85 f.o.b. Toronto, with discount of 2 per cent.; for extras as cut to length, while rolling, 2 feet and over, 10c. per 100 lbs., 1 foot and under 2 feet, 15c.; under 1 foot, 20c.; over 20 feet, by special agreement according to length and size.

Tin—Prices have advanced in sympathy with the rise in foreign markets. We quote: 35c. to 36c. per lb.

Tin Plates — Outside markets are strong and local conditions are a reflex.

Galvanized Plates—Trade is a trifle quieter.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is bare of stock and demand very active. Prices have advanced slightly and are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—An average trade is being done. Prices are steady. We quote as follows:, 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—A large trade is doing and quotations are unchanged. Our quotations are as follows: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—Trade is active and prices have advanced another half cent. A large volume of business reported. Our quotation is 14 1-2c.

Old Material—Lead, copper and brass are all active, but business generally is quiet. Dealers' buying prices are: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Dealers' stocks are well in hand, preparatory to the Fall rush of business. We quote: Anthracite in cars at bridges: Grate, $5.05 per gross ton; egg, stove and nut, $5.30 per gross ton; pea, $3.70 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

LONDON METAL MARKETS.

From Metal Market Report, July 26, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 47s., and Scotch warrants at 49s. 4d., making prices as compared with last week 1s. 7 1-2d. higher for Middleboro and unchanged for Scotch warrants.

Tin—Spot tin opened strong at £150 10s., futures at £149 17s. 6d., and after sales of 180 tons of spot and 370 tons of futures closed strong at £150 15s. for spot and £149 17s. 6d. for futures, making price as compared with last week £6 7s. 7d. higher on spot and £6 10s. higher on futures.

Copper—Spot copper opened easy at £67 12s. 6d., futures £67 17s. 6d., and after sales of 200 tons of spot and 400 tons of futures closed firm at £67 15s. for spot and £68 for futures, making price as compared with last week 15s. higher on spot and 12s. 6d. higher on futures.

Lead—The market closed at £14, making price as compared with last week 5s. higher.

Spelter—The market closed at £23 15s. making price as compared with last week 5s. lower.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, July 27, 1905.

THERE has been an active movement in many branches of the iron and steel trades, and manufacturers are facing the future with increasing confidence.

Apparently the buying in pig iron is over for the present. It stopped rather abruptly in the east with the end of last week, and there is a breathing spell in the Cincinnati market. It is estimated that the total sales during the two weeks of lively purchasing will aggregate about 500,000 tons for the whole country, the great bulk of the business having been for delivery during the next 60 and 90 days. It has led southern makers who had sold between the range of $10.50 and $11.25 to advance their prices to $11.75 to $12 for No. 2 at Birmingham, some of them holding for more. This has given the northern and eastern producers the chance to book considerable business at their old asking prices, at which they were marketing very little. In other words, the market is steady and firm after the rush of buying instead of being weak and nominal, as it was before it.

Relatively very little has been done in Bessemer pig in the valleys and the hope has been expressed that the leading interest might enter the market. This is not likely for the next few months, and it should be observed also that a large outside steel company in the central west is carrying quite a stock of Bessemer pig.

A somewhat curious phenomenon is the appearance as buyers of steel billets of a number of large steel works, the tonnage wanted in the open market running close to 30,000 tons. The explanation may be that what is wanted is open hearth steel, of which the steel works in question make relatively small quantities.

A number of railroads have bought steel rails during the last ten days, the total figuring up close to 100,000 tons. Included in the purchases is from 25,000 to 30,000 tons of the Missouri Pacific system, 17,000 tons for the Spokane International, 12,000 tons for the Kansas City Southern, 6,000 tons for the St. Louis & Southwestern, and 5,000 tons for the Somerset Railway. The fact that the mills have a heavy tonnage makes them indifferent to business in light rails unless prices are better, and the market in this branch is firmer at $23 to $25.

An interesting inquiry is that which has come to the coast shipyards for two large boats for the Pacific. The Atlantic Coast yards have been so hungry for so long a time that this indication of a flow of work is very encouraging. The boats will need 8,000 tons of steel, but there will be some difficulty in getting the shapes in time.

In the structural trade the question of deliveries is the all absorbing topic. A tidewater fabrication shop has just placed an order for upward of 15,000 tons of shapes, about 5,000 tons of which is to be applied to export requirements. Bids for the new bridge across the East River are to be opened on August 10. The tonnage involved is a little short of 42,000 net tons.

During the past ten days there has been some heavy selling of steel bars. One interest has booked 70,000 tons, largely for makers of agricultural machinery. It has been noted, however,

that a somewhat unusual quantity of spring steel bars has been called for, thus reflecting the activity in the car building industry.

The wire trade is stirring a little. The usual time for the replenishing of requirements by the jobbing and other interests is August 15. The buying spell may set in as early as August 1 this year.

MINES AND MINERALS.

Three men were killed in a explosion of dynamite in the Bank Head mine at Banff last week.

* * *

The C.P.R. is to extend its trackage at the coal towns of Frank, Blairmore and Coleman, Alberta.

* * *

A new mining district near Lake St. John, in Northern Quebec, is reported to be rich in gold, copper, asbestos and iron ore.

* * *

A rich strike of copper ore, said to run from $60 to $90 per ton, has been made in the Britannia mine workings near Vancouver.

* * *

Two new furnaces will be in operation at the Granby Smelter after August 1, and the output of ore for the Boundary District for 1905 is certain to exceed 1,000,000 tons. Up to June 30 the tonnage was 450,000.

The Dominion Coal Co., according to a Halifax dispatch, is to re-open operations on the Emery seam of the reserve colliery which produced 800,000 tons last year, the largest of any single colliery in the world. The output will be increased to 1,000,000 tons per year.

* * *

The development of the LeTete copper mine at LeTete, N.B., continues to show very promising conditions. At the 200 foot level porphyry took the place of quartz, and a level driven 155 feet at that point has both hanging and foot walls of the former rock. It may be mentioned that porphyry is the gangue rock of many of the large copper mines of the United States. The LeTete ore is rich and easy smelting.

* * *

The rail mill of the Dominion Iron & Steel Co., at Sydney, has been put on double shift for the first time since it began operations. In consequence of this its output now will be about doubled. The rod and blooming mills are also on double shift, and the entire plant is a scene of activity. There are more men employed on the plant now than at any time since it was started. Shipments of rails and rods are made daily to Quebec and Ontario markets.

* * *

A hydraulic system of coal mining is to be tried by the Dominion Coal Co. At present demonstrations are being carried on at Dominion No. 2 with a hydraulic cartridge machine containing a row of telescopic pistons at one end and a small pump at the other. After the coal is cut out underneath the machine is operated parallel with and near the top of the roof. The action of the pump forces the water along a tube where it comes in contact with the pistons. There it penetrates the coal in a downward direction, and as the pressure increases the coal begins to fall to the floor. The use of the machine does away with explosives, and produces the coal in the best possible condition, with equal speed and greater economy than under the old system. By the use of this apparatus and with the safety lamps which will replace the "clanny" in the mine, the probability of an explosion will be reduced to a minimum.

News from the Capital.

Ottawa, July 26, 1905.

THE bill prohibiting the use of trading stamps passed both houses of parliament and becomes law on November 1 next. It will be a criminal offence to issue them, punishable by heavy fines.

There was considerable opposition to the measure in the Commons. In the Senate also the bill was strenuously opposed. One Senator spoke against the bill for several hours. It is said that it was the intention of those favoring the trading stamp interests to "talk" the bill out of the Senate. The House of Commons had adjourned and the members were beginning to leave for their homes. The Senate was not ready for prorogation, on account of the prolonged criticism of the bill. For a time it looked somewhat as if, in order to facilitate prorogation, the bill would be laid aside for the present session. But the Government flatly refused to go on with prorogation till the bill was disposed of in the Upper House, and also refused to grant the Senators any pay—with their increased allowances for the present session.

LAST MINUTE PAINT MARKETS

Office of
HARDWARE AND METAL
Montreal, July 27, 1905.

Turpentine has declined 2 cents per gallon, making the price now at 88c. per single barrel, and 87 cents for two and four barrel lots.

Furthermore, a Senator supporting the bill suggested that an amendment be brought in making the measure even more severe than it was. The opponents of the bill took the hint, and it was scon given its third reading in the Senate in practically the same form as when presented to the House of Commons several days ago. The new law is an amendment to the criminal code.

The trading stamp people, it is understood, are making active preparations to fight the measure in the law courts. They claim that the legislation is an "illegal restraint of trade." They will demand $200,000 damages. It will be remembered that the Minister of Justice said the legislation was of a novel character. The bill was opposed by several members in the House, and a number of those who did not oppose it regarded it as unworkable in some respects. The legal fight will consequently be watched with a good deal of interest

Business in Ottawa during the past month has been exceedingly quiet, but prospects at present point to a very brisk Fall trade, especially in builders' hardware. Stoves and ranges will also have a heavy call ranges will also have a heavy call.

The strike of the plumbers and steamfitters in the city has been settled. The men went out about three or four weeks ago. They were receiving 28c. per hour, and demanded 32c., with Saturday afternoons off. This was not acceded to by the master plumbers. Before going out on strike the men offered to settle the matter by reducing their demand to 30c. per hour. This also the master plumbers at first refused, but last week they signed, giving 30c. per hour. Everything is now running smoothly, there being lots of work in the plumbing line. The strike throughout was conducted in a very gentlemanly manner.

GUELPH COMPANY INCORPORATED

THE business that has been conducted so successfully for the past forty years under the name of J. M. Bond & Co., Guelph, will henceforth be known as the Bond Hardware Co., Limited. This well-known firm have attained a reputation that extends not only throughout Canada, but is well and favorably known to the leading manufacturers of Great Britain and the United States.

Mr. J. M. Bond, the founder of the business, came to Guelph in 1866 with a thorough knowledge of his chosen occupation and a splendid adaptability for it. He established and has since conducted the business under his own name and through his own integrity and business application has developed it into one of the most substantial concerns in Canada.

Mr. Bond has decided to retire from active business, allowing those who have been identified with him in the growth of the house to carry it on. His decision to take matters easier in the future will be gratifying to his many friends. He has indeed earned a respite from active labor. Through the years that have witnessed the development of his business he has given unremitting attention to its every detail, and he quits his desk with the satisfaction that success, honorably won, always affords to those who achieve it, and carrying with him the confidence and high esteem of his fellow citizens.

Those particularly interested in this change are well known, being Mr. W. G. Bond, brother of Mr. John M. Bond, and who has been connected with the business almost since its establishment, and who is to-day one of the best-posted hardwaremen in Canada; Mr. T. A. Keating, for the past 18 years chief of the traveling staff for John M. Bond & Co., after a number of years spent in both the wholesale and retail departments of the hardware business; Mr. J. S. Millar, who has been connected with Mr. Bond's office department for the past 15 years, since 1898 as accountant and confidential clerk with Mr. Bond, in the management of his business.

The new firm enters upon its career under the brightest circumstances, and its success is practically assured. Mr. J. M. Bond will be president.

The Labelle Chemical Products Co., of Labelle, Que., have secured from the Provincial Government 6,500 acres of timber lands on the shores of Lake Labelle, and they will now commence the erection of their extensive works for the production of wood alcohol, acetic acid, tar, etc.

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words	each insertion,	1 year	$30 00
"	"	6 months	17 00
"	"	3 months	10 00
50	"	1 year	17 00
"	"	6 months	10 00
25	"	1 year	10 00

WANTED.

GOOD hardware clerk, one who has a knowledge of book-keeping and stock-keeping. Address Box 269, North Bay. (31)

WANTED a steam shovel cranesman; accustomed to both friction and all-steam machines. M. A. Pigott & Co., Goderich. (f)

TINSMITH wanted at once; first-class man; work the year round; must be temperate. Apply Jacob Eyer & Son, Richmond Hill. (f)

WANTED first-class shingle sawyer for swing machine; steady work. Apply to Lock Box 95, Owen Sound. (f)

WANTED foreman for planers and stickers; sticker hand, also sash and door men. Gold Medal Furniture Mfg. Co., Toronto. (f)

WANTED by traveler who is expert on gasoline engines; position in the east; engaged until Sept. 1. Apply Box 16, Sun, Brandon, Man. (f)

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

TRAVELERS WANTED.

AN experienced hardware traveler; state experience and with whom employed. Address Box 216, Montreal. (30)

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

HARDWARE travelers wanted for Maritime Provinces, Quebec, Ontario and Manitoba; must be able to invest from $500 to $1,000 each; old, reliable house; connection well established. Box 265, HARDWARE AND METAL. (32)

Nova Scotia Trade News

Halifax, N.S., July 25, 1905.

TRADE continues fairly active for the season of the year. Jobbers say that business is up to expectations. This is looked upon as the dull season in the hardware business, but dealers are not complaining. Collections are considered to be pretty good, and are improving. Prices, generally speaking, are steady, and no change of special note has occurred since last report. At the present time jobbers do not care to quote prices on turpentine and oils, as the market is fluctuating so. Contractors' and mill supplies are selling freely, and large sales of haying tools have been made during the week. The hay crop throughout the whole province is reported to be the best for years, and consequently the demand for scythes, rakes, forks, etc., is good.

The hardware association has not yet completed the revision of its price list and will not likely do so for some days. An effort is being made to have glass, bar iron, and sheet iron listed, and it is likely that these articles will be affixed on the list. Heretofore these articles were sold at varying prices, and the effort now put forth is to bring about some uniformity. The suggestion, however, has not met with universal favor, but the hope is held out that all will fall into line.

The appraisement of the loss on the hardware building of George E. Smith has been fixed at $999.30. The appraisers are still at work on the stock.

Rail laying on the Victoria Beach Railway in the western part of the province is held up for the want of material, which was ordered months ago.

The Nova Scotia Steel Co. are making large shipments daily from Sydney to points in Upper Canada. On Thursday last eighteen carloads were sent forward, and on the following day twenty-two carloads were sent out. The shipments are principally steel billets, although there is quite a lot of pig iron, steel rails and wire rods. The steel rails are consigned to the G.T.R., Montreal, but nearly all the rest are for Ontario points.

British Columbia Trade News

Vancouver, July 20, 1905.

VERY keen interest is being displayed among lumbermen in this province over the announcement of the probability that the United States Government may remove the duty on lumber, admitting it free into the republic. While the action might have the effect of bringing a number of American millmen to this province to build mills, it is felt by the local millmen that the greatest benefit would arise from the stimulation to the lumber trade, as there would then be opened the great markets of the middle west and even of the eastern states, now closed because of the tariff. Were this to happen, the millmen would feel so well satisfied that it is doubtful if they would longer demand that a duty be placed on lumber imported into Canada. That some such move is possible, is indicated by the fact that so many Americans have been investing in timber lands in this province during the past two years. This season there is even greater activity among the Cousin Jonathans to come over and share in the forest wealth of the province by the Pacific.

* * *

The tie-up of the Nanaimo coal mines is now complete. The machine shops, blacksmith shops, etc., have been closed down by order of the management. It is said that the work on the bunkers and conveyors at Brechin, the company's other mine, will cease at the end of the month. The men have accepted the offer of Deputy Minister of Labor Mackenzie King to arbitrate the matter, but the owners have not yet made any decision; but from the latest move it would look as if they did not intend to fall in line, as it would mean recognition of the United Mine Workers, which is the bone of contention now. Meanwhile the effects on Nanaimo City and the business interests centred there are simply disastrous. It spells ruin to many of those now in business there.

* * *

Following the electrification of the Lulu Island branch of the C.P.R. and its operation under lease by the B. C Electric Railway Co., comes the lighting of Steveston, the salmon town at the mouth of the Fraser, by electricity. The "juice" was turned on for the first time a week ago, and was very satisfactory. All the forty-odd canneries along the river at Steveston will install lights, and some of them will put in motors, discarding steam power for operating the plant. Private houses, hotels, etc., are all being wired for the light, its use promising to become general at once.

* * *

Another project outlined by Managing Director Buntzen on the occasion of his departure to take up his residence in London, is that of putting a road along the Fraser, possibly connecting New Westminster with Steveston. Already residents of the rural municipality of Richmond, through which the Vancouver-Steveston line runs, are asking for a branch from Eburne, so that would be a beginning of the larger project.

* * *

Up in the Okanagan, D. R. Young is out with a plan to utilize the power from Shuswap Falls for an electric tramway to Vernon from Lumby, serving an important and growing rural district. He also plans to supply power and light service. There has been considerable capital stock subscribed for, and engineers are to go into details of the plans within a fortnight.

* * *

Not content with tapping the Similkameen district via Spence's Bridge and Nicola, the C.P.R. projects a line from Grand Forks, up Kettle River valley and across by way of Fire valley, on the east side of the Okanagan Lake, to Nicola. Work on the Spence's Bridge-Nicola branch is being vigorously pushed. The contractors are picking up all the men round the coast cities, who are willing to work, and sending them up to Spence's Bridge, which is the base of operations. The little town on the C.P.R., which has hitherto been famed as the best spot to grow tomatoes in the open air in the lower mainland, is now a booming construction town, and is growing fast. Every business man is doing a rushing business, and not only are crowds of railway men there, but

the construction of the line is attracting many who wish to get into the country to settle.

* * *

The Great Northern are pushing their branch into the Similkameen, and expectations are that the line will reach Princeton early this Fall. The company have a survey party out, under the direction of Engineer A. E. Baldwin, an eminent engineer, who has had experience in seeking passes through the Sierras of South America, to find a pass or route across the Hope mountains, hitherto an unsolved problem to railway men seeking the shortest route from southern interior of British Columbia to the coast. A party under Engineer Tracy will follow Mr. Baldwin up the Tulameen River, making a preliminary survey for the line. This would indicate that the Great Northern plans do not stop with the extension of their boundary branch into the Similkameen.

* * *

Mining in the interior of British Columbia is becoming satisfactorily active. Many properties are now being worked at a profit, and a number of very important transactions have been completed in mining transfers recently. The Slocan is beginning to waken up again, and hopes of the restoration of that famous silver-lead district to its former prosperity are beginning to loom up. The Hewitt mine near Silverton, on Slocan Lake was sold the other day for a large sum, and the purchase price is said to have been paid in cash. In the boundary camps progress is shown all along. One mine, the Sally, on the west fork of Kettle River, above Greenwood, received over $200 per ton returns from a 20-ton shipment. Fifty tons more, equally as good, are ready for shipment.

* * *

In the Kaslo section of the Kootenays the zinc ores of many mines are turning out well. The lessees of the Bell mine, in White water, are taking out ore rich in silver values and carrying well over 50 per cent. of zinc. The reduction plant at Rosbery on Slocan Lake is working, and the zinc smelter of the Canadian Metals Co., at Frank, on the Crow's Nest Pass Railway, is rapidly approaching completion.

* * *

On the coast, the Britannia Mine at Howe Sound, near Vancouver, is being developed rapidly, the machinery, tramway, and concentrator all being in working shape. Mr. Geo. H. Robinson, the eminent mining engineer, who is chief owner and to whom is due the credit of going ahead with a proposition which lay dormant for years, is expected to arrive in a day or so. Then the shipments of ore will begin and regularly there will be a stated tonnage sent to the Crofton smelter on Vancouver Island. Mr. Robinson has purchased this smelter as a private enterprise, and will handle the ore from the Britannia. The bunkers of the mine are now being filled with crushed ore, in readiness for shipping to begin.

* * *

The parties holding oil licenses in Southeast Kootenay must renew on Aug. 2, if they wish to hold their oil lands. The Flathead country in Alberta, just across the line, is being developed somewhat, though transportation is still extremely difficult.

New trade and added profits await dealers who handle "Empire" Metallic Shingles and go out among their townsmen who contemplate building, determined to have their orders.

Many people keep right on using old fashioned wood shingles from sheer force of habit, no one having taken the trouble to show them the advantages of "Metallic" Shingles over wood. Don't you think you can convince some of them of the fireproof, lightning proof, storm proof and rust resisting qualities of "Empire Shingles and put some profits into your pocket that now go to competitors? The facts are so self evident that it requires a minimum selling effort to get many good orders for "Metallic" building materials.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada 305

We also manufacture:
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (Stone, Brick, Etc.)
"Impervia" Fireproof Windows
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Eastlake" Metallic Shingles
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, July 28, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

EXHIBITION week has brought thousands of visitors to Winnipeg and as it is the occasion of two Retail Conventions, an unusually large number of merchants are visiting the city. All bring reports of exceptionally good crop prospects in their districts, and it is plainly seen that the western trade are in optimistic mood.

Wholesale houses are busy welcoming their customers and the city is en fete in honor of the visitors. Business is not very active as this is practically a holiday week. There are no price changes of importance.

Screen Wire Cioth—Price is still quoted at $1.55 per 100 square feet. The season's trade is almost over.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, perroll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Wire—Prices are steady and trade is of normal proportions. We quote:

Barbed wire, 100 lb.		$2 85
Plain galvanized	6 to 8	3 39
"	9	2 50 2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
"	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—There is the usual light Summer demand. We quote:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Moving in very large quantities. Base price: $2.85 per keg.

Cut Nails—Base price $3 per keg. Very few selling.

Screws—In good demand at unchanged discounts. We quote:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

WALL COVERINGS

We always have a large and well assorted stock of

BURLAPS

on hand, and are agents for the celebrated

FAB-RI-KO-NA

Dyed Tapestry Burlaps.

Write for samples and prices.

Orders filled same day as received.

G.F. STEPHENS & CO., Limited

PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—The heavy demand which has been experienced all season, shows very little slackening. Prices are quoted as follows:

Anchor, plain	55c.
" tarred	70c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—All lines of ammunition are in brisk demand now for the Fall trade. Discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is steady and fairly active. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business continues very active at firmly maintained prices. We quote:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—All the leading brands are in active demand. Prices are steady and are quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Selling briskly at prices quoted last week:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—The recent sharp advance in white lead is being generally and firmly maintained. Turpentine and linseed oil are steady locally. We quote:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" " in kegs	0 02¾
Turpentine, pure in barrels	1 00
Less than barrel lots	1 05
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
6 to 100 "	

BUSINESS CHANGES.

Ontario.

A. M. McGill, hardware merchant, Chatsworth, has sold to John McKay.

Quebec.

Bernier Freres, roofers, Montreal, have dissolved partnership.

P. Dugal, of P. Dugal & Matte, tanner, Quebec, is dead.

George C. Smith & Co. have been registered as painters, Montreal.

Lamarche & Leclerc, plumbers, Montreal, have dissolved partnership.

Lasnier & Boucher, saddlers, St. Johns, have dissolved partnership.

The stock of Beaulieu & David, painters, Montreal, was damaged by fire. They carried insurance.

E. Audet, tinsmith, St. Ephrem De Tring, has assigned. V. E. Paradis has been appointed provisional guardian.

Manitoba and N.W.T.

W. A. Finlay, lumber merchant, Kelloe, is closing up his business.

Paull Bros., hardware merchants, Broadview, have been succeeded by Paull Bros. & Clementson.

Gaudin Dewitt & Co., hardware and lumber merchants, Napinka, have sold to Dewitt Bros., who take possession August 1.

Trumpour & Brandon, dealers in agricultural implements, Alameda, have dissolved partnership. J. P. Trumpour continues the business.

The manufacture of steel in Cape Breton is on the increase, and is now reaching in importance the production of coal. In two days of last week the Dominion Iron and Steel Co. shipped forty-three carloads of steel billets, rails, pig iron and wire rods to Ontario and Quebec markets.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

WIRED GLASS

The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

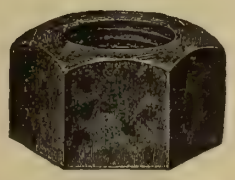
ASK FOR VEST POCKET MAP OF MANITOBA

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

SPRINGS

For Clocks, Phonographs, Typewriters and Steam Drills—in any quantity

CATALOG MAILED UPON APPLICATION.
SEND SAMPLES OR SPECIFICATIONS FOR PRICES.

THE WALLACE BARNES CO., - - BRISTOL, CONN.

PAINT, OIL AND BRUSH TRADES

ROCKEFELLER AND LINSEED.

A BUFFALO dispatch early this week stated that John D. Rockefeller, through the American Linseed Oil Co., had cornered the flaxseed market and compelled the three big independent mills there to close. The price of linseed oil would be advanced 40 cents a gallon, and in getting control of the linseed oil industry Mr. Rockefeller would make a profit of about $20,000,000 on an investment of between $8,000,000 and $10,000,000.

The dispatch went on to state that the price of seed had been run up from about $1.25 to $1.48 for flaxseed and the market would be in the hands of the Rockefeller interests until the new seed is received in September and October.

Seemingly this would have a marked effect on the Canadian market if the facts are as outlined. It is not probable, however, that the predictions made in the dispatch are correct, it having emanated from some source desiring to "bull" the market. As a result of Rockefeller's corner, the price of oil may jump up ten or even twenty cents, but a rise of 40 cents in August is extremely unlikely, the month being by no means a heavy buying season. The profit of $20,000,000, therefore, is not likely to materialize other than on paper.

The Canadian market will not be affected in any event, other than to slightly strengthen local prices. The heavy duty on oil will prevent importations from England, and the supply there being fairly large, prices in Canada will not increase much during August. Seed being higher in Calcutta and the Argentine being off the market until December or January, English producers will find oil cake marketing at a higher figure and can, therefore, sell oil at a cheaper rate.

The continuance of firm prices in Canada being assured, there is every likelihood of Canadian mills crushing this season, the heavy crop in North Dakota being expected to be sufficient to meet the American demand for flaxseed, while the duty of 25 cents per bushel is a heavy obstacle for American importers to overcome. An uncertain quantity is the amount of acreage of flaxseed sown by farmers in the Northwest, prices last season having been at their lowest. This year has been a favorable one for a heavy crop, but it is too early to estimate the probable harvest.

A CORNER IN GLASS.

A REMARKABLE agreement has recently been made between British and Belgian glass manufacturers, which will have an important effect on the trade in Britain and the British colonies.

The Belgian firms (who are the only serious rivals of the British glass manufacturers in Europe) have agreed not to send into Great Britain or British colonies any rolled plate glass, muranese tinted and embossed glass, except to the order of the British firms signing the agreement. These latter, it is understood, have undertaken to accept the delivery of a certain proportion of the Belgian output. The return made by the British manufacturers for this concession is that they undertake not to send any of these particular lines of glass to the continent.

This agreement puts the British firms involved in entire control of these lines imported from Belgium, and a jump in prices will no doubt be the result, as competition will have been removed.

The quantity of Belgian rolled plate and muranese and cathedral glass imported into Britain equals, if it does not exceed, the domestic output, being a department to which the Belgians have paid particular attention. Further developments are looked for in the sheet glass trade, as a result of this compact.

GROWTH OF STEPHENS CO.

The contract has been let for the addition of two storeys to the warehouse of the G. F. Stephens Paint and Glass Company at Winnipeg. The growth of this warehouse and of the business housed with it keeps pace very well with the growth of the city in general. The building was just erected something like nine years ago, and was—for that time—a block of which the city might be proud, 90 x 90 feet and three storeys high. Two years ago the building was more than doubled, being increased by an addition 154 x 50 feet, three storeys hgh. Now, nine years since the building was first erected, its original size will be more than trebled by an addition of two storeys. The completed warehouse will be 154 x 110 feet in dimensions, and five storeys hgh.

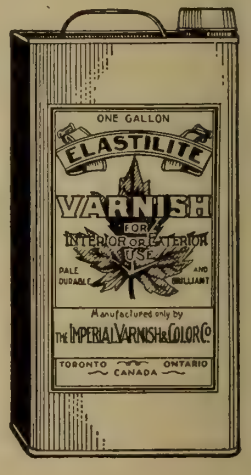
ENLARGING PAINT FACTORY.

Operations have already begun on the new addition to the manufacturing plant which is being erected by P. D. Dods & Co., of Montreal, manufacturers of ready mixed paints. The present plant is too small for the output which is required during this coming season, and to meet the trade on an equal footing it was decided to double the capacity of the plant. The new addition will be the same height as the building now in use, three storeys and basement, and will be constructed of brick and stone. It will measure fifty-two feet by fifty feet and will cost about $10,000.

There are lots of varnishes,
but the good kind is

ELASTILITE

For outside or inside use
In Tins ½ pint to 1 gallon



The Imperial Varnish & Color Company, Limited
Toronto, Ontario, Canada

STOCKS AT
WINNIPEG, MAN., care Mason & Hickey.
VANCOUVER, B.C., care Durand Merchandise Company.

TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

Fine Finish

Brant-Lac gives a finish no individual varnish or stain can give. It is a perfect varnish and stain in one coat.

Brant-Lac



applied to furniture, woodwork, floors, etc., proves this. Any colors ; any quantities. Better than you have been buying before. Someone will profit handling **Brant-Lac**—will you ?

Post card secures prices and information.

SCARFE & CO.,

Manufacturers of Fine Varnishes, etc.

Brantford, Canada.

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

The....

Real Test

OF A LIQUID PAINT IS

How it Wears

Those who have used

"ANCHOR"
and
"ENGLISH"

LIQUID PAINTS

during the last

30 YEARS

tell us they have given perfect satisfaction.

If you handle these goods your customers will stay with you.

They are the only liquid paints in which the White Lead used is

Brandram's B.B. Genuine

BRANDRAM BROS & CO. BRANDRAM'S B.B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, July 28, 1905.

IN some quarters the demand for Paris green has fallen flat and the season for 1905 may be said to be practically over. This change in conditions, although sudden, is only natural on account of the shortness of the season and the limited amount sold. The recent advance in white lead shows a marked falling off of the orders. This is a quiet season in the white lead trade and it is not likely that the retailers will buy until the demand strengthens some weeks hence. It is then expected that the market will be much steadier and if any change in price is to occur it will likely have taken place by then. business from the retail merchant's point business from the retail merchants point of view is much better than in previous years, and local wholesale dealers and manufacturers are looking forward to an early opening of all business. Within this past few days trade has become much quieter and manufacturers have taken advantage of the situation by giving their travellers holidays.

Canadian Paris Green — Barrels, 17 1-4c.; arsenic kegs, 17c.; 50 and 100-lb. drums, 18c.; 25-lb. drums, 18 1-2c.; one pound packages, 19c.; half-pound packages, 21c.; one pound tins, 20c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Owing to the active demand the price is higher and prices for English green can only be furnished on application.

Turpentine—Single barrels 90c. per gallon; two to four barrels, 89c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels, 51c. to 54c.; five to nine barrels, 50c. to 52c. boiled, one to four barrels, 54c. to 56c. five to nine barrels, 53c. to 55c. f.o.b. Montreal. Net 30 days.

Ground White Lead — Best brands Government standards, $5.50 to $5.70; No. 1, $5.25 to $5.45; No. 2, $5 to $5.20; No. 3, $4.75 1-2 to $4.95; No. 4, $4.50 to $4.70, all f.o.b. Montreal.

Dry White Lead—Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure, 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil — 8 to 9c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—No change has taken place during the week. Our quotations are: American prime white, 14 1-2c., American water white, 16c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
July 28, 1905.

PARIS green is not being ordered so much as the season is practically over. Some is still being sold, however, the tremendous demand having caused some merchants to rush refilling orders more than once. The trade this year has been the largest on record and jobbers and retailers will carry an exceptionally small amount over till next season.

White lead and mixed paints are meeting with a very satisfactory sale, the holiday season having reduced the demand very little.

Linseed oil quotations remain the same and while the market is not so strong, the condition is not considered to be more than temporary. The bulling of the United States market by the Standard Oil interests, will have an indirect influence on Canadian markets, the tendency being toward higher prices until October. Turpentine is holding firm at prices quoted last week. We quote:

White Lead—Ex Toronto, pure white $5.50 to $5.75; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.37 1-2; No. 4, $4.10 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $4.25.

Red Lead—Genuine in casks of 560 lbs., $5.25; ditto, in kegs of 100 lbs., $5.50; No. 1, in casks of 500 lbs., $4.75 to $5; ditto in kegs of 100 lbs., $5.25.

THE BEST FOR THE PURPOSE

CYCLE BAKING ENAMEL

A very durable, tenacious and elastic enamel specially prepared for bicycles, baby carriages, etc. Produces a tough high gloss finish. Write for Prices and Quantities—**Now.**

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.

617-621 Austin Ave., CHICAGO, ILL.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited

TORONTO, ONT.

McCaskill, Dougall & Co.

Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES of every kind, and for every purpose. Our glues enjoy large sales in almost all countries of the world, and our brands are generally to be seen amongst good stocks of glues. We believe we are giving better value than any other manufacturer, and we want to submit our lines to the Canadian test. Samples gladly sent in reply to enquiries.

GROVE CHEMICAL CO. Ltd, Appley Bridge, Lancashire, Eng.

We Have the Glass You Want

—THE PRICE IS RIGHT.—

Our Distributing Centres keep down your freight charges and give a speedy delivery

The Consolidated Plate Glass Co., of Canada, Limited

TORONTO MONTREAL LONDON
OTTAWA WINNIPEG



REMEMBER

that the season is now drawing near when you will have to stock up for **fall trade. Floor** and **House** paints are a prominent figure in your fall trade.

ISLAND CITY

are known throughout Canada as paints of good quality.

IF YOU CANNOT CALL

drop a line and we will mail you information which will please you.

P. D. DODS & CO., Toronto, Winnipeg, Vancouver, Montreal.



DURING THE "HEATED TERM," IF OUR TRAVELLERS DO NOT CALL UPON YOU WITH THEIR ACCUSTOMED REGULARITY, THE HARDWARE TRADE IS RESPECTFULLY INFORMED THAT ALL LETTER ORDERS WILL RECEIVE PROMPT AND CAREFUL ATTENTION FROM THE CANADA PAINT COMPANY, LIMITED, OF MONTREAL AND TORONTO.



White Zinc—Genuine French V. M., in casks, $6.50 to $7; Lehigh, in casks, $6 to $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 54 to 56c.; boiled, 57 to 59c.; 5 to 9 barrels, raw, 55 to 56c.; boiled, 58c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine—Single barrels, 87 to 90c.; 2 to 4 barrels, open; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

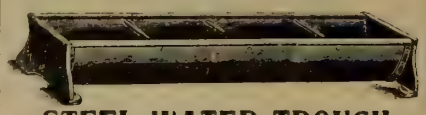
Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

Nothing new or of a strange character has occurred on this market this week. Imports are arriving more freely, but the arrivals, which are of good sizes, are not large enough to meet the heavy demand and consequently local dealers have to continue cutting up larger sizes to fill the orders. Better news is being

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.** *TWEED, Ontario* Limited

SEALED TENDERS addressed to the undersigned, and endorsed "Tender for additions, &c., Post Office, Calgary," will be received at this office until Monday, August 7, 1905, inclusively, for additions and alterations to the Post Office, Customs, &c., building at Calgary, N.W.T., according to plans and specifications to be seen at the Department of Public Works, Ottawa, Ont., and at the office of Paul Paradis, Esq., Resident Engineer, Calgary, Alta.

Tenders will not be considered unless made on the printed form supplied, and signed with the actual signatures of tenderers.

An accepted cheque on a chartered bank, payable to the order of the Honourable the Minister of Public Works, equal to ten per cent (10 p.c.,) of the amount of the tender, must accompany each tender. The cheque will be forfeited if the party tendering decline the contract or fail to complete the work contracted for, and will be returned in case of non-acceptance of tender.

The Department does not bind itself to accept the lowest or any tender.

By order,

FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, July 5, 1905.

Newspapers inserting this advertisement without authority from the Department, will not be paid for it. (29)

Travelling Representative WANTED

We have a vacancy on our staff for a first-class advertising representative covering larger manufacturing and wholesale trade only.

Salary to start, fifteen hundred or two thousand, with opportunities for advancement.

Applications invited from high-grade commercial travelers, or other competent men. The position and territory is particularly desirable, and all communications will be treated as strictly confidential.

Address
H. GAGNIER, LIMITED,
Board of Trade Building, Toronto, Ont.

Publisher, "The Clothier and Haberdasher," "The Wine and Spirit Journal," "The Trader and Canadian Jeweler," "The Cigar and Tobacco Journal," etc. (30)

TRADE MARK
This design a guarantee of quality

DO YOU PUBLISH A CATALOGUE?
IF YOU DO YOU SHOULD USE "CANADIAN-MADE" PAPER
All grades, from the highest "Glossy Finish" to the rough "Antique" and bulky "Featherweight."
YOUR PRINTER CAN SUPPLY IT.
CANADA PAPER CO.
TORONTO LIMITED MONTREAL

received from Belgium and the situation which looked so dark a few weeks ago, now has a much better appearance. Prices are firm, but no change is anticipated. We quote: First break, 50 ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 fe et,$4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

PAINT BUSINESS GOOD.

FAVORABLE weather has made 1905 the record year in the paint business, the demand for colors and mixed paints being exceptionally heavy during the Spring and Summer. Mixed paints have, of course, the greatest sale in hardware stores, although oil and colors are in good demand. Floor varnishes and stains, as well as barn paints, are called for in large quantities also. The tremendous activity in building in all part sof Canada indicates that there will be no falling off in the demand, and there is every likelihood of 1905 being the banner year for the paint trade.

CHEAP PAINTS.

Last week's Hardware and Metal contained an advertisement of Ramsay's barn paints, describing the good qualities of this well-known brand and quoting the low price of 10c. per gallon. The quotation was an error, as, while Messrs. A. Ramsay & Son are always glad to sell their paint as low as possible, they have not been able to get their $1 paint down to 10c., but they sell the best that comes in the way of paint at the lowest price. A sample order will be a good method of testing the accuracy of this statement.

Stop the leaks and save the profits.

Think twice before you contract a debt.

Don't trust to luck in anything. Look before you leap.

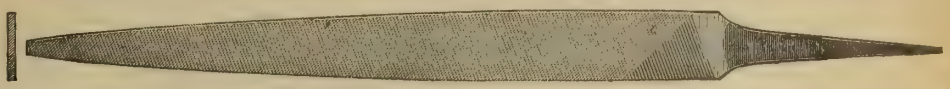
In granting credit be certain that the chances of collection are on your side.

Do you pay enough attention to your tool department? This is a line that not only belongs to the hardwareman but is never carried by anyone else—that is, as far as fine tools are concerned. And in every town there are carpenters, blacksmiths and masons, if not machinists, plumbers, electricians, etc. By advertising direct to these men and making special efforts to carry a line of tools that they can use the trade ought to be greatly increased.

Globe Brand Files and Rasps

WARRANTED

Possess all the merits of the Best Hand-Cut Files. For sale by all prominent Hardware Dealers.



Thirty years' experience has taught us how to produce a Perfect File, consequently we are justified in giving our customers an absolute warranty with our product.

NICHOLSON FILE COMPANY

FACTORIES:
Providence, R.I., Paterson, N.J., Beaver Falls, Pa., Anderson, Ind., Port Hope, Canada.

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

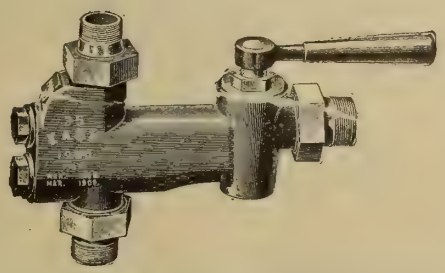
A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR
GILBERTSON'S
COMET

Brand Galvanized Sheets

People who use this brand find there is none better and they particularly like its low price. Give it a trial. Every sheet is guaranteed.

Makers: W. GILBERTSON & CO., Limited
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EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED

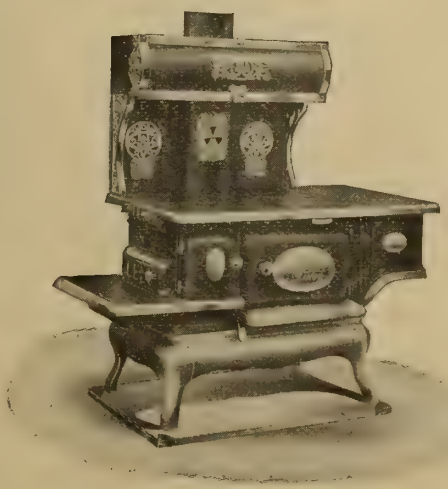
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could hear all the nice things said about it by users and sellers it would be very proud.

Mrs. Finlayson, Lucknow, writes: "After using an Empire Queen Range purchased from D. C. Taylor, I might say that it has proven to be the most satisfactory stove I ever used."

John King Co., Limited, Hardware Merchants, Fort William, write: "We find your stoves and ranges good sellers."

Send for Booklet NOW.

The Canadian Heating & Ventilating Co., Limited Owen Sound, Ont.

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The Great Polish

For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO



OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, LIMITED

MANUFACTURERS OF

Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

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In all qualities and sizes

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Boiler Plates, Rails, Fishplates, &c., &c.

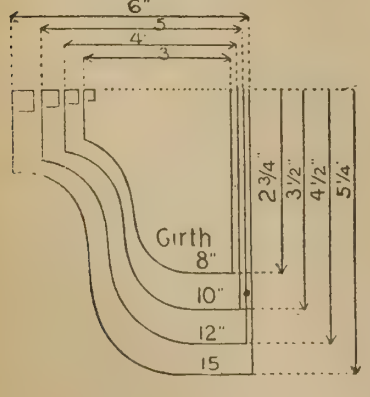
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O. G. EAVETROUGH

(SQUARE BEAD)



We supply the above in Round or Half-Round; also **Conductor Pipe**, Plain or Corrugated. Ten-foot lengths. At lowest market prices.

A full stock of Tinsmith's Tools and Supplies.

E. T. WRIGHT & CO., Hamilton, Ont.

STOVES AND TINWARE

CLEANING GAS STOVES.

THIS is the way, says the Gas World, in which stoves are cleaned by one of the leading gas companies, and done with marked success, the company being practically able to reissue the stoves equal to new. First of all, the cooker about to be renovated is taken to the bench by a fitter, who removes the hot plate float (consisting of brass taps), brass oven cock and door. The remainder of the oven complete and the hot plate are placed in a muffle, dimensions, 4 feet 9 inches high, 3 feet 10 inches wide and 4 feet deep, built of fire brick, the floor having fire brick tiles, 3 inches thick, for the oven to rest upon. The door is also of fire brick tiles, iron cases, which is worked by an overhead pulley. The muffle is heated by a furnace underneath in which coke and breeze are used, and it is got up to over 600 degrees. When not in use at night time the furnace is slackened by means of clinkering, so that the mu allowed to get quite cold. w soon unsettle the bed. The s allowed to remain in the muf hour, on an average, and drawn, all dirt, grease, et entirely removed. Before oughly cold a stiff wire on the castings, which new.

While the process of burning ing on the fitter takes the doo polishing room for the bright parts to be polished. In this room there are used emery wheels, buffs, drilling machine and grindstone, worked by a six h.p. gas engine. The enamel plate of the oven door, the float and gas taps are immersed in a large copper (capacity. 120 gallons). This is heated in the same manner as the muffle. In order to make a strong pickle, 28 pounds of strong soap powder (Wiggins & Khyll's) is put into the copper and kept at boiling point while in use, and, as in the case of the muffle, cooled down during the night. The copper is cleaned out and the soap powder renewed twice a week. Having thoroughly cleansed the cooker, the fitter then takes the parts, as already divided, to his bench, and refits them. The taps, with the use of a little metal polis (after having been in the copper) come out splendidly. If found defective they are, of course, replaced. The castings are coated with a special dull black varnish, so as not to cause a smell when the stoves are in use. When fitted, the burners are all tried and allowed to remain alight, so as to give the stove a thorough burning off and testing.

ALUMINUM WARE.

ALUMINUM ware, a ware that in Europe and the United States is now in common use, has even yet, despite steady advertising, to attain to that stage of everyday usage in the smaller households of this country, as it has elsewhere. A steady growing demand is, however, rewarding the Canadian Aluminum Works, Limited, Chambly Canton, Quebec, for their five years' pioneering of the then new metal in Canada.

The strong features of aluminum cooking utensils are not readily understood but to those constantly using them. Aluminum does not corrode, neither will it rust. It is as near indestructible as any article can be that is in daily use. It is susceptible to the highest of polishes; therefore, with this quality added to its many others, the happy possessor of aluminum utensils generally considers them, and very naturally so, the most prized articles in her kitchen.

Many people are prejudiced against aluminum ware, being under the impression that, because it is one of the newer metals it is expensive. This erroneous idea has dissuaded many thrifty housewives from considering it as practicable in their kitchen equipment. But aluminum is not expensive. A cooking utensil made of this metal is said to have four times the life of the metal utensils now in common use. Aluminum is a most sanitary metal, a proof of which is its large usage in hospitals and sanatoria.

It is no unusual occurrence for a vessel containing some article of food in preparation for the table to be allowed to boil dry. What is the result? An utterly useless vessel, and the great portion of the contents of it unfit for the table. With an aluminum vessel, all that occurs is the loss of any such portion of the contents as adhere to the vessel bottom. The vessel sustains no injury, neither does the greater part of its contents. Rice and other cereals can be cooked to a dryness directly over the fire without scorching. Cakes of all kinds can be cooked in aluminum pans without using greasy paper. Should the temperature of the oven be too high the cake will burn on the top first.

BRANTFORD FIRM EXPANDS.

George F. Sterne & Son, Brantford, who at present manufacture a species of fire-proof stove putty, intend to erect a new factory, and will go extensively into the manufacture of fire-proof stove putty, as well as asbestos furnace cement. The new building will be 30 x 80 feet and two storeys high. Ten men will be employed.

STOVE ITEMS.

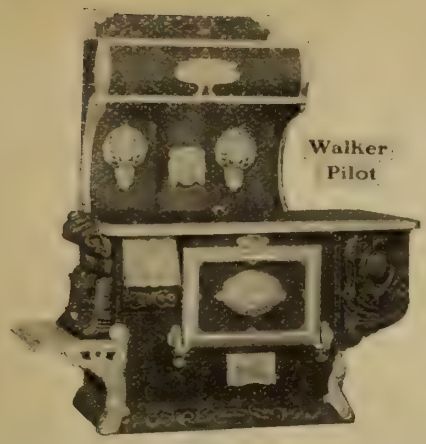
This is furnace repair time.

During the building season is the time to advertise furnaces and stoves.

J. J. Cain, Alliston is advertising for a first-class tinsmith. It's a good opening for some man.

Don't let a furnace job go to a dealer in another town because of neglect to look after the job.

The contract for heating and ventilating the public school at Bradford has been secured by the James Smart Mfg. Co., of Brockville, who will use two Kelsey warm air generators on the job.



All are Essential and All are Embodied in The

Present and Future Success. Arrange your stove line on a basis of lasting success, combined with a price that will enable you to intelligently and profitably look after the trade.

Demand Merit, First, Last and All the Time. Offer to your customers a thoroughly modern article, one that is replete with all practical utilities and conveniences. Do not injure your standing with them by selling an obsolete style of Range, made simply because some maker still uses the patterns of by-gone days.

Look for These Features. They are essential to the proper working and economy of any Range.

A proper end draft, along the entire length of the grate.

A perfectly controlled reservoir, encased in cast iron, and responding quickly when required.

Ash Pan of ample capacity, easily removed and without spilling of ashes.

A cast iron flue back that will not rust out.

Large pouch feed and broiler door.

WALKER PILOT STEEL RANGE

Other Features of this Range are: Balanced Oven and Closet Doors; Duplex Grates, removed without disturbing linings; Oval Firebox; Enameledware Tank; Oven Thermometer; Wood Extension and a profusion of handsome nickel.

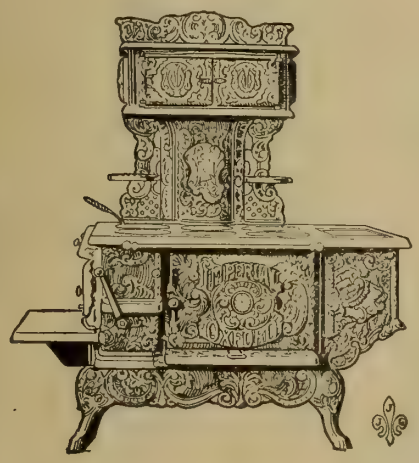
All parts are closely rivetted, oven bottom, lower edges and other parts strongly reinforced, and asbestos is freely used where necessary.

Catalog and Prices for the Asking

Walker Steel Range Company, Limited

Grimsby, Ont.

Extra profits that look big when made by selling some inferior Range may melt away or even turn to loss when the inevitable "kick" comes with its demand for replacements or exchange. Why not avoid disappointment by selling the Range that has proved its dependability—the



IMPERIAL OXFORD RANGE

As a practical man you will appreciate its mechanical excellence and superior finish, and realize that it is easy to demonstrate its "talking points" to buyers. The women folks know by reputation the superiority of the Imperial Oxford Range, and this, with our extensive advertising, makes selling an easy matter.

Better decide to handle the Imperial Oxford.

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THE GURNEY FOUNDRY CO., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

The Gurney Standard Metal Co., Limited, Calgary



The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory: *Port Hope, Ont.*

Sales Office: *50 Colborne St., Toronto.*



THE J. M. T. INJECTOR



THE J. M. T. VALVE
Re-newable Disc.

Threshing Time is Approaching

GET READY FOR REPAIR ENQUIRIES.

FOR

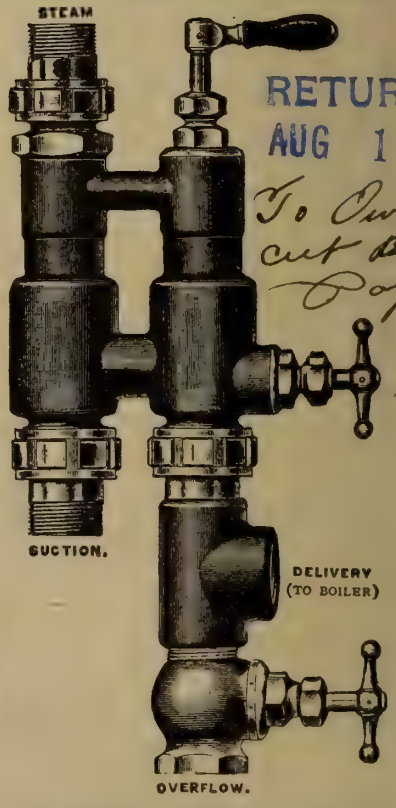
Injectors and Inspirators
Valves and Steam Cocks,
Lubricators, Oil Cups,
Steam Gauges, etc.
Iron Pipe and Pipe Fittings.

The Best Goods are the cheapest to your customer because they're durable and give him satisfaction.

J.M.T. INJECTORS
Morrison's Improved Steam Gauges

J.M.T. VALVES
are a few of the best

The . . .
JAS. MORRISON BRASS MFG. CO.
TORONTO. *Limited*



THE GENUINE HANCOCK INSPIRATOR

The Old Reliable Double Tube Boiler Feeder—adapted to all pressures without adjustment.

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HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

ARTICLE X.

STEAM HEATING.

WE have discussed in a previous article the method of installing piping on the "two pipe gravity" system, and we now propose to show how equally good results may be obtained with little more than half the piping required in that class of construction, by what is known as the "single pipe gravity" system.

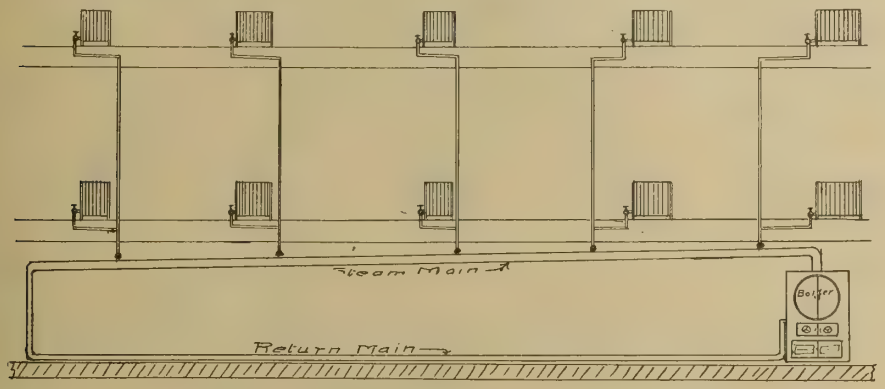


Fig 1.

The word gravity, in its application to a heating system, means that the condensation will flow out of the course of the steam directly back to the boiler, or otherwise as desired, (in the matter of the disposition of the condensation we will treat more fully later on), and in this particular the single pipe system does not differ from the two pipe system inasmuch as that the steam main has a gradual decline from the boiler to its farthest or most extreme end, so that it is constantly drained.

The great difference between this system and that last described, however, lies in the fact that only one pipe is connected to each radiator, instead of two, and in consequence there are only half the number of risers required, the principle of the system being to compel one riser line to not only supply the necessary amount of steam, but also take back to the steam main all condensation.

Of course it goes without saying that all of the piping in this system must be larger than that required to supply a similar amount of surface on the "two pipe" principle, on account of the double duty which it is compelled to perform, though, generally speaking, the increase is only one size over that required for the latter, and in this connection it is proposed to publish a simple table, when we have described the various systems, showing the amount of work which each size pipe will perform in each system.

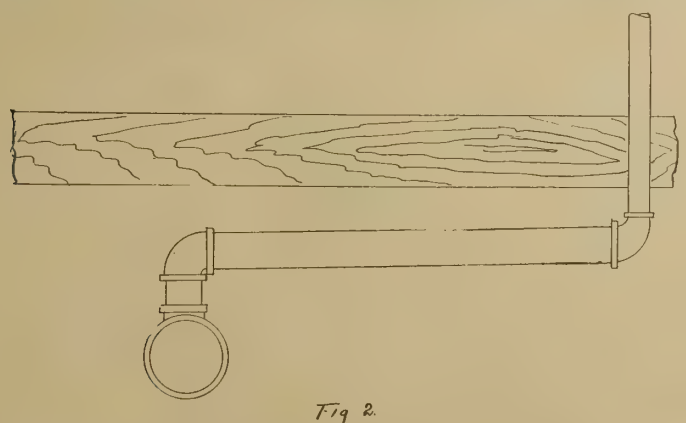


Fig 2.

On reference to Fig. 1 the reader will get a good idea of the principle upon which the single pipe system of steam piping is installed.

It will be noted that the steam main has a sufficient fall from the boiler to the opposite end to permit of its ridding itself of all condensation, through the relief which connects it to the "return main," and the relief must be almost if not as large as the return main, because through it will pass all of the condensation flowing from every radiator and pipe in the building, or at least that portion of it heated by the steam main to which it is connected, for, as will be plain, the building may be divided into sections and a separate steam main or "circuit," as it is styled in single pipe heating, run to each.

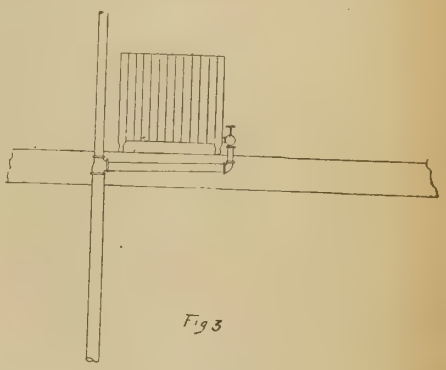


Fig 3

From the top of the steam main is taken off branches which rise to the highest floor to be heated, leaving off horizontal connections at each floor, the said connections being left moderately long to provide for expansion of the riser, and being one size larger and having a good grade back to the riser, so that condensation, instead of accumulating, as it would if the pipes were not large, will flow freely back to and down the latter, even against the opposing currents of steam.

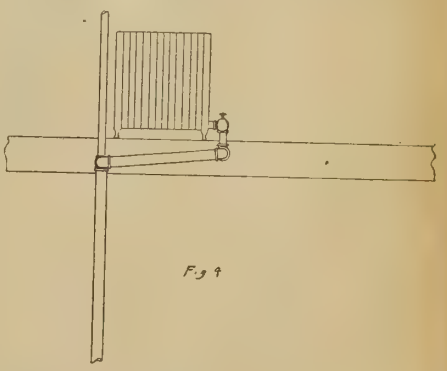


Fig 4

In Fig. 2 we have an illustration of the method of connecting the riser to the steam main. It will be noted that the principal difference between this connection and that required for two pipe work is :

First.—That it drains back to the steam main instead of toward the foot of the riser, thus obviating the necessity of connecting a relief pipe between

the latter point and the return main.

Second.—That the horizontal connection between the main and riser is one size larger than the latter, because the friction of the steam in passing over the condensation in a horizontal pipe has much more influence over it than is the case where a good grade or direct fall can be given.

Expansion of the main is provided for in Fig. 2 in exactly the same way as was indicated when the two pipe system was under discussion, viz., by having a fairly long connection between the main and riser, so that a moderate amount of "spring" is provided for, and, if necessary, a certain amount of movement may take place on the threads of both elbows and the top of the T.

In Fig. 3 is shown a branch connection for a radiator taken off the side of a riser line. The object of connecting to the far side of the radiator, instead of to that nearest the riser, is to provide for a certain amount of movement up and down of the riser, due to expansion and contraction, for it will be obvious that were the connection between the radiator and the riser a short, rigid one, the radiator would be lifted off the floor every time the riser expanded, or, if the radiator were very heavy, broken or leaky joints would probably result, while with such a connection as that indicated in Fig. 3, there will be sufficient "spring" to permit of a moderate amout of expansion.

When we speak of a moderate amount of expansion we refer to risers in buildings of moderate height, and where low pressures of steam are carried, because, as is well known, the higher the riser the greater will be the amount of "movement" at the top, and the same holds good regarding the steam pressure, for it will be plain that as the temperature rises with the pressure, so the expansion increases in like proportion, so that when for any reason there is an abnormal movement in the steam riser, or when the connection between it and the radiator must necessarily be short, we recommend the connection shown in Fig. 4.

In this case the connection is taken off front of the riser instead of the side, and is turned in again under the valve, the advantages being that not only has it the "spring" of the other connection shown in Fig. 3, but, should the movement of the riser be excessive, it can turn on the threads of the elbows without danger of breaking anything, and in addition can be given a much better fall toward the riser than is possible with that shown in Fig. 3.

In running a steam main for a one-pipe system, what are known as "eccentric" fittings should be used. These fittings are used wherever a reduction is made in size, and provide proper drainage of the main by having the bottom of the various sized pipes on the same plane, instead of "stepped up" as they would be wherever a reduction is made with ordinary fittings.

The advantages of the one pipe system are that while larger pipe is necessary, much less of it is required, it takes less labor to instal it, half the valves and other fittings required for the "two pipe" system will suffice, and on the whole it has a much better appearance.

An exhibition of sponges and bathroom accessories in the window should bring results now.

TORONTO PLUMBERS' PICNIC.

LORNE PARK was the rendezvous last Friday for the members of the Toronto Master Plumbers' Association, their wives and children and their friends, the occasion being the annual picnic of the M.P.A., the day being a glorious one and about 450 partaking of the hospitality of the jolly plumbers. That the weather man who makes his headquarters in the Queen's Park Observatory is in league with the plumbers is proven by the fact that he provided an ideal day for their outing, turning off the hot air so universal earlier in the week, and adjusting the shower valves so that none of the juice was unloaded until the "glad day" was past.

A special train left Toronto about 9.45 a.m., badges being distributed amongst the excursionists, and committees making tours of the train handing out fancy fans and bags of candies and nuts to all the ladies and children, it being their day of enjoyment, baskets being left at home and all being invited to have dinner and supper at the Lorne Park Hotel at the expense of the Association.

Arriving at the park a group photograph was taken, after which some drank in the beauties of nature, while others filled the inner man with the best the hotel man could provide, the size of the crowd evidently being greater than the expectations of this individual. No prettier spot than Lorne Park could have been chosen and the committee took full advantage of the splendid facilities for enjoyment, lawn bowling, quoit pitching, races, baseball games, dancing, 'bus rides and baby shows, all being participated in during the afternoon.

Ten races were run off between the boys and girls under fifteen years of age, the feature of the fun being that every contestant secured a prize, even the bashful, the lame and the halt, who did not exhibit their running abilities, being made the recipients of souvenirs by the committee. Fred Hogarth won the married men's race, with Rennie Wright a close second. Miss Edith Hogarth took first honors in the single ladies' event, with Miss Edith Inwood second and Misses L. J. Ryan and A. C. Tomlinson tied for third prize, after several attempts to break the tie. Another Hogarth crossed the tape in the lead in the married ladies' event, Mrs. Fred Hogarth winning, followed by Mrs. H. J. Hillier and Mrs. J. R. Bolam. Mrs. W. Inwood took the cake in the fat ladies' event and Mrs. Hawkins and Mrs. Brown captured first and second in the ladies' egg race. The fat men's race attracted a lot of attention, Pete Jessimane coming in first after Angus McPherson and A. W. Erwood had crossed the line.

The baseball match was closely contested for twelve innings and finally resulting in a victory for the master plumbers over the manufacturers and supply men by a score of 15 to 13. The features of the game were the heavy batting of G. Moore, of the plumbers' team, and Bill Bailey, of the supply men, the former knocking out a homer and a three-bagger, while the latter also secured four bases as a result of his slugging. The teams lined up as follows:

M.P.A.—A. Richardson, p.; R. Knott, 1b.; J. Fullerton, 2b.; D. Menzies, 3b.; G. Moore, s.s.; R. W. Harrison, l.f.; J. Elliott, c.; G. Ashdown, c.f.; C. Armstrong, r.f.

Supply Houses.—W. Porter, 3b.; F. Morrison, c.; A. Hellewell, p.; F. Worthington, l.f.; C. World, 2b.; B. Bailey, s.s.; W. Grant, c.f.; H. Gurney, 1b.; and J. Gouinlock, r.f.

In the lawn bowling contests the plumbers and supply men lost to the Lorne Park team, owing to the grounds being strange. They proved themselves good bowlers, however, their teams being made up as follows: Fred Armstrong, W. Mansell, A. D. McArthur and F. Somerville, and Joseph Wright, George Clapperton, P. Hayes and A. Maxwell.

In the baby show there was more trouble in securing judges than in selecting the winners. Messrs. L. J. Avery, W. Meadows and W. Messenger finally consented to act, however, they choosing as the winners the children of Mrs. Fullerton, Mrs. Robinson, Mrs. Crowlan and Mrs. Needham in the order named.

Notes.

"These Toronto plumbers are a fine lot of fellows and they give a better time than we get on the other side," said an American who was present.

W. Mansell was around with his hand bandaged as a result of having it poisoned recently. He is recovering.

The quoit match and the tug-of-war were not pulled off.

Amongst the representatives of the supply houses and manufacturers present were noticed: Messrs. L. L. Anthes and H. W. Anthes, of the Toronto Foundry Co.; F. Armstrong, C. World and D. World, of the James Morrison Co.; A. A. McMichael and Jno. M. Owston, of the James Robertson Co.; F. Somerville and W. Porter, of the Ontario Lead and Wire Co.; R. J. Cluff, of R. J. Cluff & Co.; A. D. McArthur, of the Standard Ideal Sanitary Co.; Joseph Wright, T. Worthington, C. Brewer and G. H. Reid, of the Dominion Radiator Co.; H. Gurney, jr., and A. Hellewell, of the Gurney Foundry Co.; R. W. Crashley, of the Canada Brass and Supply Co.; M. P. Huffman, of the Canada Radiator Co.; J. Heozborm, of the Glauber Brass Mfg. Co., Cleveland, and L. J. Avery, of the Wolverine Brass Works, Grand Rapids, Mich.

The committee responsible for the good time were as follows: Messrs. G. Clapperton, D. J. Morgan, J. E. Fullerton, K. J. Allison, W. J. Mason and W. Benson, with Pete Jessimane as general master of ceremonies.

PACKING FOR BOILERS.

A cheap and excellent packing for the manholes of boilers may be made in the following way, according to the Scientific American: Select three pieces of millboard or strawboard, each about 3 inches larger than the manhole and not less than one-eighth inch in thickness. Glue them together so as to produce a board three-eighths inch in thickness, and with a pattern of the manhole mark out the exact size, and after the glue is thoroughly hard cut out the packing of the requisite size with a band saw. The packing will not shrink or split open like those made of wood, and has been used successfully for nearly two years.

REMOVING INK SPOTS ON MARBLE

Ink spots on marble may be removed with a paste made by dissolving an ounce of oxalic acid and half an ounce of butter of antimony in a pint of rain water, and adding sufficient flour to form a thin paste. Apply this to the stains with a brush; allow it to remain on three or four days and then wash it.

TRADE PENBERTHY MARK.

LOOK FOR THE  TRADE MARK

AUTOMATIC INJECTORS

RETURNED
SEP 11 1905

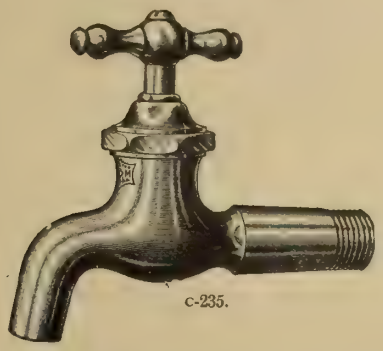
PLAIN SCREW FOR OILER

Made with or without Syphon.
From Good Red Metal
A Staple Article for the Dealer
at a Right Price.



MUELLER COMPRESSION WORK

SPECIAL GRADE BIBB



C-235.

When a compression bibb spreads the stream over the edges of a cup or other receptacle it becomes a thing of as much vexation as use.

The use of Mueller Compression Bibbs is not attended with such vexation. The water way is so tapered from the body to the end of the nose that the water is delivered in a full sized, even and compact stream.

Mueller Compression Bibbs are made in standard, extra and special grades, in plain or hose patterns and all styles of pipe connection. The bibb illustrated is the special grade, plain pattern and iron pipe style.

Each bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*

METALS

MANUFACTURERS OF

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Tin Pipe,
Fuse Wire,
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DEALERS IN

Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO

HEATING AND VENTILATING FIFTY YEARS AGO.*

IT had been the intention of the writer to give an extended resume of several early works on heating and ventilation in order that opportunity might be given to contrast our present practice with that common fifty years earlier. A press of other work has prevented me from giving the necessary time to this article to make it of much value historically, and I can only hope to suggest in the short time which I have had for the preparation some topics for discussion to those who are qualified to discuss the present methods as compared with those used much earlier.

I can at best hope to make only a few general observations.

One conclusion which I think can be stated as contrasting the work done in this art one-half century earlier with that to-day is this: The improvements which have been made are principally in the line of manufactures, such as can be comprehended under the heads of materials, workmanship and art. There have not been great or radical changes in methods and systems of heating and ventilating, so far at least as the descriptions in the various books at hand can indicate. Fifty years ago there were few manufactured articles on the market in any country of the workd for the erection of heating and ventilating systems, and it was necessary in a great measure to use articles of special design and manufacture.

One Man Did It All.

Thus, for instance, if you refer to the work of Thomas Tredgold, published in London in 1836, you will find that at that time a steam heating engineer would have been in possession of approximate methods of computing the loss of heat radiated from buildings and of corresponding methods of computing the necessary size of radiating surface to supply the required heat. You will find, however, no standard or manufactured forms of heaters or radiating surfaces existed, and that, consequently, it was necessary for the heating engineer to also be his own manufacturer and designer and construct his own heaters, radiators, etc.

Tredgold's book states that steam pipes may be made of cast iron, lead, copper or wrought iron, but in practically all the examples cited, cast iron pipes are shown. Regarding the various joints for pipes, Tredgold gives preference to the flanged joints packed with a flat plait of slightly twisted hemp yarn, which has been previously saturated with stiff white lead paint. He also speaks of making joints by facing the flanges and using for packing a strip of tin. He had even found out at that time that lead was too compressible to be used instead of tin for this purpose, as it contracts permanently. He also speaks of the use of iron cement for flange joints. The use of spigot and faucet joints, which were then common for water pipes, he states, are not well adapted for steam pipes because there is no provision for holding the parts together.

Similar Methods Used.

Tredgold states that wrought iron pipes are joined "by making the lengths that are to be put together each to screw into a piece of pipe of larger diameter," which is practically our method at the present day. For the purpose of taking up expansion, Tredgold recommends that a drum of thin copper be employed, which may be compressed or extended without injury, and states that such drums were used in steam pipes supplied to warm a lecture room at the Royal Institution. He states that the expansion may be taken up by connecting the pipes to a short length of smaller pipes arranged to slide in a stuffing box, but the drum he considers preferable.

Tredgold's work shows that he was well acquainted with the design and construction and use of steam traps for removing the water condensation, two kinds being illustrated, one a float trap, which is perfect in every detail, and the other a siphon trap, made by connecting the return pipe with a U bend, of which the legs were long enough to overcome the pressure due to steam.

The boilers shown in Tredgold's work are of both cast iron and wrought iron. The cast iron boiler is of spherical form, without internal tubes, and it is set in brick casing so arranged as to cause the heated gases to encircle the sphere in a spiral path. The wrought iron boiler is of cylindrical form, without any internal flues, and is set in brickwork so as to be encircled by the heated gases. The boiler is provided with a safety valve opening inward to prevent the formation of a vacuum, and a combined manhole cover and safety valve opening outward, the manhole cover being held on by a bar designed to give way should any excess of pressure come upon the boiler.

Steam Heating System.

In the steam heating system shown by Tredgold, the condensed water is usually returned to the boiler by gravity, his direction for piping being as follows: "The steam pipes proceeding in the nearest course to the highest point where steam is required and then descending to the lowest, from which the small condensed water pipe returns the water to the boiler. Unless you want heat in the places through which this small pipe is to pass, let it be surrounded with slow conductors of heat so that as little as possible may escape."

He states that when the boiler is not sufficiently low to receive the return water, then it may be necessary to adopt other schemes, and he describes a very ingenious method of raising the water of condensation by means of the steam pressure acting on one leg of the U-shaped piece of piping, so connected as to raise the water in the other leg high enough to enter a tank, from which it will flow to the boiler, the water level in the boiler being regulated by a float valve. Tredgold expressed an opinion very unfavorable regarding the use of heating with hot water circulation, and it is quite possible that he did not appreciate the force which caused such circulation.

Tredgold's book is ample evidence that the art of heating with fire places was rather more advanced in his day and time than at present, principally because they were more used. He gives detailed descriptions of fire-place constructions designed to utilize the heat to the best advantage and discusses the methods to be followed in securing perfect combustion and best results.

The treatise on warming buildings, by Charles Hood, written in 1844, is principally devoted to the method of heating with hot water. In general, the same observation regarding practice at his date could be made as in respect to the time of Tredgold. His work shows an excellent understanding of the principles of heating by hot water circulation, his methods being limited by the materials and workmanship available at his time.

Both Tredgold and Hood consider methods of ventilation as well as heating, and approximate rules are given for the motion of air in flues, which is caused by a difference in temperature.

Early Systems Explained.

In 1844, Dr. D. B. Reid wrote a work on the "Theory and Practice of Ventilation," which is a classic in its line, even to the present day. Dr. Reid's treatise shows that the science and art of moving air by difference in temperature was probably as well advanced as at the present time, and he gives detailed drawings of the construction of the ventilating system in the House of Commons and full description of the results of the various experiments in that building. His description of the ventilation in the House of Commons is well worthy a place in our proceedings.

Dr. Reid also describes a number of forms of fans or blowers which indicate that in many cases these were frequently used at that time for forcing in fresh air from the outside or exhausting it from the inside. The blowers, or, as Dr. Reid calls them, "fanners," while well known, were evidently not used to any great extent at his time, probably because of the difficulty of obtaining power to operate them.

The works of Peclet were printed in France about the same time as the books previously referred to, and these also illustrate the same propositions which I stated at the beginning of the article, and will not be further referred to in this particular time and place.

It will, I think, be generally admitted that if all our processes of heating were known in a general way, fifty or sixty years ago, our improvements have been principally in the line of details of manufacture, in adapting materials to a greater field of usefulness, and in working up standards for manufactured articles. The effect of the improvements has been, first a great reduction in the cost of the heating plant; second, greater economy in the use of fuel, and third, a greatly extended application of the improved systems and methods of heating.

Where America Excels.

The American excels practically every other nation, principally by his engineering ability, which is manifested by the production of simple and effective designs, by improved methods of manufacture by which the cost of construction is reduced and the quality improved. The ability of the American engineer along such lines is nowhere better illustrated than by the thousand and one, perhaps ten thousand and one, standard articles which have been constructed to meet every possible phase of demand for the heating and ventilating of buildings. As illustrations we have our standard pipes constructed of steel or wrought iron of any size desired; for these pipes we have an almost countless variety of standard valves and fittings.

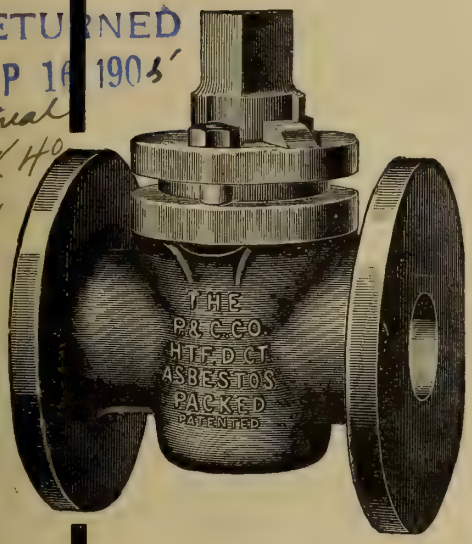
*Read by R. C. Carpenter, before Eleventh Annual Meeting of American Society of Heating and Ventilating Engineers.

Look Out for Imitations

OF

"P & C" ASBESTOS PACKED COCKS

RETURNED
SEP 16 1905
Montreal
Book 40
Page 37



Imitation is the sincerest form of flattery.

There are several imitations of the Pratt & Cady Asbestos Packed Cock now being offered. They are called Asbestos Packed Cocks, but they are the same as all other imitations, i.e., NO GOOD.

Anybody can make an iron or brass Cock and pack it with asbestos and call it an Asbestos Packed Cock. But they can't make one that will last as long as the original Pratt & Cady, or one that will give the same amount of satisfaction. Our P & C Asbestos Packed Cocks are packed with a special preparation of asbestos, and a vulcabeston ring is used on the shoulder of the plug for top packing. These special formulas are known to us alone. When you put in a P & C Asbestos Packed Cock it lasts. When you put in an imitation it wire-draws and blows out. That's the difference. Look out for the P & C trade mark on every Cock you buy.

If your dealer can't supply you write us direct.

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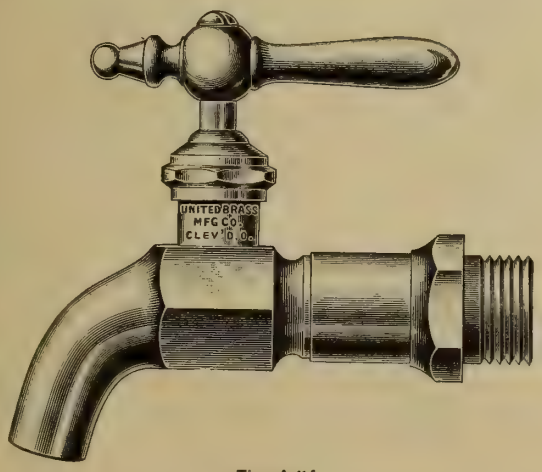


Fig. A-114

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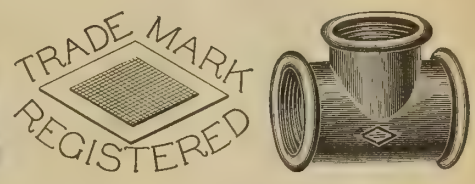
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WRITE FOR CATALOGUE AND DISCOUNTS.

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CLEVELAND, OHIO, U.S.A.





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Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

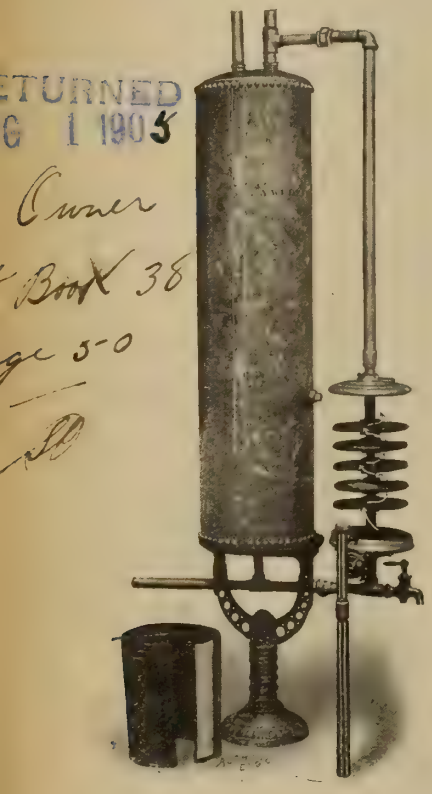
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Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

We have radiators in cast iron or steel of almost endless shape and variety and sufficient to meet almost any possible conception or demand of the user. We have standard heaters designed on scientific principles of so many varying proportions, sizes and shapes that no demand can arise which cannot be filled. This list could be almost indefinitely extended; it serves to show that the art of heating and ventilation has greatly improved in the last half century. My previous remarks show that its improvement has been more greatly in engineering and manufacturing lines than i scientific or philosophical lines; still, I do not wish to convey the impression that we have made no progress in the use of new processes for heating or in the application of scientific principles to new processes, for I think as an illustration it will be found to be true that vacuum systems of heating which are



No. 1005. Fire King Water Heater.

now common with us were not described fifty years ago, and doubtless many of the gentlemen here present will call attention to other recent improvements not referred to in the early publications.

NEW GAS WATER HEATER.

A NEW pattern Fire King gas water heater has been developed by A. Weiskittel & Son, Baltimore, Md., to meet a demand for a low-priced water heater utilizing illuminating gas. It attaches to the side of any kitchen range boiler as an auxiliary heater without disturbing the coal range connection. Hot water for baths or other purposes can be had at any time at small cost. The heating chamber has an exterior double sheet iron casing that can be removed at any time without disconnecting the heater. The arrows show the direction of circulation of the heat through the water chamber, and it will be noted that this circulation is diverted several times in order to obtain a full utilization of the heat. The burner is made in one piece and is of the open star pattern. Its design, as a result of the experience of the makers, is such that combustion is effected without producing any odor whatever. The two cuts show the 1,000 and 1,005 lines, the cylinder covering the coil being removed on the former and raised on the latter without disturbing the pipe connections. Circulars explaining the heaters in detail will be sent to any plumber mentioning Hardware and Metal.

VENTILATING A THEATRE.

IN the design of the heating and ventilating plant in the new Majestic Theatre in Boston, Mass., particular attention was given to securing and distributing evenly the fresh air supply, and arranging the vents so that they may be closed and the air re-circulated locally when the theatre is not in use. Considerable economy is thereby effected.

The usual plenum chamber method is employed with branch delivery ducts leading to all portions of the auditorium. The chamber is formed by the open space or basement area beneath the sloping dress circle floor, into which the large blower delivers fresh air directly. The openings into the lower portion of the auditorium are made through the floor, while delivery to the balconies is similarly made through ducts leading to a supplementary plenum chamber beneath its floor. Vent connections are carried from the dressing and various other auxiliary rooms in the basement and from all portions of the auditorium to the gathering chamber beneath the roof, from which the air is exhausted by power.

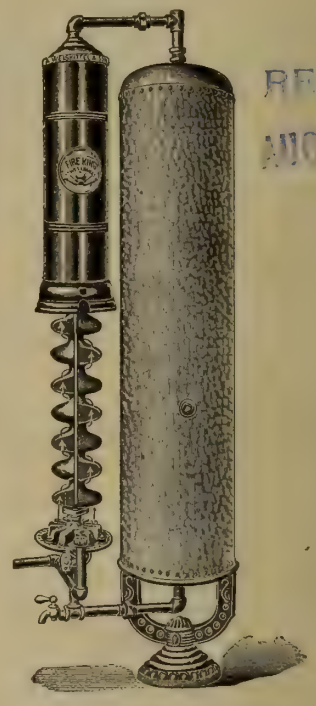
The fresh air for the ventilating system is taken through inlets in the outside wall of the building about 30 feet above the street. From these it is led downward through ducts built in the wall to a large horizontal concrete duct containing the heating coils for cold weather use. The fan is a 7-ft. three-quarter-housed blower, built by the B. F. Sturtevant Co., Boston, Mass., with a direct-connected motor of 10 h.p. capacity, and is located in one corner of the plenum chamber, into which it delivers directly. The air is cleansed by a series of filters of cheese cloth upon light pine frames hung at the bottom of the vertical fresh air flues.

The air passes first through a large primary or tempering heater, and thence to the blower through the main heater, which may, however, be by-passed by the mixing dampers. The primary heater consists of eight sections of coils, six of which have 180 square feet of heating surface and the other two 160 and 140 square feet respectively. The main heater is composed of 1,872 linear feet of 1 in. pipe.

The principal delivery of fresh air to the auditorium proper is made through holes in the floor beneath the chairs. The chair legs away from the aisles are of a special design to cover these openings, which are distributed to the proportion of about one to every three chairs. There are about 300 of these openings in the main floor, each of which has a cross section of about 27 square in. A similar distribution is made from the balcony floor, there being an auxiliary plenum chamber in the space underneath it, which is supplied from the main plenum chamber by two large galvanized iron ducts, each having a cross sectional area of 650 square in. From this chamber air is admitted to the balcony through ½-in. holes in the risers, of which openings there are about 1,200, which gives an even distribution throughout the balcony.

The foul air is vented from the auditorium through openings in the ceiling, while for the spaces beneath the balcony and gallery there are vent openings in the side walls and ceilings, which connect with a Sturtevant motor-driven 60-in. exhauster, of special construction, located in the roof.

A novel feature of the ventilating system is the arrangement for circulating the air in the theatre when not in use. The fresh air inlet ducts leading to the heating coils and blower are provided with openings into the stage area, which are controlled by dampers in connection



No. 1000. Fire King Water Heater.

with those admitting air to the gathering chamber above the auditorium; by closing the latter and opening the connection from the cold air duct to the stage (which closes the connection with outside air) the air within the theatre travels in a closed circuit through the heating coils, plenum chamber, etc., with very economical results in the initial heating of the theatre in cold weather. The dampers in the ceiling of the auditorium, as well as also the main damper in the roof opening, are controlled from the stage.

Mr. A. W. Mann, of the Canada Brass and Supply Co., London, was in Toronto this week.

Mr. J. H. Duxbury, of the Builders' Iron Foundry Co., Providence, R.I., who has been engaged in installing the waterworks pump at Moose Jaw, has left for Brandon, to superintend the installation of a large pumping plant in that city.

Your Customers Like You

because, you are a live, wide-awake business man,
because, you run your store in an attractive, modern manner,
because, they have learned that you are to be depended upon,
because, you have always done the square thing by them—
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With all these points in your favor, you are making a serious mistake—

If you are not handling the NATURO Closet.

Your own popularity, combined with the self-evident merits of these closets, cannot fail to increase your business in an amazing manner.

You are just the very person who should be installing the NATURO—in order to be convinced, look over our illustrated book and read about it. May we send you a copy?

The NATURO Company

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PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, July 28, 1905.

ALL local wholesale supply dealers are thoroughly satisfied with the continued arrival of large orders. Despite the custom of former years the demand has reached a point beyond all anticipation of the most sanguine. The market on a whole is steady and, with the exception of lead pipe, there is not one instance where prices are likely to change. The likelihood of a change in lead pipe is due to the marked increase in pig lead. The advance of the last month has been so great that it is almost impossible to manufacture lead pipe at the prices quoted below and unless the pig lead market weakens the change already stated will likely occur. The unsettled condition of the iron pipe fittings market has almost passed away and a recent action taken by the American manufacturers leads the local wholesale dealers to believe that the present prices will remain steady.

Range Boilers—No change has occurred on this market. Prices are steady and although the demand is good nothing warrants a change. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The market has become very steady owing to the high price of pig lead. The present price paid by the makers of lead pipe warrants them in advancing the price. The demand continues to be strong. We quote as follows: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—The trouble which was brewing on this market last week has almost entirely disappeared and a steadier state of conditions is expected. Our quotations are as follows: Discount on all sizes of nipples up to six inch. 67 1-2 to 70 per cent.

Iron Pipe—From throughout the country comes a brisk demand for iron pipe, and local dealers are purchasing large amounts from the mills in anticipation of the strong market this Fall. Prices are steady and firm. Our quotations are as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 62 1-2 per cent.; 3-8 inch, 62 1-2 per cent.; 1-2 inch, 72 1-2 per cent.; 3-4 inch, and upwards, 74 1-2 per cent. Discounts on galvanized pipe: 1-4 inch. 47 per cent.; 3-8 inch, 47 per cent.; 1-2 inch, 62 per cent.; 3-4 inch and upwards, 64 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised. 61 per cent.

Soil Pipe and Fittings—Fair demand and steady prices are the two most notable features. We quote: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, July 28, 1905.

INTEREST in the plumbing market, this week, centres in lead pipe and brass. Although no change is noted in the price of lead pipe, the recent stiffening in pig lead must result in an early advance. Wise dealers throughout the country are ordering in larger quantities on the strength of this, and some supply houses report very large shipments to the west.

As predicted by Hardware and Metal some time ago, a new price has been fixed on brass, but the list is not yet out, and exact figures are not available. The expectation, however, is that they will show a drop.

Business generally in the plumbing trade continues very brisk and no falling off is expected until late in the Fall. The plumbers have so much work on hand that a good trade is assured the supply houses for next year, as well, in providing for finishing touches to contracts now under way.

Lead Pipe—An early jump in price is certain, though no change is noted this week. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—The demand continues brisk and large sales are reported at unchanged prices. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—The conditions of last week still hold good in these lines. Our quotations are as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Good sales are being made, but no fluctuation in price has occurred. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Trade in this line has been particularly active during the past week. Our quotations are as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Prices on solder have undergone no change in the past week. Our quotations are as follows: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware— Local houses are preparing for large future business n these lines, and several of them are fitting up very handsome show rooms. Prices remain the same as last week. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

A GAS-SAVING DEVICE.

THE amount of light given by a gas burner depends, not on the quantity of gas consumed, but on the character of the flame produced. A gas flame comprises a central dark area and an outer bright yellow spread, the latter, of course, giving the light. As the pressure is increased, the area of the dark part increases more rapidly than the yellow part, until a degree is reached beyond which the dark area increases at the expense of the light-giving part. Under such pressure, one can increase the brilliance of the jet by partly turning off the gas. While the ordinary gas cock thus provides means for regulating the pressure to the proper degree, the

RAMSAYS BARN PAINTS



Make money in Barn Paints. Put it to your farmers. Put it strongly; it will mean money and friendship for you.

Ramsays Outside Paints, or Barn Paints, protects the barn, gives it a touch of color, and at little cost. Don't talk house paints for the barn. It will lose you the order. Talk Ramsays Barn Paints, at $1.00 a gal. It will bring orders and profit.

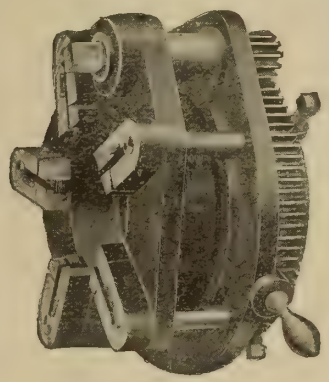
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A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Paint Makers

The "Toledo" Adjustable Die Stock

Threads pipe from 4½ inch to 8 inch inclusive. A new principle in hand power pipe threading. One man can easily thread any size the tool cuts. The tool weighs 200 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.



No. 3, Side View

Ask your jobber about them. If he don't know write us for catalogue and discounts.

THE TOLEDO PIPE THREADING MACHINE CO.

Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR { **ALL CAST** Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
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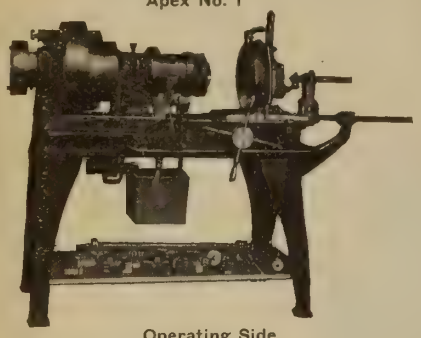
HART & COOLEY CO.
NEW BRITAIN, Conn., U.S.A.



H. & C. No. 100.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1

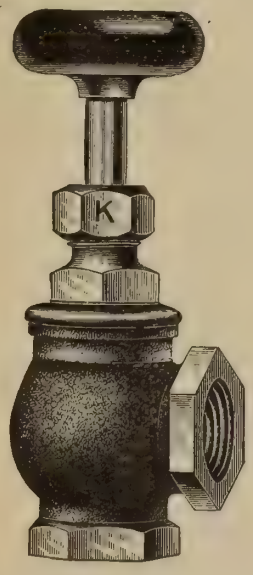


Operating Side

Capacity of this machine from ¼ to 2 inches inclusive. The Adjusting Ring at the back of the vise provides ample adjustment for the variation in size of pipe. The Bearings are very large and heavy, and babbitted with the best anti-friction metal. This machine is especially adapted for making nipples.

Our Catalogue is Interesting.

THE CANADIAN FAIRBANKS CO.
Limited
Sole Agents for Canada
MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Standard and Jenkin Disc Radiator Valves

are perfectly constructed, and of beautiful design. Like all "Kerr" specialties strictly high-grade.

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MANUFACTURERS
WALKERVILLE, ONT., CANADA

average man does not care to be bothered with it, and prefers rather to turn on the full flow of gas, even though it results in less light. For the benefit of the careless man, a device has recently been invented which may be applied to the gas pipe near the meter, to regulate the pressure at all burners in the house. The device comprises a casing interposed between the meter and the burners. A hollow plug fits snugly into the casing. This plug is formed with groups of small perforations, which vary in number corresponding with the numerals printed on the end of the casing. A number of large openings are also provided to admit gas into the plug. A handle is hinged to one end of the plug, by which the latter may be moved to bring any of the groups of perforations into line with the outlet pipe above, and thus govern the pressure of the gas as it passes out of the plug to the burners. A socket is provided in the end wall of the plug, in which the handle may be folded, so that it will lie flush therewith, permitting the cover piece to be swung down. The latter is held closed by snapping it over a lug. Central groove is formed to provide a certain amount of gas to flow constantly, no matter in what position the plug is turned. In a recent test of this gas check a saving of forty per cent. was effected without diminishing the amount of light given. The flame produced was steady, and the flickering and noise which are commonly indicative of an uneconomical use of gas were entirely avoided. A patent on this gas-saving device has been secured by the Standard Development Co., 714 Union street, New Orleans, La.

PLUMBING AND ELECTRICAL.

J. W. Behm, electrician, Moose Jaw, has completed the work of installing the electric fixtures in Smith's Hall and also the hall over Marlatt's drug store. Both these halls have recently been renovated and fitted up.

Two big new railway generators have been installed at the Cataract Power company's sub-station, Hamilton. The new generators have an aggregate of about 2,600 horse-power, and this extra power will be used on the street railway.

Ald. Hugh Wallace and Steve Mellon, Hamilton, have been chosen as delegates to represent the Ambitious City at the Winnipeg Convention of Master Plumbers. Harry Mahoney, Guelph, and F. G. Johnston, Ottawa, are two other Ontario delegates who will make the trip. London will likely send a delegate also.

Next Thursday will be a gala day for Toronto and Buffalo master plumbers, over 100 from the latter city being booked to visit Toronto, coming over on the first boat and returning on the last, and having fun, fast and furious, in the meantime. The oval at Hanlan's Point has been secured and, besides a baseball match, quoit matches, races and the postponed tug-of-war will be pulled off. R. J. Lloyd will cater and dinner will be served promptly at 12 noon, the Toronto delegation being scheduled to cross the water at 9.30 a.m. Supper will be served at 4.15 p.m. The committee arranging the good time are Messrs. K. J. Allison, J. E. Fullerton, D. Menzies, Fred. Armstrong and W. H. Meredith, and they have arranged with the weather man for a wet day.

MANUFACTURERS' AGENTS.

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"DEAN"

The original brand with the coating that lasts.

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POLISHED CANADA PLATES

"FRONTIER"

Black, color and fine polish.

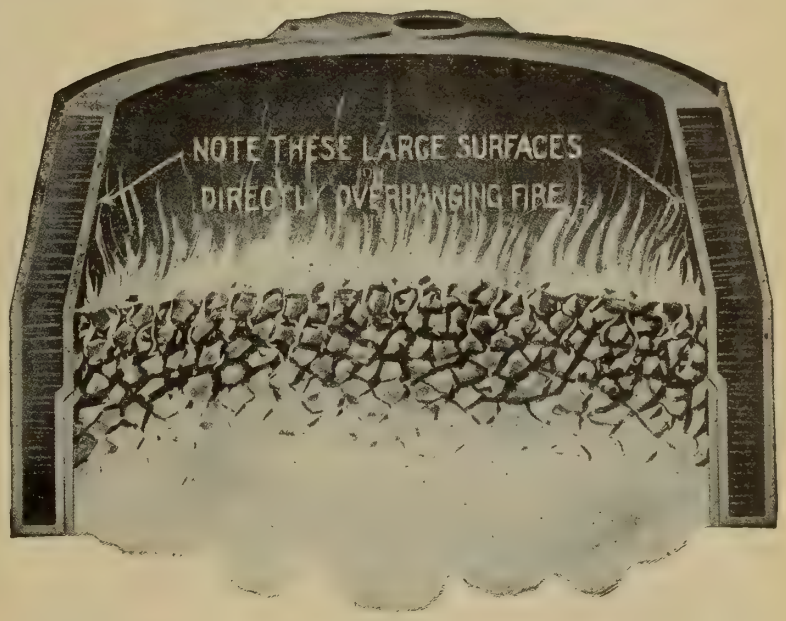
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that seams without breaking.

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MONTREAL
Wholesale Trade Only Supplied

THE OXFORD BOILER

("B" Series.)

DOESN'T WASTE COAL



The heat is checked in its upward rush and largely saved by fire-pot walls that slope inward over the fire and by bell-shaped flues in large lower water section. The mechanical perfection of this arrangement is such that a far greater utilization of heat is possible than with any other boiler.

The Oxford Boiler doesn't get leaky. Steel Push Nipples make metal to metal connections throughout and avoid the use of rubber packing, gaskets or anything likely to get out of order.

The Oxford Boiler is the perfection of household heating apparatus. Our Book will convince you.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

THE MAKING OF RAZORS

THE three essentials of a good razor are fine steel, temper and edge, and unless all three are combined the result is sure to be failure. If in the first place the steel be of poor quality, no amount of tempering or subsequent grinding will overcome the primary fault, or make up for what it originally lacks. On the other hand, many a blade has been spoilt and made totally unfit for the purpose for which it was intended by carelessness in tempering or uneven grinding, so that perfection can only be expected where all three attributes are found in unison.

Of the several processes through which each blade goes, that of grinding is, perhaps, the most important, setting aside of course the first consideration of good steel. The grinding is in some respects the finishing touch, and if improperly done will utterly destroy whatever good qualities the blade originally possessed. Therefore the cutler who seeks to turn out a first-class razor must be careful to secure grinders of reliable character with uniformly steady hands. As every employer of labor knows, a workman of the infallible type is a "rara avis," so in this, as in hundreds of other manufacturing peocesses, hand labor is being replaced by machine work.

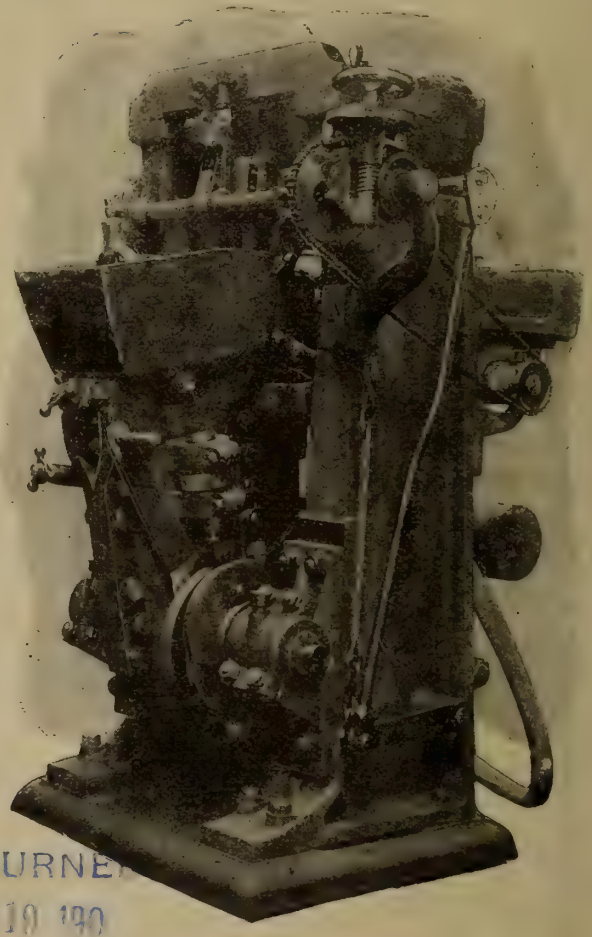
The distinction of having invented an almost perfect machine for grinding belongs to the Wilkinson Sword Co., of London, Eng., sword cutlers to His Majesty the King, whose razors and "Shavers" are daily becoming better known and appreciated by Canadian users and the trade alike. We illustrate their invention herewith. Formerly the workman with more or less unsteady hand ground one side of the blade and then the other on a revolving wheel, and it need hardly be pointed out that under such circumstances there was always a large element of chance in the finish of a razor. Here, however, when once the wheels are set to a perfect guage, any number of blades can be ground with an unvarying accuracy that was an utter impossibility when the process was done by hand. In this illustration the blade can be seen in position ready to pass between the twin grinders.



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AUG 10 190

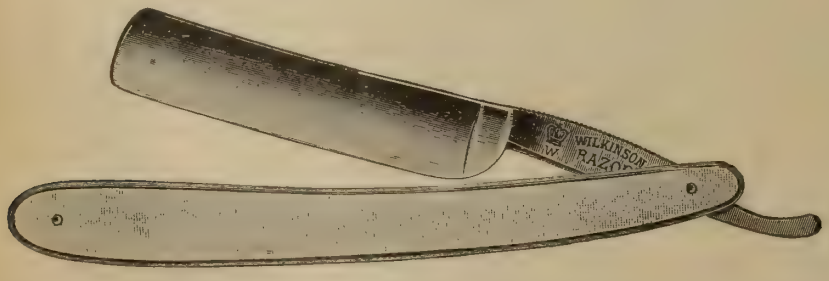


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AUG 10 1905
To Owner
Cut Book 35
Page 87



RETURNED
AUG 10 190

The Wilkinson Sword Co. use nothing but the very finest sword steel in the manufacture of all their cutlery, which embraces single and double edge hunting knives, carvers, razors, "shavers," and pen and pocket cutlery. The steel is produced in their factories in Acton and Sheffield, where the process of manufacture is carried on. Only the best and most experienced men are employed, and "Sword Steel" cutlery is becoming the standard in the Old Country.



In the face of very stiff German and American competition the Wilkinson Patent Safety Shaver enjoys remarkably large sales in many countries, and its points of excellence are being duly recognized in Canada also. It is very similar in appearance to other safeties, but it has one feature that is distinctly different—the spiral roll guard. This anti-friction roller feeds the lather on to the edge of the razor and the part to be shaved, instead of removing it as is the case with many other guards, and it also induces an oblique motion of the razor, which is an acknowledged aid to easy shaving. These "Shavers," as also the razors, are packed in neat cases, single, or containing from two to seven blades. There are also combination sets consisting of razor, strop and stropping machine, an excellent device for retaining the perfect edge on the well-made "Wilkinson" razor.

Mr. R. G. How, of 204 St. James street, Montreal, who represents this house in Canada, is now calling upon the trade, and will shortly open up permanent offices in Montreal, in order to develop Canadian business and give close attention to the requirements of the trade.

The Wilkinson Sword Co. hold many appointments and awards, one of their latest being the gold medal at last year's International Exhibition at the Crystal Palace, London.

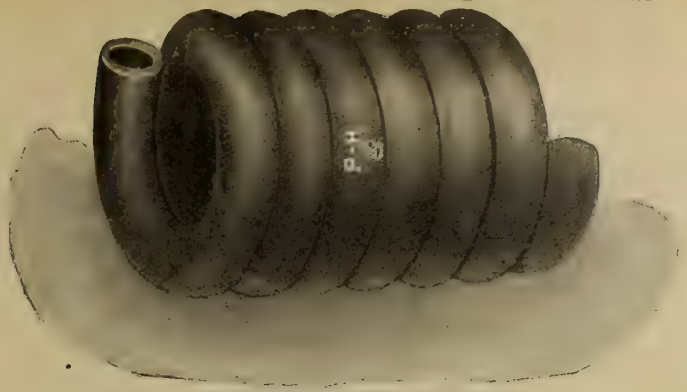
PIPE THAT IS PIPE

THIS IS OUR BRAND

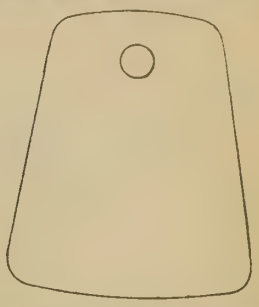
P-H

You Want It.

See that You Get It.



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TAKE NO OTHER

BLACK AND GALVANIZED.

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A Dealer

sold a

METALLIC ASH SIFTER

through popping the question, and the purchaser was so pleased that he told his neighbor. Result: that dealer sold five sifters that week, unsolicited. Were you the dealer? Write for illustrated circular, so you can duplicate his performance.

C. M. CUTTS & CO., Sole Makers, Toronto Junction, Ont.

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Largest Variety, Toilet, Hand, Electric Power

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WE MAKE THEM.

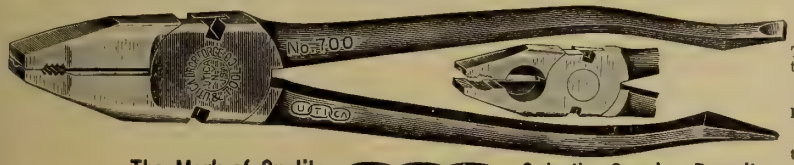
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Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

No. 700. COMBINATION PLIER. QUALITY GUARANTEED.

SIX TOOLS IN ONE { Flat Nose Plier, Burner Plier, Button's Plier, Side Cutting Plier, Screw Driver, Reamer.



ASK YOUR DEALER FOR UTICA TOOLS.

The handles of this plier are so designed that they fit the palm perfectly and will not tire or make the hand sore. Notice the shape of the throat.

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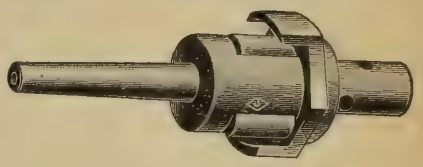
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Only the Genuine Bear it.

UTICA DROP FORGE & TOOL CO.

Canadian Office, 215 Coristine Bldg., MONTREAL. Factory, UTICA, N.Y. 296 BROADWAY, NEW YORK, U.S.A.



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Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

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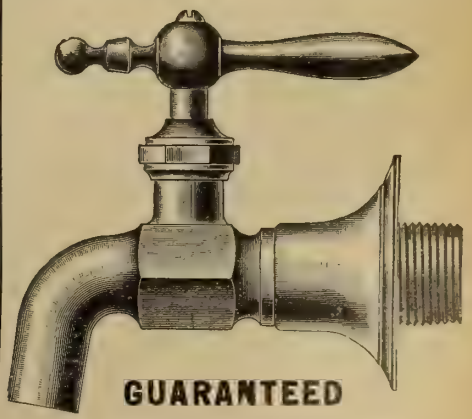
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There can be Trade without much BUSINESS about it.

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The Manufacturers List Co., - - - Toronto.



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GLAUBER, CLEVELAND OHIO, U.S.A.

OIL TEMPERED SPRINGS

FOR

Agricultural Machinery, Mechanical and Electrical Machinery.

Mattresses, Chairs, Couches, Etc.,

Door and Gate Springs, Springs for Spring Hinges and Bicycle Seats,

J. A. HENDERSON, - MONTREAL

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THREE BRANDS

of our Building Paper

Black Diamond (Registered)

Joliette and *Cyclone* (Registered)

The rapid strides made in the building trade during the last two months means that your trade should be increasing. If it is not it must be the fault of the paper you sell. Look into this and LET US KNOW.

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

July 28, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$32 00 $33 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

I Allaway's Best"—Standard Quality.

I C	4 50
I X	5 50
X "	6 50

Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	
" 14x60, " }	7 00
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 25	7 50
" " 26 "	7 75	8 00

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M," Self-hardening		0 50
"J" quality		0 18
"I" "		0 14
"B C" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed steel	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
" ¼ "			5 60
" 5-16 "			4 45
" ⅜ "			3 85
" 7-16 "			3 70
" ½ "			3 55
" 9-16 "			3 45
" ⅝ "			3 35
" ¾ "			3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 25	16 50

Bars.

Cut lengths, round, ¼ to ⅞ in.	21 00	23 00
" " round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
inned copper sheet	24 00
lanished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 41½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks		7 00
Part casks		7 25

LEAD.

Imported Pig, per 100 lb	3 50	3 75
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 06½
Sheets, 3 to 6 lb. "		0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	0 09½

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft.	3 in. rolled rim	$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 77
1¼ "	7 88
1½ "	9 45
2 "	12 60

Malleable Fittings—Canadian discount 35 per cent. American discount 20 to 25 per cent

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 p.c.
Cushion work, discount 50 per cent.
Fuller work, discount 65 per cent.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 55 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 7 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 " "	"	1 90
No .7 Fuller's	"	2 20
No. 4½, "	"	2 35

Patent Compression Cushion, basin cock, hot and cold, per doz., $31; 5 and 10 per cent. discount.

Patent Compression Cushion, bath cock, No. 2208 2 25

Square head brass cocks, discount 55 per cent		
" " iron "	"	60 "

Thompson Smoke-test Machine $25.00

RANGE BOILERS.

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND HOUSEHOLD SHEARS

FULLY WARRANTED

The best Shear on the market for general house use, being an exceptionally fine cutting and wearing Shear.

Manufactured by our secret process.



ASK FOR DISCOUNTS

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 17½
Wiping	0 15½
Refined	0 16½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2		5 05
No. 3		4 12½
No. 4		4 05
Munro's Select Flake White		5 50
Elephant and Decorators' Pure		5 50
Tiger brand, pure		5 75
Decorators' Special for exterior use		5 00
Monarch		5 75
Decorator's Pure		5 50
Essex Genuine		5 00
Sterling Pure		5 75
Island City Pure		5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potte's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls 0 55	0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls. 1 65	1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		

GLUE.

Common	0 08½
French medal	0 14
White, extra	0 22
Gelatine	
Strip	0 20
Coopers	0 20
Huttner	
Ground	0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads. per lb.

Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes. 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list " " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	$ 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt per ton		45 00
Heavy Straw Sheathing per ton		35 00
Dry Sheathing per roll, 400 sq. ft.		0 40
Tar " 400 "		0 50
Dry Fibre " 400 "		0 40
Tarred Fibre " 400 "		0 50
O. K. & I. X. L. " 400 "		0 70
Resin-sized " 400 "		0 45
Oiled Sheathing " 600 "		1 00
Oiled " " 400 "		0 70
Roof Coating, in barrels per gal.		0 17
Roof " small packages "		0 25
Refined Tar per barrel		5 00
Coal Tar "		4 00
Coal Tar, less than barrels per gal.		0 15
Roofing Pitch per 100 lb.	0 80	0 90
Slater's felt per roll		0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

When You See
"RED STARS" and "ANCHORS"

You're all right, providing they appear on the Tarred Felt, Ready Roofing and Building Papers you sell. Those are Paterson's Registered Brands and stand for **Perfection** so far as it can be attained in the manufacture of the above kind of goods.

The Paterson Mfg. Co., Limited
Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70	" 10	"
Kearney & Foot	70	" 10	"
Disston's	70	" 10	"
American	70	" 10	"
J. Barton Smith	70	" 10	"
McClellan	70	" 10	"
Eagle	70	" 10	"
Nicholson, 60 and 10 to 60, 10 and	5	"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65	2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	9 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		2½	0 25

HANDLES.

Axe, 2nd growth, per doz. net	3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" " 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.		
Shingle, Red Ridge 1, per doz	4 40	
" " 2, "	4 85	
Barrel, Underhill	5 00	

HAT ENAMEL.

Henderson & Potts', 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.	
Heavy T and strap, 4-in., per lb	0 06½
" 5-in., "	0 06½
" " 6-in., "	0 06
" " 8-in., "	0 05½
" " 10-in., "	0 05½
Light T and strap, discount 65 and 5 per cent	
Screw hook and hinge—	
6 to 10 in per 100 lb.	4 50
12 in. up	3 25
Spring, No. 20, per gro. pairs	10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.	

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned c 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	....	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval / Head
M.R.M. Co. brand, 55 per cent.
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75
Japanning, 50c. per doz. extra.		

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in.	"	6 00 to	6 50
Daisy, 8 -in.	"	5 25 to	5 75
Philadelphia, 7½-in.	"	6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	10 00
Davidson oilers, discount 40 per cent.	
Zinc and tin, discount 50, 50 and 10 per cent.	
Copper per doz.	1 25	3 50
Brass "	1 50	3 50
Malleable, discount 25 per cent		

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

½ pint in tins	per gross	..	7 80
1 " "	"	...	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent
Wood, fancy Canadian or American 37½ to 40 per cent

RETURNED JUL 29 1905

LABOR SAVING OFFICE DEVICES — TIME IS MONEY

STANDING DESKS

AND EVERY OTHER KIND OF DESKS

Our line of Standing Desks are without exception the best and strongest Standing Desks in America. Big talk! You're right, it is, and merited, too; give us your inspection and you'll decide likewise. Made in 5 ft., 6 ft., 7 ft., 8 ft., double and single sizes, in ¼ Oak, Plain Oak and Elm. Write for Catalogue.



Our Double Standing Desk

THE OFFICE SPECIALTY MFG. CO., Limited

Factories, NEWMARKET. **97-105 Wellington St. West, (near York) TORONTO**

RETURNED JUL 29 1905 Ont. Book 38 Page 46

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal		0 11
Pure Manilla		0 14½
"British" Manilla		0 11
Cotton, 3-16 inch and larger	0 21	0 23
" 5-32 inch	0 25	0 27
" ⅛ inch	0 25	0 28
Russia Deep Sea		0 16
Jute		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet ..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set		0 75
" No. 50, nickle-plated, "		0 80
Common, plain		4 50
" plated		5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Kurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000		7 50
"Eureka" tinned steel, hooks "		8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's...per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century		$6 25
" " No. 1 Maple Leaf		5 25
" " Happy Medium		4 25
" " Watch Spring		4 25
" common frame		4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24		0 85
" 18 x 30		1 00
" 18 x 36		1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 ....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14, $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17 $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75
Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots.		fo

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

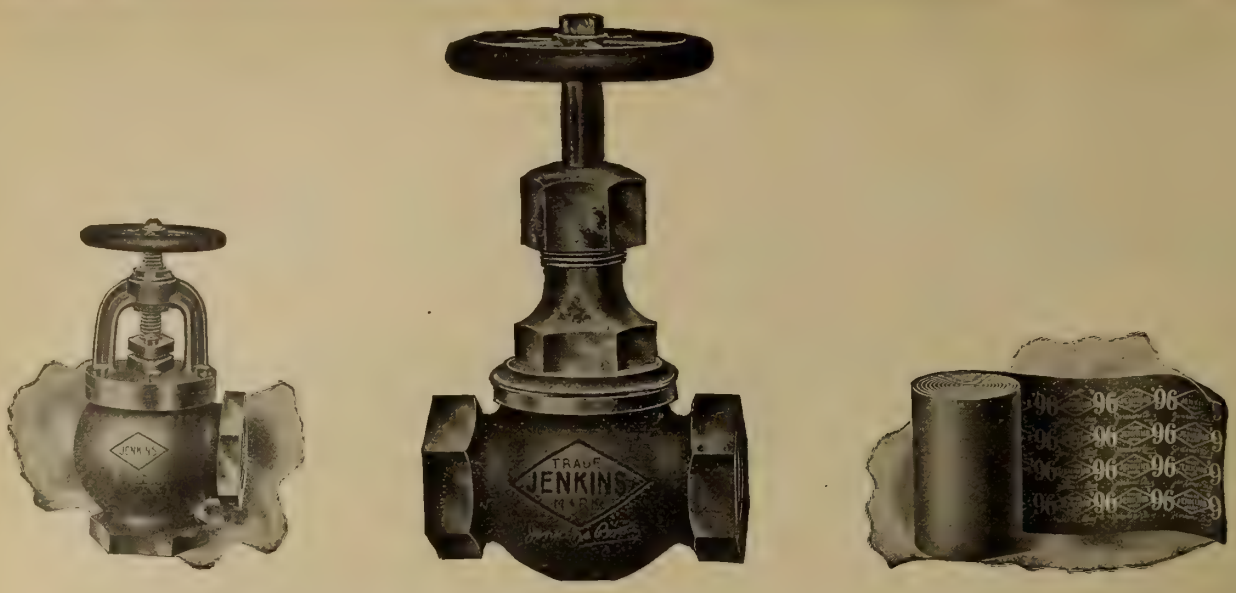
WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.



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Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Summers, John, & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

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Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

Metal Polish, Emery Cloth, etc.
Anglo-Canadian Supply Co., Toronto.
Solarine Company, Chicago.
Oakey, John, & Sons, London, Eng.

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Davidson, Thos., Mfg. Co., Montreal.
Kemp Mfg. Co., Toronto.
McClary Mfg. Co., London, Ont.
Wright, E. T., & Co., Hamilton, Ont.

Mops.
Tarbox Bros., Toronto.

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Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

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Monteith, Nixon & Co., Toronto.

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Office Specialty Mfg. Co., Toronto.

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Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
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Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
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St. George, H. E., London, Ont.
Winnipeg Paint and Glass Co., Winnipeg

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Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
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Naturo Co., Salem, N.J.
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Grey & Bruce Portland Cement Co., Owen Sound.
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Lewis Bros., Montreal.
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Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

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Gurney Foundry Co., Toronto.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
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Taylor-Forbes Co., Guelph, Ont.
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Wright, E. T., & Co., Hamilton.

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Peck Rolling Mills Co., Montreal.

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Steel Trough and Machine Co., Tweed, Ont

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Kennedy Hardware Co., Toronto.
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Luxfer Prism Co., Toronto.

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Wallace-Barnes Co., Bristol, Conn.

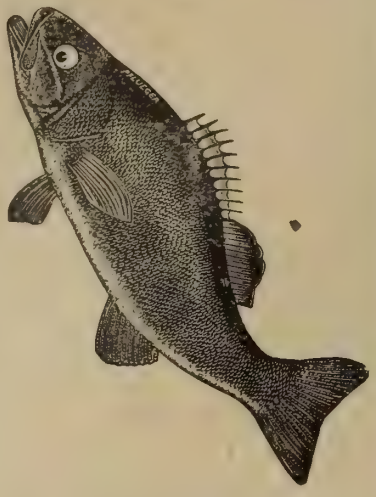
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American Steel and Wire Co., New York, Montreal, Chicago.
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Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
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Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
Montreal Rolling Mills Co., Montreal.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
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Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

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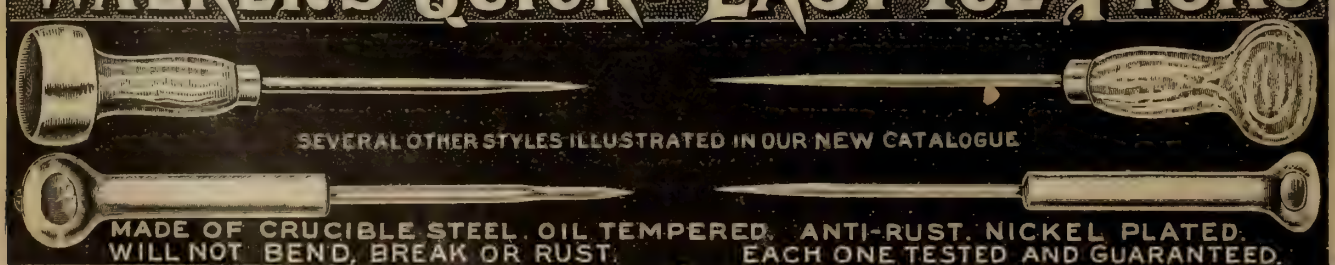
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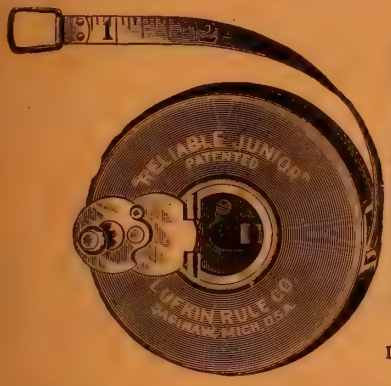
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This adds fifty per cent. to its safety. There's something to travel on, even when the tire is deflated. No matter what happens, it can't come off the wheel and there's absolute freedom from creeping or rolling.

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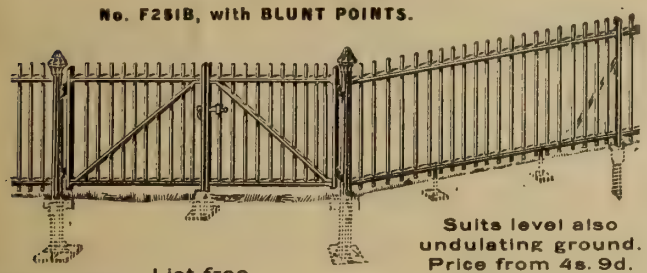
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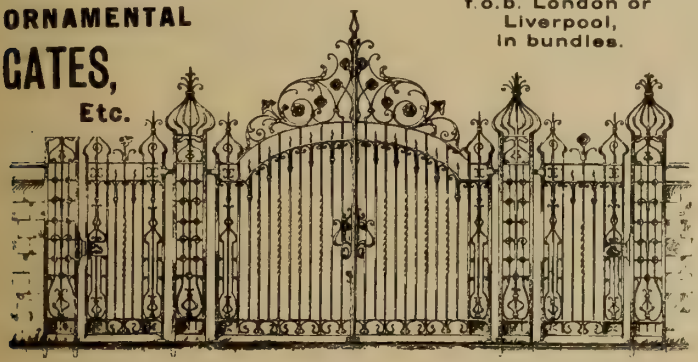


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3 ply
Saturated Tarred Felt
7, 10, 16 oz.
(RED CROSS BRAND)
Dry and Tarred Sheeting
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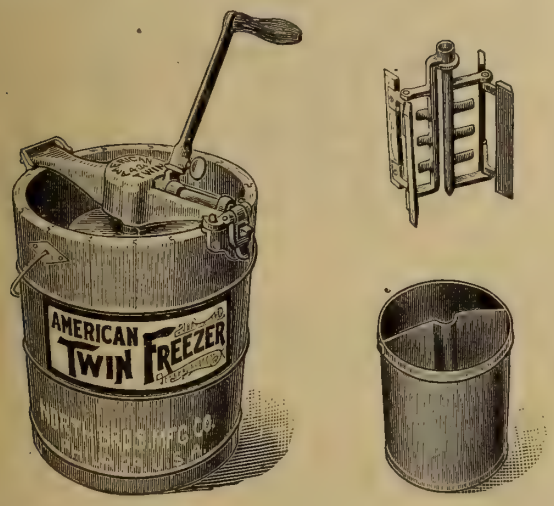
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"AMERICAN" (2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

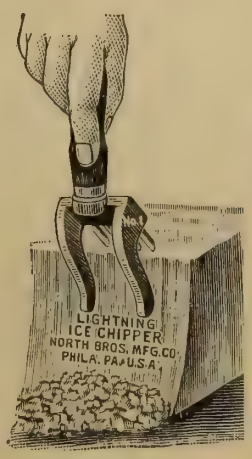
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"LIGHTNING" "GEM" "BLIZZARD"

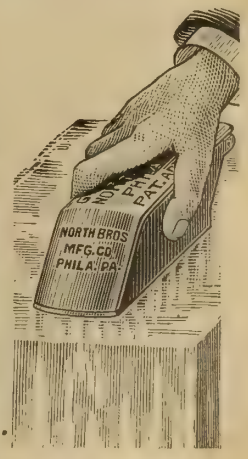


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THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops Cans of Heavy Tin with Drawn Steel Bottoms, **Automatic** Tin Scrapers.







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Davidson's Cereal Steam Cooker and Vegetable Boiler



Stew Pan with Enamel Cover



Wire Egg and Vegetable Boiler



White Cereal Dish

Using the well known application of Steam in a novel and convenieu manner.

The inside Cereal Dish being suspended in the Stew Pan by means of a useful wire basket ; is always surrounded by steam, ensuring the perfect and hygienic cooking of the contents.

The Wire Basket has many additional advantages, as it can be used for either boiling Eggs or Vegetables, and having wire handles at the sides it is very easy to handle.

The inside Cereal Dish is readily removed, and can be used on the dining table in a plated receptacle, or without, as this dish is always supplied in White Enamel only.

SIZES AND DESCRIPTION

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No. 15—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; One 5 quart Cereal Dishl
No. 35—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; Two Cereal Dishes, one each 3 and 5 qt.

Made in "Premier" and "Colonial" Enamelled Steel Ware.

The Thos. Davidson M'f'g Co., Limited

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None Better **Lots Worse**

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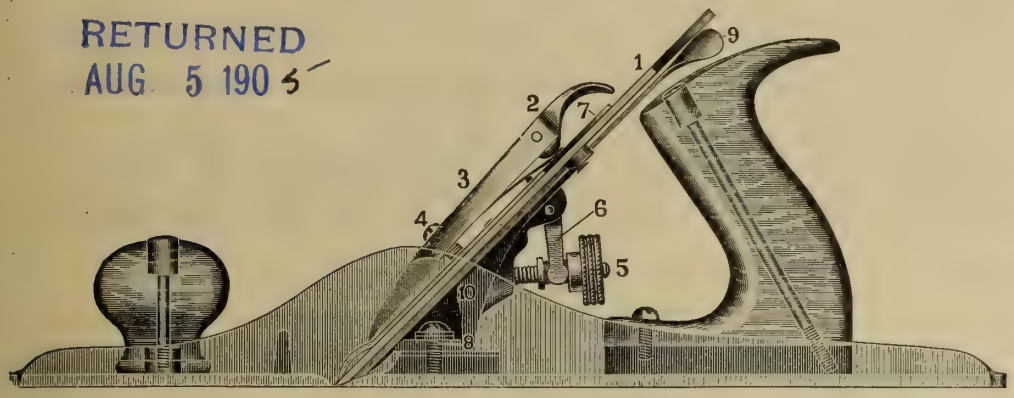
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Two lines of Builders' Hardware that are the Height of Excellence in

CONSTRUCTION, FINISH AND MATERIAL

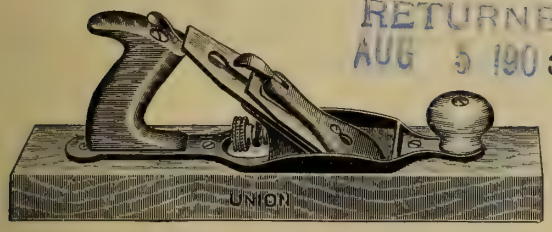
RETURNED AUG 5 1905



The above cut illustrates the UNION jack plane, No. 5, and shows the position of all the parts of the plane.

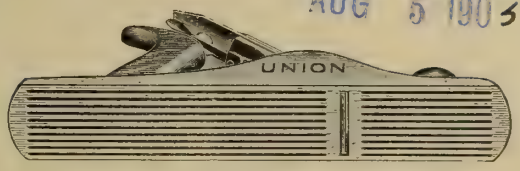
Modern methods of manufacture and improved machinery have been employed to perfect these goods and the success which they have met with in the markets of the world is a testimonial of their merit.

RETURNED AUG 5 1905



UNION adjustable wood plane with iron top.

RETURNED AUG 5 1905

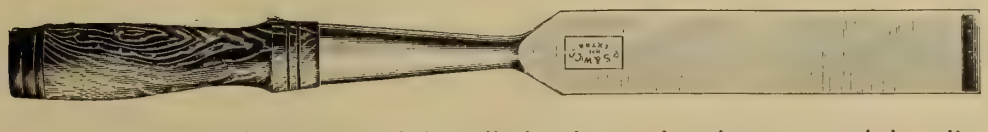


UNION adjustable iron plane with grooved bottom.

All plane irons stamped "UNION" are fully guaranteed.

PECK STOW AND WILCOX CHISELS

RETURNED AUG 5 1905
To Montreal
Cut Book 38
Page 71



We stock these chisels with both plain and bevelled edge. Leather capped handles. Sizes, ⅛-in. to 2-in.; also in sets ⅛-in. to 1½-in., ⅛-in. to 2-in.

WE CARRY
A COMPLETE STOCK OF ALL NUMBERS OF
UNION PLANES

LEWIS BROS., LIMITED

WHOLESALE HARDWARE MERCHANTS

ADDRESS ALL COMMUNICATIONS TO **MONTREAL**

OTTAWA, TORONTO, CALGARY, VANCOUVER.

Best on the Market

FRED'K REYNOLDS, SHEFFIELD, HIGH GRADE HAND FORGED CARVERS

IN CASES

Table Cutlery, etc.

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E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

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BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

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$45,000 in Premiums. - $38,300 in Attractions.

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In an especially built, extensive, fire-proof art gallery will be presented the grandest collection of art and art treasures ever got together on this continent, including loans from the King, the Corporation of the City of London, the great English Universities, the Republic of France, South Kensington Museum, Lord Strathcona, the Lieut.-Governor of Ontario and other distinguished bodies and gentlemen.

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By special command of His Majesty the King, Abbey's noted and historic painting will be on exhibition during the entire fair.

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The greatest pyro military display ever produced before the Canadian people. Scenes in this most recent of the world's most appaling event will be vividly portrayed with real Japanese and Russian soldiery taking part. The fireworks display will be on a brilliant scale, introducing new features of an Oriental character.

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The Process Building, Samples of all the Industries and Resources of the Country, Thousands of Horses, Cattle, Sheep, Swine, Poultry and Dogs, All Canadian Cereals and Minerals, good Trotting and Pacing, a superb Variety Show, the World's latest Inventions.

Special Excursions

Special cheap railway and steamboat excursions have been arranged. Enquire of your nearest station or ticket agent for rates.

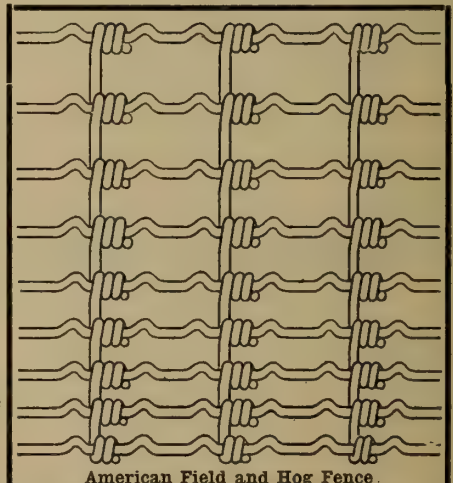
W. K. McNAUGHT, President.

For Prize List, Entry Blanks and Information, address
J. O. ORR, Manager and Secretary.

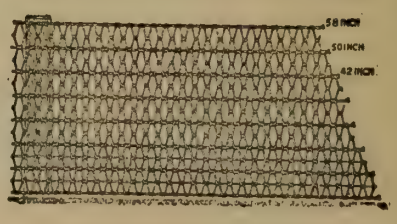
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



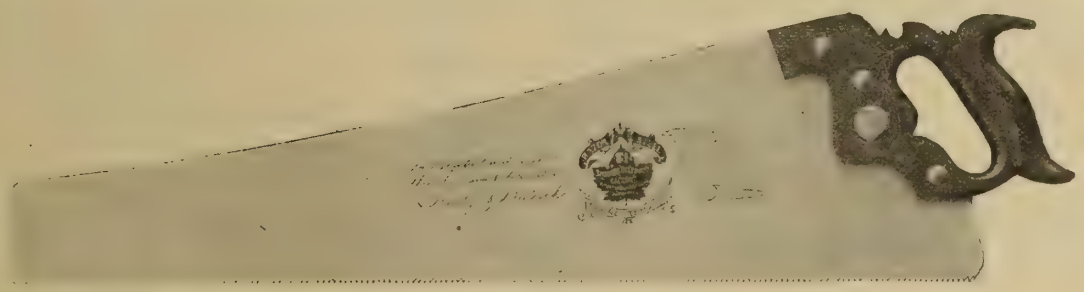
Ellwood Field and Lawn Fence

We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us

THE CANADIAN STEEL AND WIRE CO., LIMITED
WINNIPEG, MAN. HAMILTON, ONT

Canada Leads the World in the Manufacture of HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

WILKINSON RAZORS



Made of the finest Sword Steel.
Absolutely full hollow ground.
Blades $\frac{1}{2}$, $\frac{5}{8}$, $\frac{3}{4}$, $\frac{7}{8}$ inches in width,
Square, round or Irish points.

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, 204 St. James Street, MONTREAL

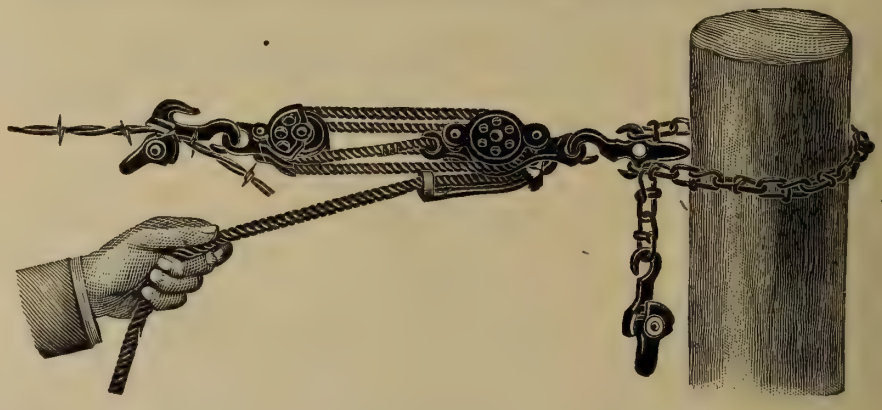
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



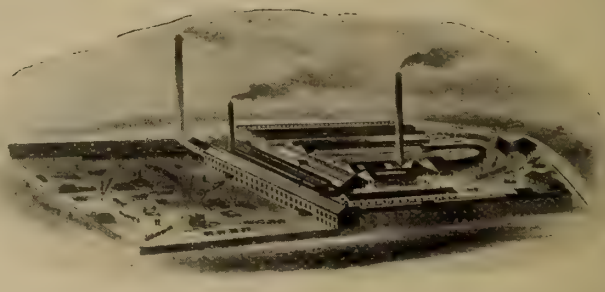
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

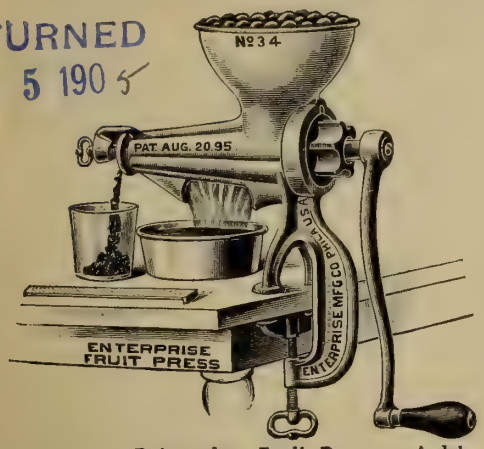
IN ENGLAND

The sheets made by John Summers & Sons, Ltd., in one week, if laid end to end, would measure over 400 miles in length, or equal to the whole length of England.

Agent: F. Hankin, Montreal

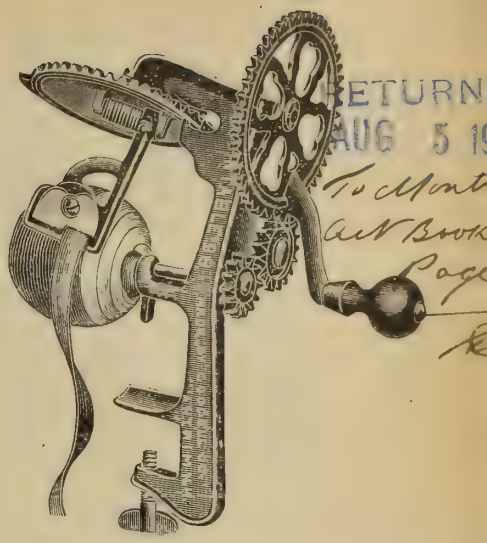
LABOR-SAVING DEVICES

RETURNED
AUG 5 1905



No. 34. Enterprise Fruit Press. A labor saving machine in the making of jellies, marmalades, catsups and fruit wines. In all such work it extracts the juice and ejects the skins and seeds at one operation. Made in two sizes, Nos. 21 and 34.

for the kitchen form a large item in the stock of the modern hardware store. Here are two useful articles that are in season.



Goodell's Turn Table Apple Parer. The skins and juice drop clear of all gears and working parts. Result—the machine does not clog and always works smoothly and easily.

Write for prices, or let our travellers quote you.

Frothingham & Workman, Limited

WHOLESALE

Hardware and Iron Merchants

Montreal, Can.

Nearly a century in the hardware trade.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
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31520.—ENTREE DISH.

Manufacturers of all Kinds of

GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts



31197.—E.P.N.S. CAKE BASKET

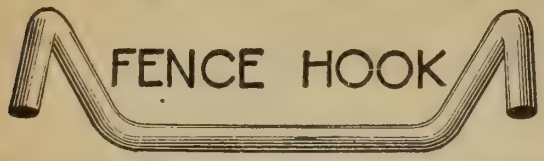
Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

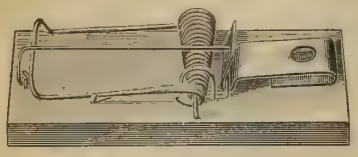
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



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J. M. MAST MANUFACTURING CO.

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GLAZIERS' DIAMONDS

Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

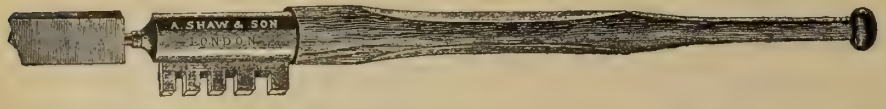
ALSO Established 181

Lead Vices, Carbon Tools, Etc., Etc.,



Agents for Canada: **A. Ramsay & Son Company, Montreal**

GLAZIERS' DIAMONDS



Ahead of all others in quality and workmanship. If sparks of fine quality, set by experts, are what you require, buy Diamonds of A. Shaw & Son's make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO. NEW YORK OFFICE, 155 Chambers St NEWARK, N.J., U.S.A.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

SEYMOUR SHEARS

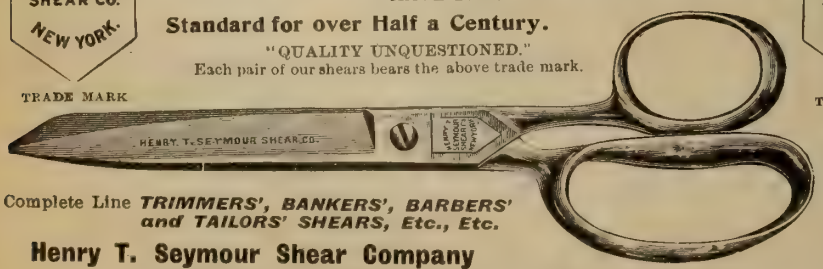
HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

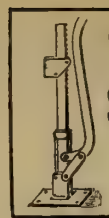


Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents



COVERT MFG. CO.

Troy, N.Y.

Steel Carriage and Wagon Jacks

Harness Snaps, Chain, Rope and Web Goods, etc.

SOLD BY ALL LEADING JOBBERS.

TO MANUFACTURERS' AGENTS:

HARDWARE AND METAL has enquiries from time to time from manufacturers and others wanting representatives in the leading business centres here and abroad.

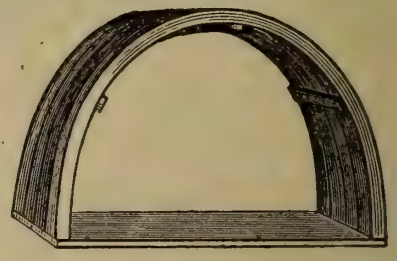
Firms or individua's open for agencies in Canada or abroad may have their names and addresses placed on a special list kept for the information of enquirers in our various offices throughout Canada and in Great Britain without charge.

Address

Business Manager

HARDWARE AND METAL

Montreal and Toronto.



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

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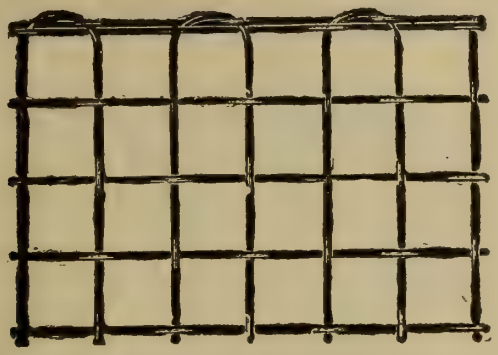
STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

WIRE CLOTH



Special Regalvanized Cloth for Apple and Fruit Drying.

Stock widths, 24, 30 and 36 in.
Other widths and meshes made to order.

Also ½-in. Galvanized Netting.

Stock widths, 24, 30 and 36 in.
Stock lengths, 25 and 50 yards.

Also Wire Cloth and Netting

FOR ALL PURPOSES.

THE B. GREENING WIRE CO.
LIMITED

HAMILTON, ONT. MONTREAL, QUE.

Dillon Hinge-Stay —Fence—



Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

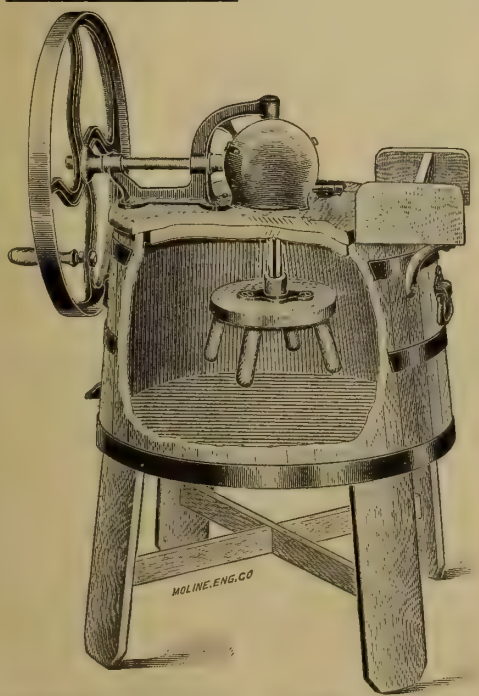
OWEN SOUND WIRE FENCE CO., LIMITED,

Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,

(Eastern and Western Agents,) **Montreal and Winnipeg**

1905 Ocean Wave Washer



Accident Proof! Dust Proof!

SPECIAL FEATURES:

1st. Covered Gearing
which can be opened instantly to expose working mechanism.

2nd. Improved Dasher.
We do not use **wooden** Dasher Pole.

3rd. Mechanical Movement Most Simple ever Constructed.

4th. The Best Seller
because it is more attractive than others.

Sold to only one dealer in each town.
Trial Order will convince.
Write us.

VOSS BROS. MFG. CO.——————DAVENPORT, IOWA, U.S.A.

The perfection of QUALITY AND WORKMANSHIP



No. 87.—"Silver Steel," patent ground, hollow back, highly tempered and finished blade.

OUR HAND SAWS have gained a reputation for perfection of quality and workmanship.

BACK SAWS of the finest quality and finish.

CIRCULAR SAWS of all sizes and for all purposes.

CANADA WEBS, HACK SAWS, MILL SAWS, FILES, EDGE TOOLS, SHOVELS, FORKS.

SPEAR & JACKSON ETNA WORKS SHEFFIELD



Scarcely Any Effort

wringing

The Tarbox Mop Cloth

means scarcely any effort on the part of the housewife, because it is made of cotton—light and elastic. Holds water like a sponge. Suited for any mop. Grades Nos. 1 and 2.

Your Jobber Sells Them.

TARBOX BROS., Toronto

The Best South Wales Produces

in

TERNE PLATES

"DEAN"

The original brand with the coating that lasts.

In

POLISHED CANADA PLATES

"FRONTIER"

Black, color and fine polish.

STEEL

that seams without breaking.

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

IRONSIDE FOR IRON

OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

IRONSIDE'S PATENT WIRE CUTTERS, guaranteed to cut any wire

We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

IRONSIDE, SON & CO., 16 Water Lane Gt. Tower St., E. C **LONDON, ENG.**

Sole Agent for Canada: MR. SYDNEY T. HACKETT, 233 St. James St., Montreal

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; F. H. ANDREWS & SON, Quebec, P.Q.; GEO. WOOD, London, Eng.

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

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THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



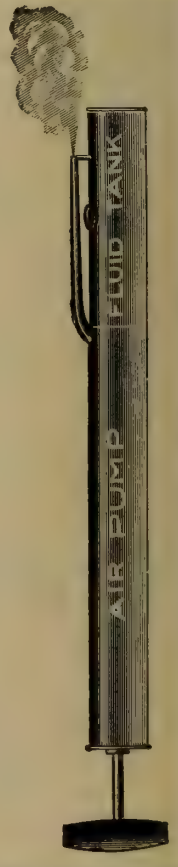
KEMP'S SPRAYERS

The Deluge Sprayer can be supplied with either tin or copper reservoir, as required.

These Sprayers are unexcelled for spraying bushes, plants, potatoes, vines, also horses, cattle, etc.

We carry a large stock and can make prompt shipment.

Prices are low and we will be pleased to quote you.



KEMP MANUFACTURING CO., TORONTO, CANADA

KEMP MFG. AND METAL CO., LIMITED,
McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

Western Hardware and Stove Dealers' Convention

Held in Winnipeg, July 26th and 27th, 1905.

WHEN the organization meeting of this association was held in Winnipeg one year ago, during the week of the Dominion Exhibition, it is doubtful whether the most sanguine of the hard-headed business men who were behind the movement really believed that in twelve months the association would make the substantial progress which was shown at the annual convention held in Winnipeg last week. This progress was evidenced by the unmistakable figures of the secretary's reports and the best proof of the standing of the association is afforded by the membership list printed below. The list includes the large majority of the substantial hardwaremen of Manitoba. It is true that there is still a very small representation of hardwaremen from the Provinces of Saskatchewan and Alberta —if it be permissible to anticipate the effect of the Autonomy bills—and it is true that not all of Manitoba is yet included in the association; but it must be remembered that the active work of organization has been in progress little more than four months since Secretary McRobie's appointment. The next meeting will undoubtedly show a big increase in the membership. In the meantime the following list is very satisfactory:

Leon Abramovich, Winnipeg.
Ashdown & Bossons, Swan River.
Allis & Weidenhammer, Grand View.
Allaire & Bleau, St. Boniface.
Anderson & Thomas, Winnipeg.
F. Anderson, Kenton.
F. J. Arthur, Kenton.
J. H. Ashdown Hardware Co., Winnipeg.
T. J. Agnew, Prince Albert.
Black Bros, Minnedosa.
J. E. Birch & Son, Roland.
D. Bradley, Holmfield.
Brown & Armstrong, Carberry.
W. J. Bristo, Glensmith.
G. N. Brown, Stonewall.
A. P. Brown, Morden.
Brandon Hardware Co., Brandon.
Babb & Kirkland, Portage la Prairie.
Butchart, Adkin & Haslem, Rapid City
R. Bogue, Moose Jaw.
R. J. Brown, Crandall.
Benttner Bros., Carman.
C. A. Baskerville, Winnipeg.
C. C. Baker, Gilbert Plains.
J. O. Cadham, Portage la Prairie.
Wm. Chambers, Hamiota.
Wm. Chalmers, Deloraine.
Chalmers & Watson, Pilot Mound.
R. J. Chalmers, Manitou.
Coleman Bros., Darlingford.
Currie & Mitchell, Souris.
Carswell Bros., Rothwell.
A. E. Code, Morris.
Geo. Clark, Newdale.
Campbell & Ferguson, Waskada.
Cairnes Bros., Holmfield.
C. F. Comer, Calgary.
J. A. Decosse, Somerset.
Jas. Dillon, Qu'Appelle.
A. E. Downey, Swan Lake.
J. A. Dunlop, Dunrae.
E. A. Duggard, Beausejour.
W. H. Dandy, Medora.
A. Douglas, Mackinac.
Doig & Wilcox, Glenboro.
Dean & Co., Elm Creek.
Denmark & Burton, Lauzenbury.
Davis & Wilson, Boissevain.
Duff & Clement, Olds.
A. E. Dykes, Winnipeg.
Eakins & Griffin, Shoal Lake.
Earl & Wolf, Olds.
A. J. Falconer Co., Deloraine.
E. G. Flook, Winnipeg.
G. L. Foerester, Neepawa.
Jas. Foreman, Alexander.
D. Forbes, Rothwell.
France & Miller, Virden.
D. J. Fumerton, Reston.
D. Gibson, Elgin.
J. A. Gilhuly, Arden.
D. B. Graham, Pilot Mound.
D. Gunn, Manitou.
A. F. Grady, McLeod.
C. W. Gaetz, Leduc.
Graham & Rolston, Winnipeg.
Gaudin, Dewitt & Co., Napinka.
J. W. Graham, Carroll.
W. H. Glover, McGregor.
Glenswright Bros., Winnipeg.
Gilmer & Co., Winnipeg.
Hamelin Bros. & Co., Melita.
Hamelin Bros. & Co., Lauder.
B. R. Hamilton Hardware Co., Neepawa.
C. A. Hamilton, Cypress River.
Geo. Huston, Cypress River.
Haines, Wylie & Co., Oxbow.
M. Isbister & Son, Saskatoon.
Hudson's Bay Co., Winnipeg.
H. Hunter, Hartney.
Hunt & Ross, Abernethy.
Hartney Hardware Co., Hartney.
Innisfail Hardware Co., Innisfail.
Irving & Clare, Nutana.
Irving & Son, Glenboro.
W. C. Inglis, Gilbert Plains.
E. T. Johnson, Minto.
E. F. Johnson, Ninga.
A. E. Jones, Milestone.
Geo. Kellington, Neepawa.
M. Keating, La Riviere.
O. B. Manville, Prince Albert.
H. V. Morse, Melita.
R. W. Middlemiss, Nesbitt.
W. P. Landon, Ninga.
W. R. Laviry, Newdale.
Leggett Bros., Rosebank.
Lawrence & Campbell, Miami.
D. McDonald & Co., Shoal Lake.
D. A. McIlquhain, Alexander.
H. McLean, Mather.
J. D. McLean, Shoal Lake.
McLean Bros., Winnipeg.
G. R. McLean, Waskada.
A. J. McPherson, Dauphin.
Jas. McNaughton, Killarney.
J. D. McLaren, Lenore.
McDonald & Fleming, Winnipeg.
J. W. Maguire, Elgin.
J. A. Moxley & Co., Rapid City.
Jas. Martin, Roundthwaite.
Morse Hardware Co., Swan River.
J. Mawson, Roland.
Manitoba Hardware Co., Reston.
Manitoba Hardware Co., Virden.
Moore & Hills, Cartwright.
Mair & Burton, Minnedosa.
Moose Mountain Hardware and Lumber Co., Winnipeg.
R. J. McConnell, Carman.
W. Montgomery, Stonewall.
W. McCrory & Co., Souris.
The McKay Co., Whitewater.
C. E. Neads, Wawanesa.
R. J. Neitherent, Wawanesa.
W. A. Oliver, Ochre River.
W. H. Pain, Milestone.
T. E. Poole, Baldur.
T. J. Parsons, Oak Lake.
D. Phillips, Dominion City.
H. S. Price, Boissevain.
L. H. Phillips, Cartwright.
Phillips Bros., Morris.
W. W. Ruttan, Melfort.
J. Rinn, Elm Creek.
J. E. Riley, Winnipeg.
J. G. Rattray, Pipestone.
Robertson Bros., Elgin.
G. R. Taylor, Crystal City.
Geo. Thompson, Elkhorn.
C. D. Sparrow, Fairfax.
D. Spear, Holland.
F. F. Sparks, Belmont.
F. N. Smith, McCreary.
H. Smith Hardware Co., Brandon.
J. Seve, Laurier.
J. Sinclare, Winnipeg.
J. Smith, Belmont.
J. P. Shannon, Carnduff.
L. F. Sherrin, Holland.
Schantz Bros., Rocanville.
Souris Hardware Co., Souris.
Sutherland & Stelck, Dauphin.
Scott Bros., Newdale.
Skelding & McElroy, Neepawa.
W. H. Sparling, Minnedosa.
W. & J. Stewart, Winkler.
W. & J. Stewart, Plum Coulee.
W. T. Speed, Austin.
Taylor & Mitchell, Birtle.
W. A. Templeton, Winnipeg.
C. F. Turner, Dauphin.
G. L. Vrooman, Lethbridge.
T. H. Whale, Winnipegosis.
Robert Wyatt, Winnipeg.
J. H. Webster, Morningside.
C. A. B. Whiting, Winnipeg.
A. E. Walker & Son, Grenfell.
Wankel & Barr, Oak River.
Winnipeg Paint & Glass Co., Winnipeg.
Wyatt & Clark, Winnipeg.
Western Hardware Co., Regina.
Williams Bros., Gladstone.
Weir & Wilson, Winnipeg.
Watt & Gordon, Winnipeg.
Walton & Cleave, Carman.
J. Yellowleese, Ninette.

OPENING MEETING.

President J. A. Lindsay was present for a few minutes at the opening of the first meeting on Wednesday morning, July 26. Owing to illness, which was very much regretted by his many friends in the association, he was unable to stay for the meetings, and the chair was taken by A. J. Falconer, of Deloraine. In opening the meeting, Mr. Falconer reviewed the work of the association. He spoke as follows:

Chairman's Address.

"Gentlemen of the Western Retail Hardware and Stove Dealers' Association, I occupy this position to-day on

account of the illness of our president, Mr. Lindsay, and in the absence of our vice-president, Mr. Wyatt. You all agree with me that Mr. Lindsay is the best man we have got for the position he holds, and we regret exceedingly his ill health, but we hope soon to see him in harness again. He was here for a few moments this morning, but suffered from a nervous attack, and was compelled to go away again. We have not a very representative meeting here to-day, but all those who are here are very much interested in this association work. I think, perhaps, the Summer time is not the best time in which to hold our annual meetings; we should have a much better gathering were it held in the Winter.

"I hold in my hand the verbatim report of our last meeting. The item which will concern the meeting most is the appointment of a secretary. The executive left it with the association at Winnipeg to choose a man, and they have chosen Mr. McRobie, and I think they are wise in their selection. They have got a good man. It is very gratifying to me to be able to tell you that of all the hardwaremen called upon, we have only received two absolute refusals to join our association, and we have, I believe, about 140 paid-up members and a few not yet paid up. Now, that is very good for one year, and we hope to increase that by extending into the Territories and other places in Manitoba, where, up to the present, our secretary has been unable to call. There will be more business brought before you to-day, and I won't keep you very long with any remarks of my own. It was thought since this meeting was so small that we defer the election of officers till the Winter. That is, of course, a matter for yourselves to decide. There is also a matter that affects every one of us that will be brought up, and that is the credit system. It is highly desirable that considerable credit should be done away with, and the time for giving credit shortened. I think that from November to the beginning of April we might do a cash business only, and from that time we might give credit. I am pretty sure that we have to do business on smaller margins than the department stores, and they get cash for their goods. Mr. Price will have something to say in this matter."

Committee Report.

The committee composed of J. A. Lindsay, Oliver Gilmer, H. S. Price and C. A. Baskerville, appointed to secure a secretary-organizer for the association, reported the engagement of J. E. McRobie, and on motion of W. H. Gordon and J. A. Gilhuly, the report was unanimously adopted.

Secretary's Report.

Secretary McRobie then presented the financial report of the association showing a satisfactory balance in the treasury. His general report was as follows:

"In presenting you this, my first report since my appointment as your secretary, treasurer and organizer, I desire to thank the many dealers throughout the country, whom I have had the pleasure of calling on. I must say that I have been met by them one and all in the most friendly spirit, and when I state that out of some hundred dealers called on, of that number only six refused to become members of your association, it is a pretty sure indication that this association is wanted by the dealers.

"I greatly regret that I have been unable to call on the majority of the trade previous to this meeting. I found after I started out that it would take a great deal longer time than I anticipated, inasmuch as I had to settle each town one with the other. In the several districts the greatest difficulty I have had to contend with (and in making this statement I want you to understand that I do so in the best interests of yourselves) was the want of that confidence that should be between men in the same line of business as yourselves, and the great difficulty of bringing you together to talk it over and come to some mutual understanding on business lines equally beneficial to you all.

"I have had, from a standpoint of success, I think, a pretty good showing, as referred to above. I was enabled to call on a hundred dealers, and all so canvassed became members of your association or expressed themselves in favor of it, but owing to so-called want of confidence in his opposition, none of them would be the first to put aside this false feeling and meet his brother dealer as he should. And right here I would like to say that the impression that would be forced upon anyone in my position if he did not know you, probably better than you knew yourselves, would be that according to each of your opinions of each other there was not an honest hardwareman in the province to-day.

"I have not gone into a detailed statement here of the work accomplished, territory covered, or members added; this can be had if necessary, from the roll book or traveling expense account.

"It has been demonstrated that with a little co-operation on the part of each, price cutting on staple lines can be, and has been, overcome in a good many sections. Why not in all? And if you can accomplish this on the price question, why not on credits?

"There is not one of you but has expressed himself as being strongly opposed to the system. Why not act upon it as you are doing on staple goods? Cut the system down to a minimum as a start, give it a fair trial together, and I am sure that it will work to your advantage.

"Now, gentlemen, I could continue for a long time to enumerate the many instances that have come to my notice while traveling among you, of trifles that are preventing a great number of you from doing your business as it should be done; small things in themselves, but enough to cause you a great deal of unrest, loss of legitimate profit, and, what is of a great deal more moment, loss of that business integrity, and relish of a hearty enjoyment of your daily business that most of you would otherwise enjoy from day to day.

"Gentlemen, this matter lies in your own hands; it is up to yourselves to to make this association a fact, and a solid fact at that. You have the initiative in your own hands. It's for you to decide. Your secretary cannot do your work; he can help you to accomplish it, but you must work, and work consistently with him or otherwise it won't do any good.

"Your association does not desire a membership from any but those who join with the determination to maintain and carry out any arrangement that may be entered into from time to time.

"(Signed) J. E. McROBIE,
"Secretary-Treasurer."

On motion of J. E. McRobie and W. J. Coleman, the report was adopted.

Two Associations or One?

Chairman Falconer then raised the question of the advisability of continuing both the Western and Manitoba Associations. "We meet here as the Western Association, and as you know we have also the Manitoba Association, of which I happen to be president, and Mr. Johnson, who is here with us, is treasurer; and I cannot see myself what the sense or object can be in having two associations when the western can do the work of both, and, as a matter of fact, is actually doing it now. For my own part I would like to see the western absorbed, in the meantime anyway, as we have really no need for two sets of officers. I should like to hear from Mr. Johnson in this matter."

E. H. Johnson (Brandon) rising, stated that he had $207 on hand belonging to the Manitoba Association. He also said: "I think one association is all we want; in fact, I have done no business since Mr. McRobie was appointed. Since I returned home in February I have not taken more than $10, so I really see no necessity for this Manitoba Association." The chairman said that this was the general opinion that there was no need for the two associations, at least not for a good many years, and if it was needed in the future it could be revived.

The Credit System.

The burning question in the west is the evil of long credits and the meeting had not been long in progress when the question came up for discussion. It was introduced by H. S. Price, of Boissevain, who spoke in part as follows: "This question was broached last meeting, and since that time I have been making inquiries, and speaking to different hardwaremen in the country, with the result that the opinion of all seems to be that something should be done to shorten credits. My own opinion is that it would be best to close down all credit after the 1st of November each year until the following 1st of May, as in that way we should have six months in which to clear our accounts of anything left outstanding. There is, in my opinion, no reason whatever why farmers should not be able to pay for their goods within the time mentioned. We all have the same troubles in connection with the credit system, and there is no reason why matters should not be improved. I do not know how such action would affect the hardware business. It

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would certainly have some effect. I think this matter well worth discussing by the members of this association."

Chairman Falconer agreed that it was a matter of vital importance to the hardware trade in Manitoba. He believed it would be a very good thing if business could be done for cash only between Nov. 1 and April 1.

R. J. McConnell, Carman, agreed with Mr. Price, and would like to see his idea carried out. He said that sometimes the stories of price cutting which got about were not always correct. When a farmer told such a tale, it was only fair to each other to find out if it were true, because sometimes a farmer might be mistaken, and sometimes he might be a liar. (Laughter.)

Fred. Babb, Portage la Prairie, said: "I am very much pleased to hear from my friend from Carman. We have a large dealer in our town who, up to the present time, has refused to join the association, and, unfortunately, until we can get him into line very little can be done with us. Our old credit system has been run so long that it is like pulling teeth to change it, but all I can say is that the next time our secretary comes to Portage I would suggest that he bring a shot gun. He might be able to use it. I am sorry to have to say so, but I am afraid that while things are as they are in Portage la Prairie, we could not adopt the suggested system."

W. J. Coleman, Darlingford, said that in his part of the country the crops were a little later than elsewhere, and suggested the 15th of November to the 1st of May as a better period. He advised Mr. McRobie to get hot after Morden, as that town was the greatest stumbling block to good work of the association in his town.

E. H. Johnson explained the peculiar conditions in Brandon. "With regard to the credit system in Brandon, we are not like smaller towns. The cutting off of the credit system during the period mentioned, with them, would have to be limited to farmers. It could not apply to the city trade. The association works well in Brandon, in spite of the fact that the largest dealer there does not yet belong to it."

J. Rinn, Elm Creek, was emphatic in his denunciation of the credit system. "Credit is the ruination of retailers. Wholesalers are prompt enough to draw a line at 30 or 60 days, but we have to give unlimited time to our customers. We find our purchasers obtain money by some means to forward to Eaton or Stanley Mills, and if we did a cash business we would certainly get a portion of this money."

General Discussion.

The chairman said he had it on good authority that the cash sales at Eaton's the opening day amounted to $40,000.

Secretary McRobie believed the best remedy would be a big difference between the cash and credit prices of goods.

Fred. Babb (Portage la Prairie) said that there were many straight and many crooked men, and he was afraid in many cases if credit was discontinued during five or six months each year that some merchants would use it as a means of getting business from farmers who were known to be good by offering them long credit.

Mr. Rinn thought the association could get the wholesalers to assist them.

Mr. Babb thought not, as many agents would even peddle to the farmers when they could not get what they thought was enough business out of a town.

Mr. Curran was of opinion that before anything very substantial could be effected, the wholesalers would have to join with the association.

Decision Reached.

Finally, on motion of W. J. Coleman, Darlingford, and J. McNaughton, Killarney, the following resolution was adopted: "That this association instruct our secretary to write all members of association suggesting a meeting of members of local districts to meet and arrange the curtailing of credits to suit their particular districts, suggesting a date when books shall be closed in each season, and suggesting, if possible, to have all books closed from Nov. 1 to May 1."

Notice of Motion.

W. Gordon, Winnipeg, and A. P. Macdonald, Winnipeg, then handed the secretary the following notice of motion: "I will move, at our next semi-annual meeting, February, 1906, that the Manitoba and Western Retail Hardware and Stove Dealers' Associations be merged into one, and known as the 'Western Retail Hardware and Stove Dealers' Association.' "

Price Committee.

A committee, composed of the gentlemen whose names appear below, was appointed to confer on the remedy for price cutting. This committee consisted of Messrs. Rinn, Shannon, Gilhuly, Martin, Taylor, McNaughton, Babb, Coleman, Curran, Barr, Gordon, McDonald.

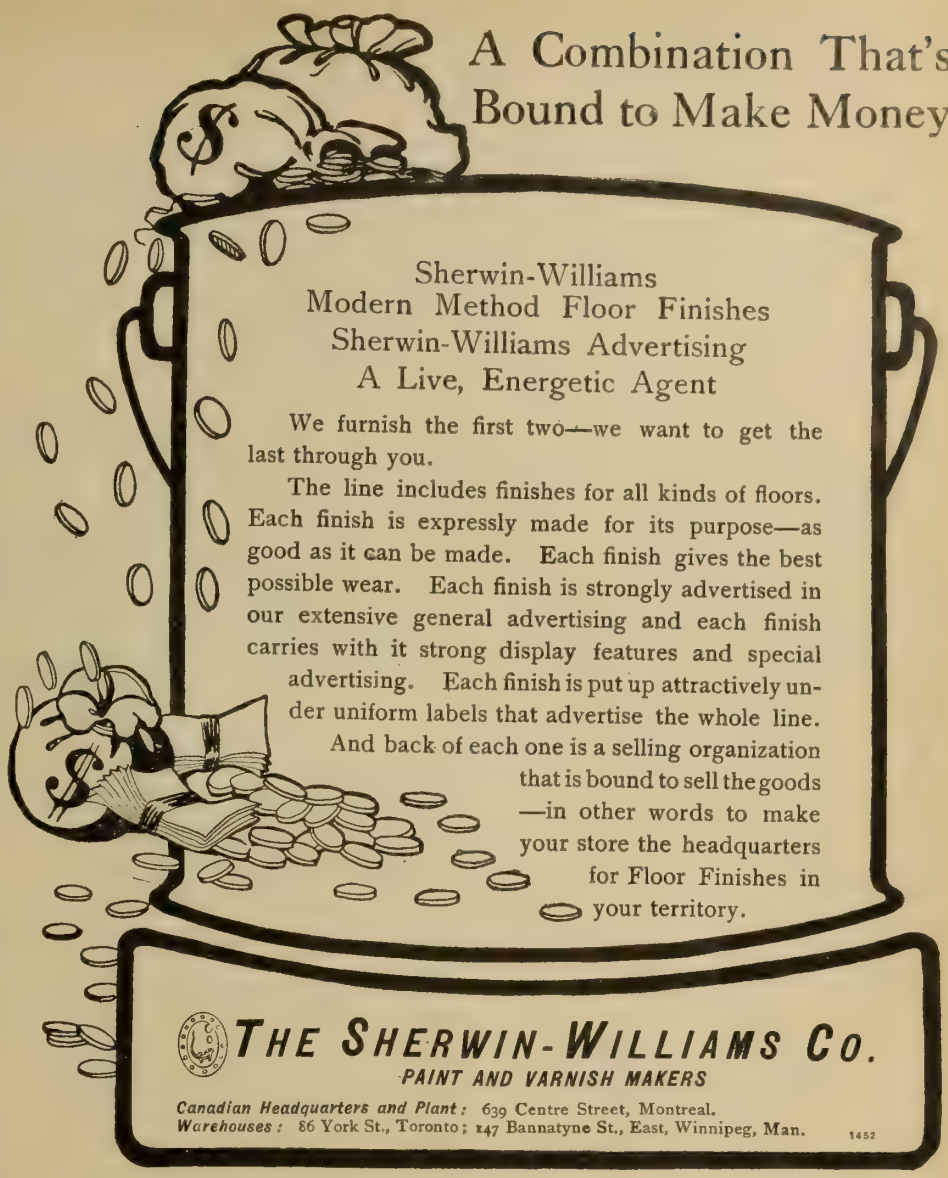
The convention then adjourned to meet Thursday morning.

CONCLUDING SESSION.

At Thursday morning's meeting, Robert Wyatt, Winnipeg, presided. He said: "I am sorry not to have been able to attend yesterday, more particularly as I am to some extent unacquainted with the business transacted. However, the matters to be considered are in your own hands, so I will not take up your time with any remarks of my own, but just proceed with the business of the day. I might say that the questions before us for discussion this morning are 'Insurance' and 'Prevention of Price Cutting.' "

Constitution Revision.

A motion was made by W. H. Gordon, seconded by B. McConnell, that a committee consisting of H. S. Price, Boissevain, the secretary, and the mover



be appointed to revise the constitution and by-laws of the western association, such revisions to be voted on and passed at our next meeting in February, without the usual four weeks' notice of motion as per our present by-law. (Carried.)

Fire Insurance.

The question of mutual fire insurance was then introduced by the chairman, who regretted the absence of Oliver Gilmer, the member most interested in this subject.

A. P. Macdonald did not think that anything could be done in the matter at this meeting as he did not think it large enough. He believed the principle was good, but he would do nothing until the February meeting.

Secretary McRobie suggested the appointment of a committee to take the matter up and get it in shape before the next meeting. Definite information was required.

On motion of A. P. Macdonald and E. H. Johnson, a committee was appointed, composed of Messrs. Gilmer, Babb, McRobie and Thompson, to gather information about the mutual fire insurance systems of other hardware associations and report at the next meeting.

Price Cutting.

E. H. Johnson thought the only feasible course was for the secretary to take measures to prevent price cutting, using the Winnipeg prices as his basis. Every dealer knew his freight rates from Winnipeg.

Fred. Babb, Portage la Prairie: "I may say that the way we arrive at it is by calling a meeting of the merchants of several towns in our district and adjusting figures, and so far the scheme has worked satisfactorily. I really think that the only way to arrive at the matter would be for the secretary to suggest the prices and the merchants then to arrive at a satisfactory agreement according to local conditions."

J. McNaughton, Killarney: "The line of action we took last April is working very satisfactorily, and I think myself the only proper way is to group the different places into districts, making each district as large as possible, then have the merchants form their own lists, putting their own prices, when I think they would stay by them."

W. J. Coleman, Darlingford: "With regard to forming into districts, I am not quite sure that this would be as satisfactory as could be desired, particularly for places on the border of two or more districts. After all, the freight rates are not so very different, and I think it would be desirable to have uniform prices if possible."

E. H. Johnson, Brandon: "Our district make their own prices, and when there is a change they are easily adjusted. Think of the immense amount of trouble involved if the secretary had to advise every change."

H. S. Price, Boissevain: "I think that can be easily adjusted. Suppose, for instance, there was a change in the price of lead or oil, then it would be up to the secretary to advise us, when we could make the necessary change. My idea of a uniform list was as a starter only; after it was once going, the maintenance of the system would be easy."

Secretary McRobie: "What I would like this meeting to decide, as it will be too late at the next meeting, is to set your base on wire and nails and staple goods, so that when jobbers go out next Fall and quote for next delivery, dealers can be notified of a uniform selling base from Winnipeg, and you will all have the same price."

Decision Reached.

Finally, on motion of G. H. Clare, Saskatoon, and R. J. McConnell, Edmonton, it was decided that the Winnipeg retail prices be taken as the basis for outside prices, freight charges to be added.

Letters.

The following letter was received from Hardware and Metal:

Winnipeg, July 27, 1905.

J. E. McRobie,
Sec'y Retail Hardware Association,
Winnipeg:

Dear Mr. McRobie,—It is not necessary for us to assure you that in your efforts to promote the organization of the Retail Hardware Association you may always rely upon the hearty co-operation of Hardware and Metal. But we are anxious that the association should be given much more prominence in our paper, as we believe that publicity in a strictly trade paper (the circulation of which is confined entirely to hardwaremen) will always be a benefit to you. We would like to see an Association Department in our paper every week or every alternate week, and we are prepared to place at your disposal a page of the paper every week (if you can use that much space) to be devoted entirely to association news. In the editing of that page we would, of course, require your constant assistance in furnishing us with the right kind of news.

Whether you see fit to accept this offer or not you may rely upon the support of Hardware and Metal whenever you require it.

Yours truly,
The MacLean Pub. Co., Ltd.
Per F. R. M.

Letters of regret at their inability to attend were read by Secretary McRobie from Messrs. Comer, Calgary; Johnston, Ninga; Priestholdt Bros., Hanley, and others.

Thanks to Press.

On motion of A. P. Macdonald and H. S. Price, a hearty vote of thanks was passed to Hardware and Metal and the Commercial for assistance given the association since the last meeting.

A. H. Bailey responded for the Commercial, and F. R. Munro for Hardware and Metal. Both speakers expressed their appreciation of the thanks tendered them for the efforts of their papers to assist the organization. They urged the association to make greater use of their trade papers.

The convention then adjourned.

NEW STEEL COMPANY.

London capitalists are interested in the new steel company, to be known as the London Tool Company, and which has secured a site of eight acres on Lottridge street, Hamilton. It is the intention of the company to erect a large factory.

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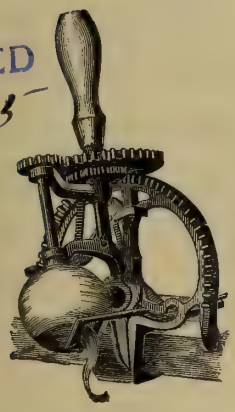
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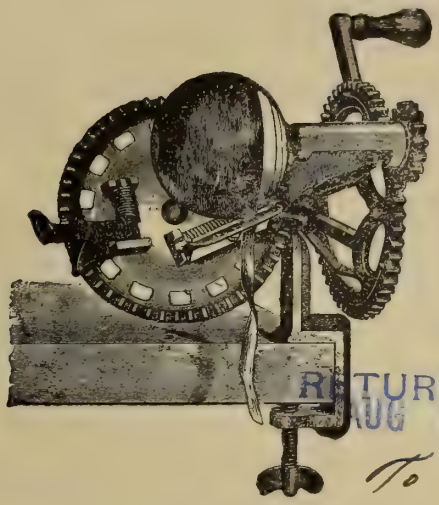
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APPLE PARERS

RETURNED AUG 5 1905

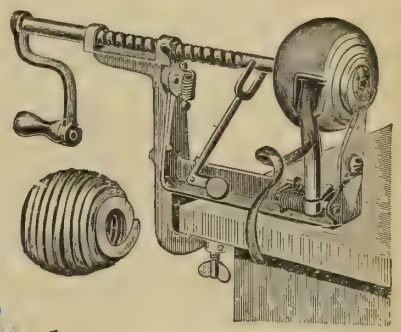


"New Lightning."



"Rocking Table."

RETURNED AUG 5 1905
To Owner
Cut Book 38
page 73

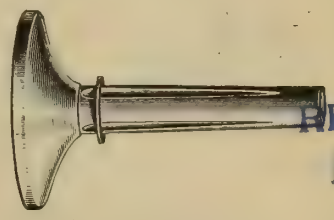


"Little Star."

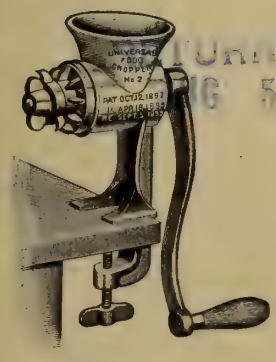
MEAT CHOPPERS



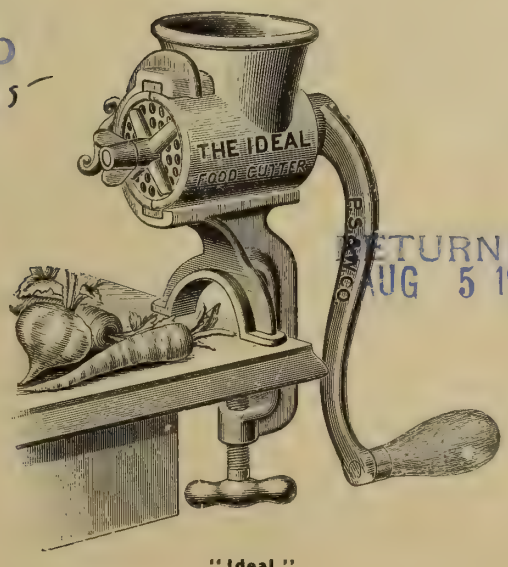
"Universal" Stuffer Attachment.



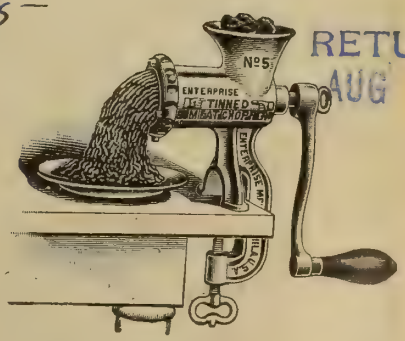
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"Universal."



"Ideal."



"Enterprise."

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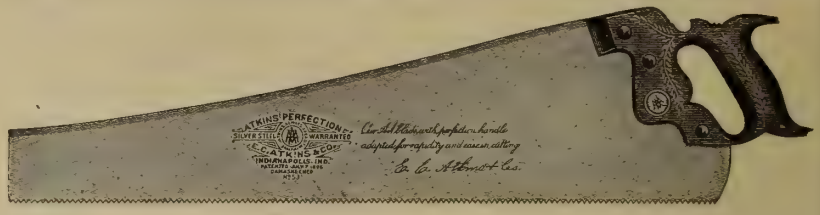
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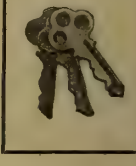


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BUILDING AND CONSTRUCTION

BUILDING NOTES.

A. Orr, Hamilton, is erecting a $2,100 residence.

A. J. Kerr, Hamilton, is to erect a $1,900 residence.

The Ottawa Fair Board are to erect a new Dairy Building.

Thomas McMaster is to erect a new residence at Guelph.

M. Rawlinson is to erect a $15,000 warehouse in Toronto.

H. G. McMahon is erecting a $2,100 residence at Hamilton.

The Standard Meter Co. are to erect a $10,000 factory in Toronto.

Wm. Grayson, Moose Jaw, is erecting four new stores, to cost $12,000.

Morrison & McDougall are erecting a cement block store at Arcola, Assa.

The Bank of Hamilton is to erect a modern fire-proof office building in Hamilton.

The Western Commercial Co. is erecting a block of store buildings at Saskatoon, Sask.

A new $2,000 schoolhouse is being erected in Artemesia Township, near Flesherton.

Work on the new buildings for the Wampole Mfg. Co., at Perth, has been commenced.

The Hamilton Bridge Co. have secured the contract to build a steel bridge at Owen Sound.

Thompson & Wright are working on a $2,500 addition to the Laycock school at Brantford.

Work on the extension of the Intercolonial Railway station at St. John has commenced.

R. W. Dunsmuir has let the contract for a new residence at Victoria, B.C., to F. J. Mesher.

The McLaughlin Carriage Co., Oshawa, are to construct a five-storey brick block at Winnipeg.

Sixteen new buildings have been erected, or are in the course of erection, in Treherne, Man., this year.

Fraser Bros., Strathcona, Alta., have commenced the construction of the Coney Elevator at Ponoka.

A Pittsburg Co. is said to be preparing plans for the erection of 300 houses in Hamilton, for the Canadian Westinghouse Co.'s employes.

Mr. R. L. Borden, leader of the Conservative party, will commence almost immediately the construction of a fine residence at the capital.

The construction of the new Canadian Bank of Commerce Building, Prince Albert, has been awarded to Contractor Holmes. The building will cost in the neighborhood of $14,000.

Extensive alterations are being made at the School of Science building, Toronto. Work has also been commenced on the new convocation hall in connection with Toronto University.

The value of new buildings for which permits have been taken out in Hamilton this year amounts to $844,025. The value for July was $126,580, or $41,880 more than for July last year.

A new planing mill, to cost $100,000, is to be established at Douglaston, N.B., by Swedish capitalists, to export planed lumber for the English, Australian and American markets.

L. H. Packard & Co., manufacturers of shoe dressing, etc., Montreal, have found their present premises on McGill street too cramped, and are planning to erect a new factory building 100 x 100 feet, on St. Antoine street.

Messrs. McClatchie Bros., retail hardware merchants, of Cowansville, Que., are erecting a new store 100 x 32 feet, to cost in the neighborhood of $10,000. The building will be forty feet high with thoroughly modern equipment.

The Northwest Construction Co., operating at the Newcastle Island quarries, at Nanaimo, has received a contract for stone for the United States navy drydock at San Francisco, requiring nearly 200,000 cubic feet of stone.

In spite of strikes in the building trades in Montreal, the month of July exceeded the same month last year by many thousands of dollars. The building has been mostly of a residential character in the north and west ends of the city.

The bricklayers on one of the biggest jobs in Montreal went out on strike Monday of this week. It is claimed that this strike is not in sympathy with the carpenters, but rather because the men objected to continue work where operations are under police protection.

Work on the construction of the Canada Car Co.'s plant at Lachine has been completed so far as the exterior is concerned. Machinery is rapidly being installed, and it is expected that the operation of the plant will begin in September.

The following building permits have been issued at Toronto Junction: S. Womersley, two brick dwellings, $1,900 each; Wardell and Speers, two brick houses, $1,900 each; Alex. Brown, brick house, $1,700; S. E. Jewett, three pairs of houses, frame, $1,200 each.

Montreal and New York capitalists have organized a hundred thousand dollar company to erect a magnificent new Summer hotel on Lake St. Louis, to be ready for business next season. The hotel will be close to Bellevue Station, on the New York Central, about thirty-five minutes' ride from Montreal.

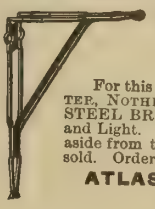
John McDonald & Co., Chatham, N.B., are erecting a business block for Hoffman & Sons, to cost $11,000, and to be fitted up with modern plumbing arrangements. They are also building a store for John Gray, to cost $2,000, a $3,000 residence for Robert Ritchie, Newcastle, and a $2,500 house for James Shields, Chatham.

The Grant & Smith Construction Co., who have the contract for the cement work on the new C.P.R. bridge at Saskatoon, have completed their first ce-

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HAMILTON, ONT. TORONTO, ONT
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ment pier at the south end of the bridge, and a coffer dam has been constructed for the second, where the excavation is in progress. The company are putting on another pile driver in order to hasten the construction, and a large force is now at work excavating for the pier on the north end of the bridge.

Considerable building is going on in Sarnia, largely to supply the demand for residences. The houses going up are of the better class, the great majority of them to be occupied by their owners. This is one of the best signs of the progress and prosperity of a town, and that Sarnia is enjoying a good, steady boom cannot be disputed. There are no empty houses that are of a comfortably habitable nature in the town, and everything denotes a healthy condition of affairs. Geo. A. Proctor has several contracts on hand, including house for Andrew Bradley, a house for John O'Rourke, a residence for A. C. Clark, residence for F. F. Pardee, and A. Batty's two stores. Among other contracts H. Johnston has residences for J. A. McCrea, Jos. Breakey, Dr. McDonald and George McMillan, while D. Goodall is working on a residence for Malcolm McKenzie, and James Shanks on one for R. G. Towers.

TORONTO BUILDING PERMITS.

Wm. Spence, brick dwelling, Davenport road, $2,400.

W. M. Alcombrak, dwelling, Havelock street, $2,600.

Abraham Gard, dwelling, 55 Heward avenue, $2,500.

Chas. Anning, brick dwelling, Regent street, $1,800.

Chas. Powley, dwelling, Hamburg avenue, $1,800.

W. Bulmer, two dwellings, Lindsay avenue, $4,000.

M. Grantstoin, dwelling, Agnes street, $1,800.

Jos. Tait, brick dwelling, Humberside avenue, $2,000.

J. Bishop, roughcast stable, Markham street, $4,000.

Alex. Mills, brick residence, Nanton crescent, $5,000.

Edmund Elliott, two dwellings, Beatrice street, $5,000.

Senator Jones, brick dwelling, 145 St. George street, $3,000.

John Drummer, four brick dwellings, Dupont street, $9,000.

Thos. Bird, five roughcast dwellings, Dresden avenue, $3,500.

Adam Davidson, roughcast dwelling, Clinton street, $1,200.

N. Boynes, one pair brick dwellings, Davenport place, $3,000.

Chas. J. Doughty, brick dwelling, Langley avenue, $2,500.

J. Spreeman, roughcast dwelling, Withrow avenue, $1,600.

H. Gillespie, two pairs dwellings, Ossington avenue, $11,000.

Thos. Barton, brick dwelling, Westmoreland avenue, $5,400.

H. Watt, brick and stone dwelling, Rusholme road, $3,000.

W. G. Gooderham, brick dwelling, 197 Bleecker street, $3,000.

C. T. Jefferys, brick dwelling, 44 Simpson avenue, $2,900.

Chas. Shipway, roughcast dwelling, Withrow avenue, $1,650.

A. E. Shaver, roughcast dwelling, Dovercourt road, $2,100.

Chas. W. Kent, brick-cased dwelling, Emerson avenue, $1,800.

John O'Neil, addition to hotel, 346 Queen street east, $2,000.

Walter Nash, one pair brick dwellings, Gore Vale avenue, $5,000.

Arthur Mitchell, brick dwelling, 117 Brunswick avenue, $2,800.

Judah Levi, stone and brick dwelling, 104 Argyle street, $3,000.

Mrs. Mary Covert, brick stable, 426 Bloor street west, $1,500.

Leonard F. Toby, roughcast dwelling, Margueretta street, $1,000.

Ontario Lime Association, storehouse on C.P.R. property, $1,800.

Joseph Davis, one pair dwellings, 97 and 19 Munro street, $1,500.

Robert H. Robinson, brick dwelling, 179 Deleware avenue, $2,550.

W. E. Hunter, four brick dwellings, 14 to 20 Belmont street, $6,000.

M. Rawlinson, brick warehouse, 5 to 9 St. Joseph street, $15,000.

Chas. Jolliffe, brick and stone dwellings, Howland avenue, $7,000.

W. H. L. Gordon, alterations to dwelling, 221 George street, $1,500.

Holtby Bros., brick building and stable, Rusholme road, $2,500.

Herbert J. Glover, four roughcast dwellings, Muir avenue, $2,000.

H. S. Henderson, one pair of dwellings, Margueretta street, $2,800.

Imperial Bank, bank and office, corner Yonge and Bloor streets, $16,500.

H. H. Brown, three brick and stone dwellings, Perth avenue, $3,600.

Mrs. D. Jodoin, brick stores and dwellings, Queen street west, $4,000.

Toronto Racket Club, brick and stone club house, Emily street, $6,000.

Geo. A. Mitchell, brick stable, rear 226 St. George street, $3,000.

J. D. Farquhar, one pair roughcast dwellings, Logan avenue, $3,000.

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every home and building that has a trace of darkness? Because Hardwaremen are not fully cognizant of the ever-present need for it, and how they might share in supplying that need. When a Hardwareman realizes these undeniable facts, he does two things—he writes for samples and booklet; he gets a supply of the glass. May you reason to your profit! It awaits you.

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Glass Importers and Manufacturers.

W. J. Kernohan, brick and stone dwelling, Langley avenue, $3,000.

Otto Donatt, two pairs roughcast dwellings, Eastern avenue, $3,500.

Toronto House of Industry, brick lodging house, Elm street, $10,000.

Dr. J. S. Island, residence, corner Ontario and Carleton streets, $6,000.

Fred Ford, one pair brick dwellings, 116 and 118 Carlaw avenue, $3,200.

Standard Meter Co., factory, corner Morrow and Silver avenues, $10,000.

Trinity Methodist Church, brick and stone parsonage, Lowther ave., $4,500.

James Bridgland, one pair of roughcast dwellings, Shanley street, $2,000.

Edmund Baynes, one pair brick and stone dwellings, Hepbourne street, $3,500.

A. B. Coleman, two pairs brick and stone dwellings, Parliament street, $8,000.

Kidney and McKelvey, one pair stone and brick dwellings, Huron street, $5,000.

Alden & Wild, one pair roughcast dwellings, 734-736 Crawford street, $3,000.

F. W. Stair, alterations to office building, corner Bay and Adelaide streets, $7,000.

C. A. Grant & Co., two pairs brick veneer dwellings, Howard avenue, $9,800.

J. W. Walker, stone and brick dwelling, corner Bathurst and Ulster streets, $2,800.

W. McConnell, one pair dwellings, corner Markham and Lennox streets, $6,000.

W. G. Riddell and F. Danhower, one pair roughcast dwellings, Garnet avenue, $3,000.

F. H. Herbert, in trust, dwelling and stable, corner Avenue road and Heath street, $12,000.

Trustees St. Paul's Methodist Church, alterations to Sunday School, Avenue place, $20,000.

J. Hunt Stanford (in trust), one pair stone and brick dwellings, St. Vincent street, $5,000.

Blanchard & Courtmanche, brick addition to dwellings, 10 to 16 Golden avenue, $1,600.

C. Bulley, one pair stone and brick dwellings, corner Withrow and Broadview avenue, $5,600.

W. H. Mitchell, one pair stone and brick dwellings, corner Albany and Barton avenues, $5,500.

Separate School Board, brick addition to school, Lansdowne avenue and Dundas street, $2,200.

J. W. Walker, one pair stone and brick dwellings, corner Palmerston boulevard and Lennox street, $7,000.

MONTREAL BUILDING PERMITS.

E. Bastien, dwellings, 1368 St. Andre street, $1,800.

D. Lalonde, dwellings, Dumont street, Papineau ward, $2,000.

Jno. Forget, dwellings, Huntley street, St. Denis ward, $2,000.

A. Hudon, dwellings, St. Hubert street, St. Denis ward, $2,000.

I. Thibault, dwellings, St. Germain street, Hochelaea ward, $2,800.

M. Tremblay, dwellings, St. Germain street, Hochelaga ward, $2,800.

L. David, alterations to stores and dwellings, St. Lawrence street, St. Jean Baptiste ward, $1,000.



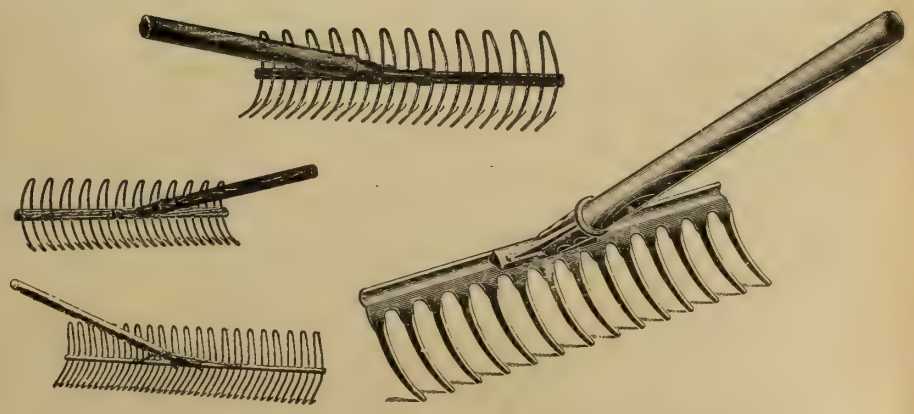
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INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

CANADA'S trade in the year just closed was $465,228,307, while in the previous year it was $464,981,972. There is an increase of $10,451,000 in imports, and a decline of $8,560,000 in domestic exports, and of $2,000,000 in foreign exports. The feature to be noted is that trade, having doubled in nine years, has become almost stationary, and that there is a decided fall in exports. It could not be expected that the rate of increase shown in recent years could be maintained, and there is no ground for alarm in the fact that it has ceased. The rapid growth of the west in population has probably fully compensated for any falling off in exports.

The Canada Glue Co.'s plant at Brantford is nearing completion.

The Hewson Woolen Mills at Amherst, N.S., are extending their plant.

Iron ore is being shipped from the mines at Calabogie, near Renfrew.

A. P. McLeod is to establish a sash and door factory at St. Peters, N.S.

A wireless telegraph system is now in operation between Montreal and Quebec.

The C.P.R. Co.'s Atlantic steamers made a profit of $200,000 during the year ending June 30.

The railroads of the United States will consume probably 2,100,000 tons of steel rails in the calendar year.

Stratford has passed a by-law voting $30,000 as a loan to the Thread Mills, Limited, to aid in establishing a factory there.

A branch plant of the Vulcan Soot Cleaner Co., of Pittsburg, may be erected at Hamilton to supply the Canadian demand.

The St. Catharines tannery is to be enlarged, and a plant will be installed for the manufacture of high-grade leather shoe laces.

A company has been organized in Vancouver to manufacture the "All Right" extension ladder. A. P. May is president of the company.

The steel rail mill of the Dominion Iron & Steel Co. has been put on a double shift for the first time since it has been in operation.

The Union Steamship Co. are to bring out a steamship from Scotland to run on the Montreal-Lake Superior line. It will be the largest freight boat in Canada.

Prospects at the mills of the Montreal Cotton Co., of Valleyfield, Que., are now very bright. Seven hundred and fifty additional looms will be put in operation next week.

Stratford has decided to grant $30,000 to the C.P.R. to aid in purchasing a right of way to that city. The road is to be built by 1907 and to connect with the Goderich and Ingersoll branches.

The Victoria, B. C., Machinery Depot have in hand the construction of a Cyclone water-tube boiler, 300 horsepower, working up to a pressure of 300 pounds, for furnishing heat to the retorts of the new turpentine works in that city.

Owing to a scarcity of wheat at Fort William a broker who had a contract to deliver a certain amount in July found it necessary to re-ship 140,000 bushels back from Kingston by boat, this being the first wheat cargo ever passing westward through the "Soo" Canal.

M. A. Halliday, owner of the electric lighting plant supplying Chesley, Ont., with light, is constructing a concrete dam in place of the former one, which will raise the water of the river two feet higher than at present. Thus he will get the extra power required by the increased lighting demands.

The Robb Engineering Co. have secured orders for one 150-horse-power boiler for the Good Shepherd Asylum, Quebec; and 80-horse-power engine and boiler for the Electric Light Co., of Golden, B.C., and a 50-horse-power engine from Ahearn & Soper, Limited, for the Dunlap Tire Co., Toronto.

In the six months ending June 30 the output of sheets and tin plate by the American Sheet & Tin Plate Co. is said to have exceeded the output of the same period in 1904 by nearly 40 per cent., amounting to about 550,000 tons, or at the rate of 1,100,000 tons for this year, as compared with 735,489 during all of 1904.

Neepawa, Man., is considering a project to secure water-power from the White Mud River. The chief points are: It will cost $40,000, exclusive of the land covered, which will be 120 acres. The pent-up waters will aggregate 200,000,000 gallons, and with a fall of seventeen feet will produce 400 horse-power ten hours each day, for eight months of the year.

President Mellen, of the New York, New Haven & Hartford Railroad, has announced that the company plans to substitute the overhead trolley for the third-rail system on two important divisions. The company had previously announced that owing to claims that the third rail was a menace to life, it would return to a steam passenger service, but this was strongly opposed by the cities and towns affected.

The Nicola Valley Iron & Coal Co. will start active operations on their property in the Fall, and be ready to load on the first cars that come through on the Spence's Bridge in about a year from now. So says S. Tingley, of Ashcroft, who is heavily interested in the field. Mr. Tingley staked this field 28 years ago and has hung on ever since waiting for a road. He has great hopes of the future of the property.

The Temiskaming and Northern Railway Commission has decided to go ahead with plans and specifications for the operation of the road by electric power. The cost of installing the system has been ascertained and tenders will be called for at once. The Blanche River viaduct is now being built by the Dominion Bridge Co., and will be completed in three weeks. Twenty-five miles of track have been laid north of New

Liskeard, and 100 miles more are contracted for to be built this year.

The building of the Michigan Central Railway double tunnel under the Detroit River, to cost upwards of $10,000,000, will provide an immense amount of work for a foundry plant. As the tunnel is to be constructed from the Windsor end direct to the Detroit terminal before the surface is disturbed on the Detroit side, it is quite possible that a foundry may be located on the Canadian side of the river and built of Canadian material to avoid the duties which would have to be paid on the material if imported from the United States.

Superintendent Lewis of the Algoma Steel Co., Sault Ste. Marie, Ont., and designer of the steel rail mill, has applied to the executive committee for an appropriation to erect a plant for light rails. In his report Mr. Lewis says there is at present a good market for the output of such a mill, and the market in Canada is bound to grow rapidly. A member of the executive committee, when asked if Mr. Lewis' suggestion would be acted upon, said it certainly would be as soon as the executive committee could see its way clear to do so.

Construction on the Nelson, B.C., electric power and light plant, to cost between $150,000 and $200,000, is to be commenced immediately. The contract for the hydraulic and electrical equipment has been awarded to the Allis-Chalmers-Bullock Co., of Chicago, through the Vancouver agency. This contract alone calls for an expenditure of $55,000. The contract for the hydraulic and electric equipment embraces two vertical turbine waterwheels, and one 750-kilowatt generator with a complete complement of transformers and substation equipment.

Companies Incorporated.

The Dominion Natural Gas Co., Limited, have been granted the right to increase their share capital from $500,000 to $1,000,000.

The Toronto Launch and Engine Co., Limited, of Toronto, have been incorporated with a share capital of $40,000, for the purpose of dealing in boats, launches, steam and gasoline engines, etc., and to take over the engine patents and applications for patents from J. C. McLachlan.

Northern Construction Co., Limited, of Montreal, have been incorporated with a share capital of $100,000, for the purpose of constructing private and public works of any kind. The directors are: E. M. O'Brien, J. B. Rose, E. C. Perkins, G. A. Lafontaine and W. S. Stavely, all of Montreal.

The Monarch Supply Co., Limited, Toronto, have been incorporated with a share capital of $6,000, for the purpose of operating works for the production, sale and distribution of electricity for purposes of light, heat and power. The directors are: J. S. Lovell, W. Bain, R. Gowans, W. W. McNeill, and W. F. Ralph, all of Toronto.

The Loughborough Mining Co., Limited, of Sydenham, have been incorporated with a share capital of $10,000, for the purpose of carrying on the business of a mining, milling, reduction and development company. The directors are: M. F. Westover, E. Clark, D. M. Barton, and A. H. Jackson, all of Schenectady, N.Y.; and G. W. McNaughton, of Sydenham.



No. 15. OSHAWA, ONT. August 5, 1905

A POINTER

Mr. Hardware Merchant, let us give you a pointer which calls only for a little talk and will mean much eventual business and profit for you.

When you are asked to figure on the hardware for a new building ask the architect or contractors whether they intend to use wood lath in the construction. If they say "yes" tell them that steel lath is now made so good and so cheaply that it is becoming generally adopted, and soon it will be the exception for anything else to be used.

FOR YOU

Tell them that in a few years it will be difficult to sell or rent a house which has been made dangerous for occupation by the use of the inflammable wood lath, and that it is likely the insurance companies will impose a heavy additional rate.

When this happens it will be too late, except at a heavy expense, to make the building conform to new conditions.

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If you can convince them that it would be much better and cheaper to put in steel lath, write us for figures on **Pedlar's Perfect Metal Lath,** keeping in mind that, if adopted, it will be shipped direct to the premises where it is to be used, and all you will have to do will be to write a few letters.

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We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

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The fire-pot can be taken out through the front doors and the operation is a very simple one.

The "Famous" has a full nickel dress very artistically arranged, and is equal, if not superior, to any other stove in its class.

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NEW ADVERTISEMENTS:

Spear & Jackson, Sheffield, Eng.
Canadian National Exhibition, Toronto.

A YEAR OF PROGRESS.

WHILE it is true that the attendance last week at the annual meeting of the Western Retail Hardware and Stove Dealers' Association was not quite so large as had been hoped for by the executive, the actual results of one year's work are very encouraging, and the officers and members of this young association have every reason to be optimistic as to its future. The hot Summer days present many attractions in the open air, and there were many diversions in Winnipeg during Exhibition week, hence the fact that the gathering was not quite so large as in February. Another cause contributed to the same result. The majority of hardwaremen know that the association is now organized on a sound basis, that it is prospering, and that the direction of its affairs in in safe hands.

Nevertheless, those who did not attend missed a very interesting convention, and we would refer them to the full report of the proceedings appearing elsewhere in this issue. We also desire to draw special attention to the long list of members of this association, which appears in another part of the paper. That list, in which is represented the big majority of the important retail hardware firms of Manitoba, is the best possible proof of the progress made since the organization one year ago. And it must not be forgotten that the work has only commenced. Much of Manitoba remains to be visited by the secretary, and the whole of the Greater West—the new Provinces of Alberta and Saskatchewan—is yet to be canvassed. Secretary McRobie will now resume his energetic canvas for new members, and remembering the worthy cause which he has to plead, and his own ability, which fits him so well for the work, we have no doubt but that the membership list will be doubled before the semi-annual meeting in February. There is every reason to be encouraged by the showing made in one year.

ROLLING MILLS IN WINNIPEG.

WINNIPEG has not yet so many manufacturing industries but that they can be easily counted, and hence special interest attaches to the announcement that a rolling mill will be in operation in the Prairie City in a few weeks. It will be known as the "Kirkland Iron and Steel Rolling Mills," and the business will be under the management of T. M. Kirkwood, of Toronto, who was at one time owner of the Belleville Rolling Mills.

The Winnipeg mill will have a capacity of 50 tons of bar iron per day, and it will be the only plant in the Canadian prairie country. The plant is entirely new, the roll trains being among the heaviest in Canada. The plant consists of one nine-inch mill with seven sets of housings three nigh, and one sixteen-inch mill with three sets of houseings three high, including the pinions. All the machinery is set on concrete foundations 8 feet high, and fastened at the bottom with 56-lb. rails.

The building is of iron, and its dimensions are 100 x 165 feet. When completed the plant will cost about $77,000, and as work is being pushed ahead rapidly it is expected that work will commence about August 15. It was expected that the mill would have been in operation a month ago, but the delay was occasioned by the fact that the rolls purchased by Mr. Kirkwood in Bromwich, England, when there last May, have been slow in arriving.

The scrap iron which forms the raw material for this mill is now being delivered at from $5 to $7 per ton. Wrought scrap iron is the raw material wanted, and there should be no difficulty in procuring all that the mill requires within the boundaries of the Province of Manitoba, as the other foundries in the province use principally cast iron scrap.

As the freight charges on bar iron from the east amount to about $13 per ton, the western mill will have an advantage not to be despised in the race for western trade. Considering the rapid growth of Winnipeg, there can be little doubt that the present plant will have to be enlarged before the G.T.P. is completed.

CANADA WANTS CLEAN BILLS.

CLEANLINESS and decency demand that something should be done to keep filthy bills out of circulation. In Canada the evil is pretty marked and there is an increasing cry for reform.

We have heard of merchants, who have adopted the plan of only handing out crisp, new bills in change. These men are reformers and they are doing a good work, even though there may be a tinge of selfishness in it.

In the United States, every hotel and bank will always issue a clean bill on request. In Canada you generally take what you can get.

Surely sanitary reasons alone should induce the people of this country to rise up and protest against the continuance of the evil. The passing of filthy bills from hand to hand cannot but serve to spread disease germs and undoubtedly much of the sickness in the country can be traced directly to unsanitary money.

A PROTEST.

WE are glad to see that the protest which this paper entered against the actions of British Columbia and Quebec, in placing a provincial tax upon travelers, has been supported by the leading commercial men of the country. The Dominion Commercial Travelers' Association has now taken the matter up and is urging the Federal Government to disallow these two Acts. A protest from such an influential body as this should carry great weight with it at Ottawa.

The essence of federation consists in absolute freedom of interprovincial trade. Yet in both the cases cited this freedom has been seriously hampered. That the representative of a British house, resident in Ontario, should not be allowed to do business in the next province without paying an exorbitant license fee is an intolerable injustice. It invites retaliation, and the framers of the laws themselves know the disastrous effects of such a course. We trust, with the Commercial Travelers' Association, that these laws will be voluntarily withdrawn or, if not, will be withdrawn on the invitation of the Dominion Government.

NICKEL COINS FOR CANADA.

A RECENT suggestion that Canada should adopt nickel as a metal for coins, using the pure metal rather than the alloy used by the United States Government, has much to commend it. Canada has the greatest deposits of nickel in the world, and is practically the source of the world's supply. The adoption of the metal for all coins would, therefore, be a great advertisement for the country and aid

materially in the development of this branch of the mining industry.

Nickel is growing in popularity for coinage purposes in Europe, and Canada would do well to be one of the first countries to adopt the metal. Its use for fifty, twenty-five, ten or five-cent pieces would cost much less than the present silver coinage, and the Government's profits would, consequently, be larger. The day is past, however, when the public look for intrinsic value in coins, most coins being mere tokens. It is the Government's fiat that places value on the coins, and pure nickel, which will stand hard wear, would be an almost ideal metal for a Canadian coinage.

BENEFITS OF PREFERENCE.

THE London Times, in a recent financial and commercial supplement, illustrates the effect of the preferential tariff of Canada upon Canadian imports from Great Britain and the United States.

It declares that a comparison of the gross total of Canadian imports from the two countries does not fairly illustrate the effect of the preferential tariff and uses only the value of dutiable goods. Of these, Canada, in 1893, was taking rather more than 45 per cent. from the United Kingdom, 40 per cent. from the United States, and less than 15 per cent. from all other countries. By 1897, the year before the preferential provision was adopted, the percentage for the United States had risen to 50, that for Great Britain had fallen to about 30, while that for other countries had advanced to 20 or more. The general effect of the preference given to British goods appears to have been simply to arrest this process of decline for these and of gain for American and other foreign goods. Since 1898 there has been little variation in the percentage of dutiable imports in these three categories. The division has kept near the line of 50 per cent. for the United States and 30 per cent for the United Kingdom, from which the English writer concludes that the tariff preference for the Mother Country "seems just about to neutralize the natural advantages of the United States," in proximity and closer trade communication.

There are, however, classes of goods in which Great Britain cannot be expected to compete with the United States in supplying Canada, such as live animals, fish, breadstuffs, provisions, fruits, fertilizers, petroleum, turpentine and various other products which he enumerates. Accordingly, he presents a diagram showing the change in the value of dutiable imports from the two countries with these non-competing articles eliminated. This shows that the values imported from the United States in 1895 were only about $10,000,000, while those from Great Britain were about $22,500,000. The former increased and the latter diminished until values were approximately equal at about $20,000,000 when the preferential duties took effect. From that time both lines on the diagram show about an equal increase until 1904, when that of the United States reached somewhat higher. The shares in that year were about $40,000,000 for Great Britain and $45,000,000 for the United States. The inference is that but for the preferential tariff the increase of these imports from the United States would have been much larger, and from Great Britain much smaller if any increase at all.

The writer next selects certain manufactures in which Great Britain excels, comprising those of wool, cotton, linen, flax, leather and glass, with carpets, curtains, cordage, jams, confectionery, gunpowder and earthenware, and shows that Canadian imports of these from the Mother Country were about $12,000,000 in value in 1895 and sunk to $10,000,000 in 1897, but after the preference in duties was granted increased rapidly until they reached nearly $24,000,000 in 1904. The value of the same goods imported from the United States in 1895 was only $3,000,000, and though it has increased rather steadily it has not reached as much as $6,000,000 since. This is taken as evidence of a positive and substantial gain to British trade from the preference in duty rates, but it is in a line in which British manufactures have to go along with the tariff discrimination.

Another diagram is given exhibiting a class of articles in which the United States has made a large gain in exporting to Canada, and Great Britain has made little or no gain in spite of the preference. These include silks, gloves, perfumery, brass and copper goods, electrical apparatus and various instruments, and paints, colors, varnishes, etc. The value of those imported from Great Britain was about $2,300,000 in 1895 and $2,000,000 in 1897. It increased at first under the preferential duties, but has hardly got above $2,500,000 since. The value taken from the United States in 1895 was less than $1,500,000, but it increased to about $5,000,000 in 1904 in spite of the discrimination in duties. This is attributed to British manufactures in some of the lines affected, allowing foreigners to surpass them in the novelty of their designs, efficiency of construction, economy of manufacture and selling enterprise. On the whole, the Times inclines to the opinion that British trade with Canada has been saved by the tariff preference, and in some lines largely benefited at the expense mainly of the United States.

NO MACHINERY TAX.

WHEN it was proposed recently to levy a tax on machinery used for manufacturing purposes in the City of Toronto, representatives of the Canadian Manufacturers' Association waited upon the city council asking them to reconsider the matter. The answer given at the time led the manufacturers to believe that the tax would not be revoked and that they would have to pay some $26,000 into the city treasury for the machinery they were using to operate their respective plants. Other pressure was probably brought to bear on the city council and the shortsightedness of their policy made apparent to them. The Board of Control recently authorized the tax collectors to the effect that this was not to be collected this year. Had the city collected the tax it would probably have lost many times the amount by frightening intending manufacturers from coming to the city.

PROGRESSIVE JAPAN.

THE newly-discovered nation of Japan continues to forge ahead in a way that surprises even the most sanguine of her supporters. In manufacturing, the Japs are already in the very front rank, and so keen has Japanese competition become in their home market that British and German traders show signs of alarm. A few years ago the foreigner brought his goods to Japan and succeeded in cultivating a first-class demand for them. It was not long before it began to dawn upon the unsophisticated Jap that he was paying out money to a stranger for something that might as well be produced at home. Directly he set about copying articles of foreign manufacture with such imitative skill that even the connoisseur to-day finds it difficult to distinguish between the copy and the original.

Japan has not been slow to make the most of such opportunities as were afforded at the Osaka Exhibition, held recently in Japan, and it would not be surprising if her aggressiveness in trade and commerce were to extend to Canada within the next few years. Even now there is talk of certain Japanese interests going into the fish canning business for export trade.

Ernest L. Harris, commercial agent at Eibenstock, Germany, writes to the New York Journal of Commerce on the subject as follows:

"The products of Japan's industries are gradually forcing themselves into various markets of the world, where their competition is being felt by English and German traders. Japanese ingenuity and industry are beginning to exert an influence to such an extent that their exports are increasing, while at the

same time the markets in Japan are passing more and more into the hands of home manufacturers. This is causing a reduction of imports. It has long been thought that the Japanese were masters of the art of imitation, but it is now generally admitted the world over that they also possess powers of great initiative.

"A recent report of the British consul at Kobe records the fact that the import of cotton yarns shows a big decrease, due to the increased growth of the Japanese industry, which is gradually but surely ousting Lancashire coarse cottons from the Japanese market. Among woolen manufacturers the outlook for imported goods is not bright. The manufacture of flannels in Osaka has improved to such an extent that imports of this article have fallen off considerably. Japanese manufacturers today are producing the cheapest kind of cotton underwear, socks, toilet soap and lamps. The indigo and tobacco trades are also rapidly passing into Japanese hands."

BUFFALO PLUMBERS IN TORONTO.

A DELEGATION of about 125 plumbers and steamfitters from Buffalo were the guests of the Toronto Master Plumbers Association on Thursday, and a royal time was spent by all at Hanlan's Point. The fun commenced with the arrival of the Buffalos about 10 a.m., they being escorted to the oval at Hanlan's Point by the Highlanders' band, and badges distributed, the New Yorkers bringing a supply of white neckties with them, the date and name of the associations being printed on the ties above the Union Jack and Stars and Stripes.

Dinner was served promptly at noon, the spread being all that could be desired. A large tent was used as a dining hall, and any man who went hungry or thirsty, could cast no blame on the committee. Amongst the guests present, Hardware and Metal noticed Dr. Sheard, medical health officer; and Plumbing Inspectors Copping, Kirk and Meadows, of Toronto; Chief Clerk Snider, and Dean Wilson, chief inspector, of the Buffalo Board of Health. The officers of the Buffalo M.P.A. present, included Dan Lund, president; John Kaveney, vice-president; C. A. Smith, treasurer; W. E. Jackson, clerk; and H. J. Wood, secretary.

Sports of all kinds were the feature of the afternoon's enjoyment, a ball game, tug-of-war, quoits and races being all on the bill of fare. Toronto won the ball match by a close score, and her heavy weights were hard pullers in the tug-of-war, but Buffalo made even by winning practically all the field events. Supper was served at 4.15, and escorted by the band, the return trip via the Niagara boat, was commenced at 5.15 to the strains of "Auld Lang Syne," and the cheers of the Toronto men.

A CO-OPERATIVE SUPPLY HOUSE.

RUMORS are current that the relations between the Toronto Master Plumbers' Association and the jobbers who compose the Central Supply Association, are not as pleasant as they were and that the differences existing between the two bodies have gone so far that the establishment of a co-operative store by the master plumbers is almost certain. Through the co-operative institution the master plumbers plan, according to street talk, to supply themselves with all the goods they require, the trade banding together to support the store their money is invested in rather than the existing supply houses.

The cause of this move on the part of the master plumbers is understood to be the supposed selling of supplies to outsiders by the jobbing houses. The latter claim, however, that they cannot legally refuse to sell to plumbers who are not members of the association, and that they are doing all in their power to meet the wishes of the association men.

The supply men do not seem to fear the new move, contending that co-operative enterprises have never proved a success in this country. On the other hand, the master plumbers are sanguine that a plan can be worked out whereby the dividends to be paid will induce all members to support their own supply house, and in the case of a price-cutting war, that the members be allowed to buy where they can get the goods the cheapest, on condition that a percentage of the savings be paid into the treasury of the co-operative.

It is hoped that the matter will be arranged satisfactorily to both parties before extreme measures are found necessary.

PREPARING FOR CONVENTION.

ON Monday evening the executive of the Winnipeg branch of the National Plumbers' Association met to complete arrangements for the big convention on Tuesday, Wednesday and Thursday of next week. The first day will be spent in seeing the sights of the western metropolis, a drive to Silver Heights being one of the features of the day's entertainment. Refreshments will be served in the evening. The second day will be devoted to the serious business of the convention, the meetings to be held in Eureka Hall. Interesting papers will be read on important subjects. The closing day will be spent in pleasure. A steamboat ride on the Red River on Thursday night will be followed by a dinner at the Queen's Hotel, which popular hostelry will be the headquarters of the delegates during the convention. The entertainment of the visitors is in the hands of A. J. Hammond and Secretary Kirkman.

UNIFORM SIZED CATALOGUES

CATALOGUES of all sizes and shapes in unlimited number are supplied to merchants annually by jobbers and manufacturers. The material contained in the books and booklets is valuable and should be kept for reference by the up-to-date merchant. But the multiplicity in form and make up of the catalogues soon drives to desperation the merchant who endeavors to file them, and the books which should prove a blessing come near to proving a curse.

The matter of establishing a uniform size for catalogues has been discussed at numerous conventions and in the trade press for years, and at last there appears to be a possibility of something being accomplished. The Southern Hardware Jobbers' Association appointed a committee at its recent convention to push the matter vigorously and induce the manufacturers to get up their illustrated sheets suitable to be inserted in a uniform binder. The following questions are also being asked of each jobber belonging to the association:

First—Do you have your own catalogues printed? If so, send us a sheet of the catalogue itself, also of the loose leaf used in the loose leaf binder which you use in connection therewith.

Second—If you do not use your own printed catalogue, whose or what style of catalogue do you use for your office and your salesmen? Give size of sheet and size of printing space.

Third—What size sheet would you suggest we recommend shall be adopted by the jobbers and manufacturers? Please remember that it requires a little wider sheet for the loose leaf binders that for the regular printed catalogues.

It is time that similar action was taken in Canada, as the evil is almost as great here as in the States. Readers who have suggestions to offer will be given space in these columns to discuss a remedy for the nuisance.

With the Canadian Manufacturers' Association Excursion Party in England



Messrs. McNaught, Ballantyne and Firstbrook discussing weighty affairs.



Excursionists taking the electric cars at Sheffield.



Colonel Gartshore of London and Lloyd Harris of Brantford "on a toot" up the Thames.



Mr Dennis Murphy of Ottawa and Mr. Callahan of Hamilton, talking it over.



A group of Winnipegers at the Ascot races.



Mr. and Miss Sweet taking it easy. Mr. Sweet is Manager of the Sanford Clothing Co., Hamilton.



R. C. Wilkins of Montreal taking a sun bath with a friend.



Mr. and Mrs. David Waterous of Brantford playing Shuffleboard.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 58.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 4, 1905.

LOCAL wholesalers are putting their travelers back on the road, after their vacations, and orders are coming in more regularly. Although this is generally the slack season of the year, business continues surprisingly good, and all prices remain firm. The outlook for Fall trade is first-class and many orders are being booked for September delivery.

The stiffening of the tin market will affect all tin products, and advances in these lines may be looked for. Copper also has an upward tendency. A metal expert asserts that the visible supply of tin is over 18,000 tons short this year.

The effect of the tariff preference to British cement and firebrick is seen in the large quantity of English and Scotch firebrick, and English cement, which is being imported. Not much American cement is on the market, as the tariff brings the cost too high.

Blacksmiths are ordering supplies for their Fall trade, and sporting goods continue to be another feature of the market. Indications point to a very large business in the Fall, and all the jobbers are preparing for record-breaking orders.

Axes—The season for these goods is not yet at hand, but orders are already arriving for Fall shipment. We quote: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Conditions are the same as in the axe trade. An early revival in business is looked for. Our quotations are as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—Business is brisk at unchanged prices. Our quotations are as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns— Retail merchants are heavily stocked, and orders received are mostly for Fall shipment. Prices are as follows: Cold blast, $4.50; No. 0 Safety, $3.50.

Barb Wire—Business is very quiet, as the season is ended. We quote: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—No activity is manifested, and sales are practically over for the season. Our quotations are as follows: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—The demand is normal and keeps prices firm. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Orders for sorting-up are being received for immediate shipment. Little change is expected this season. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—There is the usual demand for these goods and no fluctuations are reported. Prices are : Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5.

Wire Nails—There is a big and increasing demand for wire nails, to the detriment of the trade in cut nails. Large building operations in the west keep the trade brisk, and prices steady. We quote: $2.10 to $2.20 a keg f.o.b. Montreal.

Cut Nails—The demand is fair and prices are still at $2.20 a keg f.o.b. Montreal.

Horseshoes—Orders are coming in for the Fall trade, and a brisk demand is expected. The market is firm and prices remain as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all sizes 0 to 4, $5.50; toe weight, all sizes 1 to 4. $6.75. Packing—Up to three sizes in a keg ten cents per hundred pounds. More than three sizes twenty-five cents.

Horse Nails—The market naturally follows that for horseshoes, and trade is picking up in anticipation of the Fall and Winter trade. Prices are the same as last reported.

Sporting Goods—Guns and ammunition are the principal items in this market, and orders are arriving in increasing numbers. The demand for fishing tackle has dropped off, owing to the lateness of the season. Our quotations are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—A good demand is reported, and no change in prices has occurred.

Cordage— Orders are dropping off, though binder twine is still being shipped to many parts of the province. Prices are firm at same figures.

Cement and Firebrick—Local business is rather quiet, but a better trade is looked for in the near future. Prices are very firm, especially in Canadian cement, and better prices may soon be asked for Canadian Portland. We quote as follows: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—A good demand comes from the lumber camps, and business is brisk at unchanged prices. We quote as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Green Wire Cloth—Only a few orders are now being received, and the season is practically closed.

Poultry Netting—Buying is now light, and only a few scattered orders are reported. We quote: Discounts for 2 inch nineteen gauge standard, and sixteen gauge extras, at 60 per cent.; finer meshes, 55 per cent.

Spring Hinges—Little interest is shown in this market, as retailers are all well stocked. Our quotations are as follows: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—There is a fair demand and prices remain firm, as follows: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Cherry Seeders—Sales this season have been limited as yet. Prices range from $7.50 to $12.00.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, Aug. 4, 1905.

BUSINESS for this season is very satisfactory, and the travelers' holidays being practicallv over, an increased trade is looked for by the jobbers, although the splendid season experienced so far would indicate that a falling off is likely during the present month. Letter orders have been received in large numbers during the past few weeks, Summer fruit canning requirements being the chief item of trade just now. There are no changes of prices.

A few of the higher priced grades of lawn mowers are still being sold, but the demand for the cheaper lines has fallen off.

Many merchants are having special sales on seasonable goods not yet disposed of, the present being an opportune time to clean out the hammocks, ice cream freezers, etc., still in stock. A spell of warm weather provides a splendid opportunity to push these goods.

Sporting Goods—While the season is well advanced, there is still a lot of fishing being don and tackle is moving in fair quantity. Ammunition is also being sold in increasing amounts.

Washing Machines—Buying is as active as could be expected at this season.

Chain—The ordinary Summer trade is being done. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demands for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—Demand is reported good and country merchants are ordering in fair quantity.

Wire Nails—Active building is responsible for the record business being done. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—Trade continues satisfactory. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is particularly good for this season. We quote as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonable trade is noted. Prices are the same.

Screws—The mills are busy, but stocks are satisfactory. The strong demand keeps prices firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—No shortage in stocks is expected, although buying is quite active. Prices are firm.

Cordage—Sorting up orders are being received in fair quantity. We quote: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—No advance has taken place as expected. American cement is not a strong factor, none being heard of on the Toronto market. Our quotations are as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is brisk, demand being strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper—The general activity in building circles has resulted in a good business being done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—Business in hides has been active during the week. A good demand is reported and firm prices, particularly in wool. Supplies on spot are light, in fact one dealer volunteered the information that he had not a hide in his warehouse that was not sold. We quote as follows:

Hides, No. 1 green steers, per lb		0 10
" " 2 " " "		0 09
" No. 1 green, per lb		0 09½
" " 2 " " "		0 08½
Country hides, flats, per lb	0 08½	0 08½
Calf skins, No. 1, selected		0 10
" No. 2		0 08
Lamb skins, each		0 55
Shorn pelts "		0 45
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb		0 16
Wool-washed fleece		0 26
Rejections		0 20
Pulled wools, super, per lb	0 21	0 23
" " extra "	0 22	0 24

For Manitoba, British Columbia and Maritime Province markets see following page.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, August 4, 1905.

SOME excitement has been created in the metal markets by the announcement that the Dutch government is about to curtail the sales of Banca tin in 1906, by making them some two thousand tons smaller than last year. Added to this there has been considerable manipulation of tin on the metal exchange, and a further advance is considered imminent.

Pig iron continues to occupy a prominent place in the eye of the buying public, and the recent boom in the United States is reflected in the large orders received by Canadian firms.

Another feature to be noted, is the advance in antimony. Some houses are cleared out of it, and, indeed, it is hard to obtain, even at the price quoted.

Ingot zinc is another article whose demand exceeds the supply, just now, owing to the difficulty of obtaining prompt shipments from the producing points, where floods have disorganized transportation.

Pig Iron—The brisk demand continues, and an advance is predicted. Prices are firm as follows:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.50 to 19.00	delivered	Montreal.
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—There is an increased call for bar iron, and a big Fall trade may be expected. We quote as follows: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—The market is improving steadily, and the prices remain firm. We quote: Colonial and Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel No fluctuations are reported. We quote: Sleigh shoes $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—Good business is being done and prices are the same as last week. Our quotations are as follows: Cold-rolled shafting, 3-4 inch to 17-16, $3.85 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—An increased demand keeps the market firm, with no prospect of a change. Our prices are: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—Shares the general activity in the metal markets. Quotations given are as follows: Queen's Head, 28 gauge, $4.15; 26 gauge $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
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Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Oils, Belting, Graphite Bags etc., etc.

"Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra

Black Sheets—No change has occurred in this line. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The scarcity of antimony, and consequent increase in price, furnish one of the features of the week. We quote: 14 1-2c. to 15c.

Sheet Zinc—A scarcity is reported, and the prices remain firm. An advance is looked for. Our prices are: Cask lots, $7.25; small lots, $7.50.

Tin Plates—A brisk demand is manifest as an advance is feared. We quote: Cokes, $3.75; charcoal, $4.

Ingot Tin—An advance is noted largely owing to a rumor that Banca tin sales will be curtailed in the next season. Prices now ruling are: 34 1-2c. to 35c. per lb.

Ingot Copper—The firmness reported last week, continues. Prices are still 16c. to 16 1-4c.

Ingot Zinc—Great difficulty is being met in securing prompt deilvery of orders, and, at the present time, the visible supply is decidedly limited. Our prices are: 6 1-4c. to 6 1-2c.

Pig Lead—Is still very scarce, for no other apparent reason than the general good tone of the market. We quote the following prices:$3.75 to $4 per 100 lbs.

Boiler Tubes—No change has been experienced, and prices will remain at last week's figures. The demand is good. We quote prices as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—Prices are a little firmer, but no advance is looked for immediately, though it will certainly occur within the next couple of months. We quote prices as follows: Copper and wire, 12 3-4s.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Aug. 4, 1905.

A PERIOD of high prices is considered likely to follow the recent advances, as, while business is none too active owing to the high prices on ingot metals, buyers will probably have to come into the market even at the higher figures. There are no indications of a retrogressive movement, the tendency being still upward. Foreign markets are strong, and the local markets equally firm. Antimony has made its usual weekly jump, advancing another half-cent.

Pig Iron—All the mills are busy, and

Bar Steel
Cold Rolled
Reeled Machinery
and Iron Finish

From stock or for import. Prices right.

A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen
handle our
ANTI-FREEZING PUMPS.

They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.

Do you handle our PUMPS?

Write for catalogue and prices.

The R. McDougall Co., Limited
GALT, ONTARIO.

B. K. MORTON & CO.'S
WELL KNOWN
B.C. BRAND
DRILL STEEL

AGENTS
E. G. PRIOR & CO., Victoria
BAINES & PECKOVER, Toronto
CANADIAN REPRESENTATIVE:
D. W. CLARK, Box 521, TORONTO

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

the general activity causes a cotinuance of the firm quotations.

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Not much business is doing, but as the tendency of prices is upward, it is likely that buying will pick up while prices are still low. Our quotations are as follows: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—Market is very strong and buying active. We quote: 35c. to 36c. per lb.

Tin Plates—Last week's conditions of activity continue.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—An improvement in trade is reported. Prices steady. We quote as follows:, 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—A large trade is doing and quotations are unchanged. Our quotations are as follows: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—Another half-cent advance is recorded. The market is strong and prices still advancing. Our quotation is 15c.

Old Material—The advancing prices of metals is resulting in a more active condition. Prices remain the same, however, with no advances made in the dealer's buying prices, which are: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Another 10c. advance is reported on hard coal. We quote: Anthracite in cars at bridges: Grate, $5.15 per gross ton; egg, stove and nut, $5.40 per gross ton; pea, $3.80 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, August 3, 1905.

THE iron trade generally continues in a very sound and satisfactory condition. The rush of buying in the southern field is over for the present, and in the leading distributing markets southern iron is slightly easier, since some of the smaller companies are willing to sell on the basis of $11.50 for No. 2 at Birmingham. The larger interests who sold heavily lately, are asking better prices. A lot of 4,000 tons of Gray Forge was sold for Pittsburg delivery at a rather low price.

Considerable further quantities of malleable bessemer pig have been marketed during the past week, and in the Chicago territory the condition of furnaces is such that the supply is rather restricted.

The demand for billets and sheet bars has continued good and prices are higher, with some good business pending in eastern Pennsylvania both for steel and for muck bars.

The rail mills are full of work. Some large orders, which have been pending, have not yet been placed. For some small lots for September delivery, some of the large systems have indicated a readiness to pay a moderate premium.

The condition of the structural trade is well illustrated by the fact that the United States Steel Corporation has started to build a mill for rolling structural shapes at the Clairton plant. This mill, which will have a monthly capacity of 10,000 tons of shapes, ranging from 4 to 8 inches, is to be completed in the extraordinary time of 13 weeks.

The plate trade is looking forward to a heavy additional tonnage for the large lot of steel cars for which the Pennsylvania lines west of Pittsburg are in the market.

Agricultural implement makers have entered into additional season contracts for steel bars.

The strong position of steel is having its reflex action upon sheets, in which concessions are not being made as freely as some time since.

The general demand for pipe shows a little improvement. The oil country requirements are fair and the buying of boiler tubes is good.

There are at hand the first indications of the approach of the buying of wire products for the coming season, but the movement has not yet become pronounced. It may do so at any time between now and the middle of August, when the season really opens.

The eastern scrap trade shows some excitement among dealers and prices are firm and advancing.

The Canadian Copper Co. will erect a customs smelter at Copper Cliff to treat the product of New Ontario silver and copper mines. The cost will be $75,000. A power plant is being erected at Turbine, a new town near High Falls, 25 miles from Copper Cliff.

LONDON METAL MARKETS.

From Metal Market Report, Aug 2, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 46s. 4 1-2d., and Scotch warrants at 49s. 4d., making prices, as compared with last week, 7 1-2d. lower for Middleboro, and unchanged for Scotch warrants.

Tin—Spot tin opened strong at £151 15s., futures at £150, and after sales of 200 tons of spot and 200 tons of futures closed steady at £151 10s. for spot, and £150 for futures, making price as compared with last week, 15s. higher on spot and 2s. 6d. higher on futures.

Copper—Spot copper opened strong at £69, futures £69 5s., and after sales of 200 tons of spot and 900 tons of futures, closed weak at £68 6s. 3d. for spot, and £68 10s. for futures, making price as compared with last week, 11s. 3d. higher on spot, and 10s. higher on futures.

Lead—The market closed at £14, making price as compared with last week, unchanged.

Spelter—The market closed at £24, making price as compared with last week, 5s. higher.

THE METAL TRADE.

The past month has been a remarkable one in metals, and more so for the reason that the revival in business and confident buying by consumers was started at a time of the year when nothing but Mid-summer dullness was to be expected; and also that the buying movement started on a comparatively high basis of prices, and so far as American markets are concerned, has had no aid from speculative sources. The following advances have been established for the month:

Pig tin, 2 1-2c. per pound.
Copper, 1-2c. per pound.
Spelter, 1-2c. per pound.
Lead, $2 per ton.
Cookson's antimony, 4c. per pound.
Hallett's antimony, 2 1-2c. per pound.

Consumers are not only experiencing an increase in their business, but appear to see excellent prospects ahead, and with it has come up the serious question whether the present and prospective requirements for metals are not in excess of present production.—Metal Market Report. Aug. 2.

MINES AND METALS.

The Lake Superior Consolidated Co. intend to erect a coke plant with a capacity sufficient to supply the 150,000 tons of coke now consumed annually. A great many orders of various kinds have been received, and the present daily output amounts to 500 tons of rails and 450 to 500 tons of pig iron. The total output of rails since the mill was started eight months ago amounts to 100,000 tons.

* * *

A discovery of Bessemer iron ore is reported from Loon Lake, east of Port Arthur.

* * *

A rich gold strike is reported on the Copper River about 50 miles from Hazelton, B.C.

The capitalization of the Britannia Copper Syndicate, Vancouver, B.C., is to be increased to $1,000,000.

* * *

McKenzie & Mann and other owners of iron mines near Atikokan, have transferred their properties to the new Port Arthur Mines Co., Limited, capitalized at $500,000. Sulphur ore to the amount of 50,000 tons is to be shipped annually to the United States.

* * *

The wonderful development during the past few weeks of the mining discoveries near Cobalt on the Temiskaming Railway is the talk of the country. Already over $2,000,000 worth of ore has been raised and shipped to foreign smelters, and it is now proposed to establish a smelter in Ontario at North Bay, Sudbury or Toronto, to refine the silver ore.

* * *

Ore averaging 63 to 67 per cent. of iron is being mined at Lepreaux, N.B., by the New Brunswick Iron Co.

* * *

The B. A. Pyrites Mine at Queensboro, Hastings County, Ont., is developing an immense body of iron pyrites and is shipping ore to Buffalo.

* * *

The No. 1 blast furnace of the Algoma Steel Co., Sault Ste. Marie, Ont., have established a new world's record for a charcoal blast furnace. The output on July 8, 1905, was 173 tons, on July 9 it was 172 tons. The average for the four days ending July 9 was 163 tons. The charcoal consumption per ton of pig iron was 1,741 pounds; the pressure of the blast 9¼ pounds; the amount of blast 10,172 cubic feet per minute. As yet the furnace has not been blown to its capacity on account of lack of charcoal, but judging from its behavior so far the management sees no reason why the furnace cannot make as much iron with charcoal as it could with coke as a fuel.

* * *

The Nova Scotia Steel and Coal Co. have put in operation their new open-hearth steel plant. The operation, conducted under the direction of the officials, was successful. The second and third furnaces have also turned out their first cast. For the present the battery will be limited to these three furnaces, of 40 tons each, and a 50-ton mixer. Two additional furnaces are in contemplation.

British Columbia Trade News

Vancouver, B.C., July 28, 1905.

CONSIDERABLE interest is being taken in this province in the reported application of the Canadian Manufacturers' Association, to the Railway Commission, to revise its ruling ordering the C.P.R. to equalize its rates on fir and cedar lumber. The ground taken is that the ruling made some months ago has been observed by the railway company in the rather unexpected manner of raising the rates on fir, rather than lowering them on cedar. Such a course is not precluded by anything in the wording of the ruling of the Commission. The C.P.R. Co. claims that to lower the rate on cedar, is impossible, while the Canadian Manufacturers' Association claims that the increase on fir will work a serious hardship to the industry in the province, seeing that the millmen are already handicapped by competition with the protected industry of the coast states. The fact that this whole matter of competition has been subject of controvery with the Dominion Government for a long time, will no doubt have great weight with the Railway Commission.

* * *

A contract for 200,000 cubic feet of cut stone for the navy yards at San Francisco is to be filled by the Northwest Construction Co., with stone cut from the famous quarries at Newcastle, near Nanaimo, long lying inoperative. The stone will be loaded on a sailing vessel, now en route to Newcastle. Other large contracts for stone in San Francisco, will be filled from this quarry, which years ago, supplied the stone used in the San Francisco branch of the U.S. mint. The quality is vastly superior to any other stone quarried on the coast.

* * *

Work has been begun on the excavation for a new reservoir in connection with Vancouver city waterworks. The new reservoir is to have a capacity of 15,000,000 gallons, the present one having a capacity of 10,000,000, which was made last year by doubling the former storage capacity . The new reservoir will not be built this year, only the excavation being done, and leaving the site a year to settle, when the concrete walls will be built. The excavation is to be 300 x 400 feet, 16 feet deep and 200 feet square in the bottom. It is estimated that 45,000 cubic yards of earth will have to be removed. The contract price for the excavation is $14,000. It cost $36,000 to build the 10,000,000 gallon reservoir complete. These reservoirs are located on the highest point in Stanley Park, the city's magnificent natural forest, and close to the main portion of the city. It has an elevation sufficient to give an average of 108 lbs. pressure, thus breaking the head from the source of water supply in the Capilano River, a mountain stream which is tapped at many hundred feet elevation in the mountains across the Inlet from the city. In addition to this increase in reserve supply, it is proposed to build another reservoir on the higher elevations at the south of the city, for a high level system for that portion of the city, the pressure not now being sufficient for fire protection.

* * *

The first fire boat operated in Vancouver harbor has been put into commission by the Pacific Coast Lumber Co., which owns a large mill facing on the harbor front. This company, with considerable enterprise, purchased the vessel from the city of New Westminster, where she once combined the duties of a fire boat and public ferry across the Fraser River, being put out of commission by the building of the big Fraser River bridge. The steamer has been entirely remodelled, and is now capable of throwing a strong force of water in six streams. The aldermen were invited to witness a test of the steamer's capacity recently, with a view to deciding on joining in the cost of maintaining her for general service on the waterfront, an arrangement which is likely to be entered into.

* * *

The Victoria Marine Railway Co., which has its ways and works at Esquimalt, is now engaged in preparations for extensive shipbuilding. A new steamer is to be built for the C.P.R. to add to the Princess fleet, and though similar in type to the Princess Beatrice, built a year ago for the C.P.R. by the B. C. Marine Railway Co., the new Princess will be 40 feet longer, and will cost $40,000 more. She will be a wooden vessel. The same company is to undertake the remodelling of the Princess May, the northern liner of the C.P.R.'s fleet, at an estimated cost of $150,000.

* * *

A hydrographic steamer for the Dominion Government, to cost $75,000 and to replace the British admiralty hydrographic steamer Egeria, is also to be built, as well as a quarantine tender, which is now under contract at $42,000.

* * *

A. F. Peters, of the Record Foundry Co., St. John, N.B., is negotiating in Victoria for the purchase of the old Albion iron works and foundry, the object being to start a stove works, similar to that now operated in the east. The company Mr. Peters represents, is also discussing the advisability of locating in Vancouver, where it will be necessary to build.

* * *

Coast smelter industry is looking up. Folowing the purchase of the Crofton smelter by Mr. Geo. H. Robinson, the mining man who is principal owner of the Britannia mine, comes the announcement that the Ladysmith smelter, under the management of Mr. Thos. Kiddie, has secured a contract for 20,000 tons of copper ore to be delivered from Alaska mines, ores which are peculiarly suited to fluxing with those from the Mt. Sicker mines on Vancouver Island. Mr. Kiddie secured this contract in face of strong opposition from the smelter at Tacoma, Wash., the oldest established concern of the kind on the coast. There is a smelter now built on Prince of Wales Island, opposite Ketchikan, Alaska, which is proposed to be operated smelting Ketchikan ores, but no suitable ores for fluxing have yet been secured.

* * *

One more coal field has been added to the many already located in British Columbia. The newest location is on Short's Creek, west side of Okanagan Lake, and at 2,800 feet elevation. It can be mined and transported very economically, owing to its situation above the lake. The seam uncovered

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c a word each subsequent insertion.
Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

YEARLY CONTRACT RATES.

100 words	each insertion,	1 year	$30 00
"	"	6 months	17 00
"	"	3 months	10 00
50	"	1 year	17 00
"	"	6 months	10 00
25	"	1 year	10 00

WANTED.

A 1 BANDSAWYER; accustomed to sawing swell drawer fronts. Berlin Furniture Co., Limited. (f)

BLACKSMITH wanted; first-class horseshoer and general jobber; steady job to right man. Tinney Bros., Cavan P. O.

CABINETMAKERS wanted; steady work and good wages paid for steady men. Bracebridge Furniture Co., Limited, Bracebridge. (f)

GOOD hardware clerk, one who has a knowledge of book-keeping and stock-keeping. Address Box 269, North Bay. (31)

TINSMITHS wanted; wages 20c. to 25c. per hour, according to ability; must be temperate; steady work to right men. Apply personally and at once to The Pedlar People, Oshawa, Ont. (32)

WANTED—man who can do plumbing and sheet iron work. J. Peart, St. Catharines. (f)

WANTED traveling salesman for enameled ware and tinware business; state age, experience, salary; applications confidential. Box 267, HARDWARE AND METAL, Toronto. (31)

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods Address Box 254, HARDWARE AND METAL, Toronto. (tf)

TRAVELERS WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25 f)

HARDWARE travelers wanted for Maritime Provinces, Quebec, Ontario and Manitoba; must be able to invest from $500 to $1,000 each; old, reliable house; connection well established. Box 265, HARDWARE AND METAL. (32)

is 52 inches thick, and promises to be excellent quality of bituminous coal.

* * *

The silver-lead industry in the Kootenays promises to be very prosperous, in the opinion of Manager W. H. Aldridge, of the C.P.R.'s mining department. He views with satisfaction the increased tariff on lead products, and is certain it will be of direct benefit to the industry in Canada. He says that the lead streak at the Trail smelter, now blown in, has plenty of ore in sight. Also, that the lead produced finds ready market, not only in Canada, but in the Orient, both China and Japan being large purchasers. The Australian lead has been diverted to England, leaving the Orient to Canadian lead. The price of silver continues fairly strong, and in this, Manager Cronin, of the War Eagle and Centre Star mines at Rossland, observes that it usually keeps up to 60c., though once in a while it drops to 55c. Lead is ruled by London price, which at present is high and the market strong.

Nova Scotia Trade News

Halifax, N.S., Aug. 1.

A VERY noticeable falling off in trade was evident during the week. The dull season in the hardware business has now set in. There is a fair demand, however, for a few lines, such as builders' materials, and cotton lines and twines. Sales of haying tools are also falling off, as the season is now well advanced. The firm of W. B. Arthur & Co. have assigned, and it is said their liabilities are very heavy. Representatives met some of the creditors, and an effort was made to compromise at 45 cents on the dollar, but the negotiations fell through.

The Dominion Coal Co. on Saturday received the first portion of an order for 150 steel cars similar to those which they have been using for several years, in general construction, but with some alterations in the bottoms, which it is expected will make the new cars more easy to discharge than the old. The capacity of each car is about 100,000 lbs., or about 48 tons, so that the 150 cars will add about 7,000 tons to the car capacity of the company, an important element in securing prompt despatch to their steamers. It represents an outlay of over $150,000, but gives the same amount of tonnage at a less cost than wooden cars can be built.

Steady progress is being made at the Sydney Cement Co.'s works. The output is increasing and on Friday reached two hundred barrels. The cement has been tested both in the air and under water, and it has been found satisfactory. The damage by fire and water to the stock of George E. Smith & Co. has been appraised at $13,306.76. The insurance loss is divided among the following companies:

Acadia	$1,120 10
Halifax	1,120.10
Norwich Union	2,240.20
Liverpool, London & Globe	2 240.20
North British & Mercantile	2,240.20
Hartford, Connecticut	2,240 20
Phoenix	2 105 76

The firm is now selling off the damaged stock at reduced prices, and the store is crowded with purchasers from the opening to the close every day.

J. Stanley Miller, of the staff of William Robertson & Son, wholesale hardware dealers, has accepted a position with a large wholesale hardware house in Harrisburg, Pa., and will leave for his new field of labor this week.

Prices quoted here follow:

Lead pipe	$ 4 70
Sheet zinc, in casks	7¼c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3½ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 30
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White lead per 100 lbs., pure	5 75
" 2nd quality	5 50
" 3rd "	5 00
Barbed Wire	2 55
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 co
Black sheet iron	35c.
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94
Boiled oil	54
Raw oil	51

PERSONAL MENTION.

The hardware business of MacPhail & Co., Vancouver, has been sold to L. E. P. McAdam, late of New Zealand. Mr. J. L. Johnson, an old-time hardware man in the Northwest, comes in as manager.

Pilkington & Co., British glassware manufacturers, are erecting a large warehouse in Winnipeg, where they intend to carry a stock of goods for their Western Canada trade.

The warehouse of the Imperial Implement Co., Winnipeg, was partially wrecked as a result of the great weight of heavy farm machinery which it contained.

Mr. J. Hartford Chidester, of the Arrow Can Co., of New York City, manufacturers of the improved pressed steel ash cans, was a visitor at the Montreal office of Hardware and Metal last week. Mr. Chidester while in Montreal called on one of the local can manufacturers for the purpose of starting the manufacturing and sale of this can in Canada.

A HANDSOME RULER.

A very handsome ruler is being distributed among the hardware and heating trade by the Pease-Waldon Co., Limited, of Winnipeg. Among the multitude of advertising novelties of the kind, this ruler has a distinction all its own, and is worthy of a place on any business man's desk. Mention this paper and ask for one.

ONTARIO POWER COMMISSION.

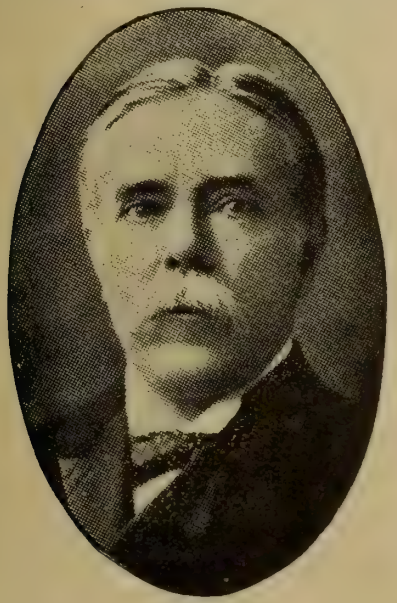
THE Ontario Government made a definite move in the right direction when it decided to appoint the electric power commission to inquire into the question of the water-power possibilities of the Province of



Geo. Pattinson, M.P.P.

Ontario. The commission includes the Hon. Adam Beck, representing London, who has made a careful study of the subject; Mr. George Pattison, M.P.P. for South Waterloo, and one of our manufacturers, and Mr. P. W. Ellis, a successful manufacturer and public-spirited business man of Toronto. The investigation that is about to be carried on is of the most important nature and should have considerable effect on the progress of manufacture within the province.

It is hinted that the Government even propose to assume control of the existing franchises at Niagara and place all



P. W. Ellis.

water-powers under state control. This would be a decided innovation on the part of a government, but, if properly executed, would have the effect of supplying power to manufacturers at a much cheaper rate.

If you are catering to the building trade you know that builders who have once used "Hayes" Metallic Lathing cannot be induced to use any other. Its grip upon the mortar is so tenacious that it takes but half the quantity required by wood or cheap metal lathing, makes partitions much narrower and has a lightness, rigidity and freedom from "buckling" found in no other make of metal lathing. It's fireproof, ratproof and sanitary. No live builder should overlook the superiority of "Hayes" Metallic Lathing.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada 308

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (Stone, Brick, Etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Aug. 4, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

IN another part of this issue appears a full account of the proceedings at the annual meeting of the Western Retail Hardware and Stove Dealers' Association. Hardware dealers who were not present are recommended to read this report. Although the attendance was a little disappointing the membership list, the secretary's report, and the record of actual work done, show a satisfactory condition of affairs.

* *

A rolling mill for the manufacture of bar iron will be in operation in Winnipeg about the middle of the month. A full account of the Kirkwood Iron and Steel Rolling Mills will be found in another part of this issue.

* * *

On Monday, at noon, an important deal was completed whereby the Western Light Co. acquired the full selling rights in Manitoba and the two new provinces, for Siche gas, and all appliances connected therewith. The partners in this new company are H. A. Kidney, who was formerly connected with the Siche Gas Co., and E. C. Foley, and E. C. Colby, two gentlemen connected with the Canadian Iron Wool Co. H. A. Kidney will assume the active management of the firm, and offices are being opened at 328 Smith street.

* *

Henderson & Potts Co., Limited, already find their premises on Lombard street too small, and Manager Irwin informs Hardware and Metal that arrangements have been completed to double their warehouse capacity. Evidently there is a growing demand in the west for "English" paints.

* * *

Price changes are not numerous. Wire nails are reduced to $2.75 per keg, and in consequence, while cut nails are still nominally quoted at $3.00, none are selling. Turpentine has declined 4c. per gallon. After some cutting and competition the price of lanterns has been announced, and will be found below.

Screen Wire Cioth—Price is still quoted at $1.55 per 100 square feet. The season's trade is almost over.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch	roll,	perroll	$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Lanterns—There is a strong demand now for lanterns for Fall trade. After some competition and uncertainty, the wholesalers have announced their prices, which are as follows:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Business still continues very brisk at steady prices. We quote as below:

Barbed wire, 100 lb.		$2 85
Plain galvanized	6 to 8	3 39
"	9 2 50	2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60

WALL COVERINGS

We always have a large and well assorted stock of

BURLAPS

on hand, and are agents for the celebrated

FAB-RI-KO-NA

Dyed Tapestry Burlaps.

Write for samples and prices.

Orders filled same day as received.

G. F. STEPHENS & CO., Limited

PAINT AND COLOR MAKERS

WINNIPEG, - CANADA

Plain twist	2 85
Staples	3 35
Oiled annealed wire, 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
" 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—There is a very light demand at present. Prices are still quoted as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—The base price has been brisk at steady prices. We quote as below:

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws — A record building year means a big demand for screws, and one or two sizes are said to be almost out of stock temporarily. Discounts are still as follows:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

"Arcade"	70 and 10 p.c.
"Black Diamond"	60 p.c.
"Nicholson's"	62½ p.c.

Building Paper—In common with all other classes of building supplies, building paper is selling very briskly. Prices are quoted as follows:

Anchor, plain	55c.
" tarred	70c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—The demand for arms, ammunition, etc., is increasing, local houses reporting some large orders. We quote:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is steady and fairly active. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	12 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Selling briskly at prices quoted last week:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red 3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24.....	3 25
Canada plate, 20 x 28.....	3 50
Canada plate, full polished.....	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch.....	....
" ¼ "	2 45
Black iron pipe, ⅜ inch.....	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal.....	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light.....	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand. We quote:

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints, Oils and Turpentine—It is rumored that a further advance will be made shortly in white lead, as the present price leaves the jobber little or no profit. Turpentine declined 4 cents per gallon the last of the week. General lines of painting materials are selling briskly. We quote:

White lead (pure).....	$6 00	6 25
Bladder putty, in bbls.....		0 02½
" " in kegs.....		0 02¾
Turpentine, pure, in barrels.....	0 96	1 01
Less than barrel lots.....		1 05
Linseed oil, raw.....		0 62
Boiled		0 65

Window Glass—We quote:

16-oz. O.G., single, in 50 ft. boxes—	
16 to 25 united inches.....	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
91 to 95 "	17.30
6 to 100 "	

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

WIRED GLASS

The use of which is past the experimental stage, and is now recognized as a necessity by up-to-date business men.

Money saved is money made, and WIRED GLASS will save you money on INSURANCE. Samples and Particulars on Application.

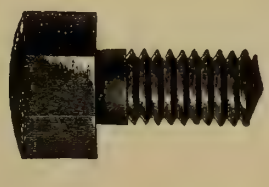
ASK FOR VEST POCKET MAP OF MANITOBA

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

SPRINGS



Send Samples or Specifications for Prices.

The WALLACE BARNES CO., BRISTOL, Conn.

PAINT, OIL AND BRUSH TRADES

MASTER PAINTERS' CONVENTION.

THE Dominion Master Painters and Decorators held their annual convention in Hamilton last week, over 100 delegates being present. The chief features of the convention were the instructive papers read by members and the entertainments provided by manufacturers. The latter included a banquet at Hotel Brant, given by the Berry Bros. Co., of Walkerville, and a trip to Niagara Falls, provided by the Menzie Wall Paper Co., Toronto. The addresses included the following:

"Graining a Door," by W. E. Graham, Somerville, Mass.

"Master Painters' Associations and Why we Exist," by Mr. J. W. Morley, Winnipeg.

"The Advantages of the Open Shop to Employer and Employe," by Mr. A. N. Dubrule, Montreal.

"The Importance of Bookkeeping to a Master Painter," by Mr. Frank H. McCausland, Toronto.

"Measurements and Prices," by Mr. J. W. Knott, Toronto.

"Simple Methods of Testing Painters' Materials," by Robert Simpson, Sarnia.

"The Paper Hanger and His Difficulties," by Harry Holcombe, Hamilton.

"Apprenticeship and Technical Schools," (a continued paper), by W. T. Castle, Montreal.

"Fate of the Master Painter as Sub-Contractor," by member Montreal Association.

Lead tests were also conducted by James Matthews, and an interesting discussion arose on the question of removing old papers from walls. It was pointed out that several of the states had passed laws against putting new paper over old paper, for sanitary reasons. In Montreal, it was stated, the Board of Health had taken the matter up. Some of the members were in favor of sending a petition to the Legislatures of the various provinces to pass similar acts, but action was deferred till next year. It was suggested that the various associations call attention of their local Boards of Health to the matter.

The new officers are as follows: President, A. M. McKenzie, Hamilton; vice-president, T. W. Brooks, Windsor; secretary-treasurer, Stewart N. Hughes, Toronto; executive committee, H. N. Reynolds, Guelph; J. W. Morley, Winnipeg; Wm. Stamp, Hamilton; J. W. Johnston, St. John, N.B.; Robert Simpson, Sarnia. Trustee, George Metcalf, Hamilton. Windsor was chosen as the next place of meeting.

WHITE LEAD DUTY DEFERRED.

THE Government has made known to the paint manufacturers of Canada that their requests with regard to the increased tariff on imports of dry white lead have been granted, and that all white lead coming into Canada up to September 15, will come in at the old tariff of 5 per cent., provided it was ordered previous to July 6, the date on which the new tariff of 30 per cent. was established.

FOSTERING HOME INDUSTRIES.

An order-in-council was passed last week providing that dry white lead, orange mineral, and dry red lead made from lead produced from Canadian ores and pig lead from Canadian bullion, on entering Canada shall now pay duty on the full value of the article. A few years ago, in order to encourage lead mining in Canada, it was provided that pig lead made from Canadian ores and refined abroad, and dry white lead corroded from Canadian refined lead should be allowed entry at the actual cost of refining in the one case and the cost of corroding in the other. Recently a lead refinery has been established at Trail, B.C., and corroding works at Montreal, and it is in conformity with the policy of granting incidental protection to these new Canadian industries that the change has been made. The lead miner gets his encouragement through the present bounty.

NEW WHITE LEAD PLANT.

It is announced that, as a result of the new protective duty on white lead, the National Lead Co., of New York, a factory in Montreal. A good deal of Canadian capital has been secured for the scheme, which will be carried out by a separate company under control of the New York corporation.

The National Lead Co. is a large amalgamation of American lead corroding interests, and is generally known as the white lead trust, while the Carter White Lead Co., of Canada, already established in Montreal, is a dependency of the Carter Co., the largest of the independent companies in the United States.

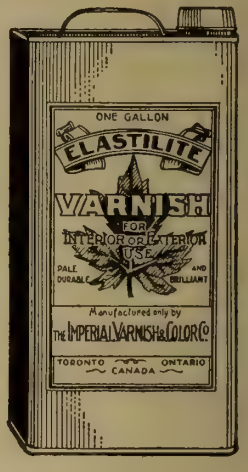
Great secrecy is observed by the promoters of the new plant, but more definite news may be expected soon.

FRANCIS FROST CO. TO BUILD.

An agreement has been entered into between the Francis Frost Co., manufacturers of paints, oils and varnishes, and the Town of Toronto Junction, whereby the company secures a suitable site at the Junction and guarantees to build a cement or brick factory valued at $3,000 within one year. The growing business of the company made necessary the securing of larger premises with better shipping facilities, and these are provided at the new site.

There are lots of varnishes,
but the good kind is

ELASTILITE



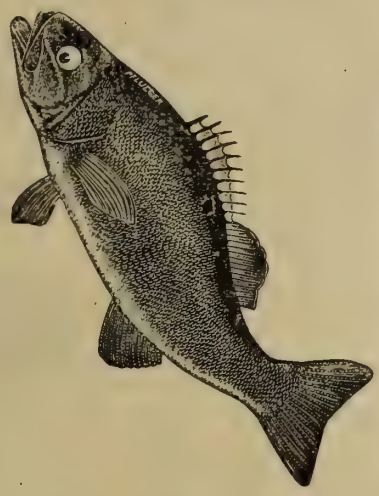
For outside or inside use
In Tins ½ pint to 1 gallon

The Imperial Varnish & Color Company, Limited
Toronto, Ontario, Canada

STOCKS AT
WINNIPEG, MAN., care Mason & Hickey.
VANCOUVER, B.C., care Durand Merchandise Company.

PFLUEGER'S
Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines. Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio



WALL PAPERS

Every sample in the new "STAUNTON" Line for 1906 is a good reason why you should place your order for "STAUNTON" Wall Papers.

Before Buying, See Our Line

STAUNTONS LIMITED
TORONTO



Stock up

Skedden Brushes

they have a Record for Satisfaction.

The Skedden Brush Co., Limited, Hamilton, Ont.

Toronto Office—57 Queen Street East.
Phone Main 3431 F. W. KNIGHT, Agent.

IMPERIAL FRENCH GREEN

is preferred by skilled painters because of its fineness of texture, covering capacity and great durability. Acknowledged to be more permanent than Nature's Greens.

Insist on it once and you will always use it



Be sure this label is on the can and take no other. See sample cards.

JOHN LUCAS & CO., MFRS.,
PHILADELPHIA, NEW YORK, CHICAGO.

MACARTHUR, CORNEILLE & CO., MONTREAL

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 3, 1905.

THE past week has marked a continued activity in all departments. The demand for white lead, which was stagnant for a fortnight after the new tariff was adopted, has revived, and, as prices are still moderate, the orders are brisk.

Paris green is cleaned out, except for a few small lots in jobbers' hands, which have been distributed in needy centres. The stock has not been so low in many years.

In general paints, the demand is good, for the season, and large sales are reported. Red lead may be advanced during the week, as the market for pig continues very strong.

Turpentine is firm, at the prices quoted in our last minute reports of a week ago. It is stated that the crop is short this season, as compared with last season, owing to the difficulty of securing proper labor, in the southern pine belt.

Canadian Paris Green — Barrels, 17 1-4c.; arsenic kegs, 17c.; 50 and 100-lb. drums, 18c.; 25-lb. drums, 18 1-2c.; one pound packages, 19c.; half-pound packages, 21c.; one pound tins, 20c. Terms 2 per cent. discount for cash in 30 days or 90 days net.

English Paris Green—Prices will be furnished on application. For the present, it is open.

Turpentine—Single barrels 88c. per gallon; two to four barrels, 87c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Raw, one to four barrels. 51c. to 54c.; five to nine barrels, 50c. to 52c. boiled, one to four barrels, 54c. to 56c. five to nine barrels, 53c. to 55c. f.o.b. Montreal. Net 30 days.

Ground White Lead — Best brands Government standards, $5.50 to $5.70; No. 1, $5.25 to $5.45; No. 2, $5 to $5.20; No. 3, $4.75 1-2 to $4.95; No. 4, $4.50 to $4.70, all f.o.b. Montreal.

Dry White Lead—Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins. $6 50.

Dry White Zinc—Pure dry in casks. 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—Pure. 25 lb. iron, 7 1-2 to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Pure linseed oil $1.75 to $1.85. Bulk in barrels, $1.50; in 25-lb. irons. $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish — Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—$1.20 to $1.40 per gallon.

Castor Oil — 8 to 9c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—A number of orders have been received from dealers contracting for a winter supply. As prices are at their lowest now, this is a wise move.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, August 4, 1905.

A DROP on both linseed oil and turpentine is reported this week, although stocks of neither article are at all heavy on the local market. Enough turpentine is being received, however, to supply the local demand and the drop is in response to a weakening on the southern market. The bulling of linseed in the States has not been as marked as predicted.

White lead is being sold in large quantities. When the price was low, buying was not at all active, but since the recent advance, orders have been placed in increasing quantities. This is a condition which could hardly have been expected. An advance on red lead is looked for shortly.

Mixed paints continue to be sold in large quantities, and business is keeping up so well that no decline is now looked for during the Summer months. Paris green sales have fallen off as expected.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this

Brandram's
B. B.
Genuine
White Lead

BRANDRAM BROS & CO
BRANDRAM'S
B. B.
WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

has long been known as the best white lead the world produces. It is unequalled for

WHITENESS,
FINENESS
and BODY

and will cover more surface than any other white lead made. It is the only white lead used in

"ANCHOR"
or
"ENGLISH"
LIQUID PAINTS

making them the leaders on the market.

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

DRIES QUICKLY and HARD

Has a beautiful lustre and easily and quickly applied.

Standard Air-Drying Cycle Enamel

Put up in Penny Lever Cans to meet the requirements of owners of bicycles whose wheels have become scratched and the enamel finish defaced. All colors. Prices in our catalogue. Write for it.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.

617-621 Austin Ave., CHICAGO, ILL.

Subscribe to the

OIL AND COLOURMAN'S JOURNAL

for news of the **British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.**

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG.



A Popular, Profitable and Seasonable Line to Handle.

Dennis' Flexible Steel Wire Door Mats

DENNIS WIRE AND IRON CO.

Send for Catalogue. LONDON, ONT

McCaskill, Dougall & Co.

Manufacturers

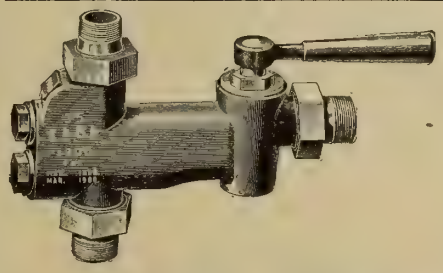
RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

ABOUT GLUES

What kinds do you handle? Are you and your customers satisfied? Perhaps we can give you a better article at a fairer figure. Our SCOTCH GLUES will be found of exceptional strength, and equal to many glues for which much higher prices are charged. Let us send samples.

GROVE CHEMICAL CO. Ltd., Appley Bridge, Lancashire, Eng.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

DO IT NOW

THIS IS AUGUST. A few more weeks and September will have begun, and with it the **FALL RUSH** in the paint trade. This is your chance to stock your shelves with a paint that is, when packed, both attractive and fair in price.

These two features will pass the tins of paint from your shelves to the **customers'** hands.

LEAVE

The quality of the paint should be left to the judgment of the **consumer.** Our brand is noted for its quality.

EXPERIMENT YOURSELF — ISLAND CITY

P. D. DODS & CO., Toronto, Winnipeg, Vancouver, Montreal.

"Make Assurance Doubly Sure"

If you are interested in the welfare of your customers and desire to arrest deterioration and improve the character of their buildings "stand not upon the order of going" but go at once to the Post Office with a letter order for a supply of the **CANADA PAINT COMPANY'S** House and Villa Paints. Also special paints for Floors, Verandahs, Roofs, Wagons, Carriages and Implements. The fact of the **CANADA PAINT COMPANY'S** name being upon the package is a guarantee of excellence.

"Good Paint"
"Good Purchase"

season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current quotations at the end of this issue.

White Lead—Ex Toronto, pure white $5.50 to $5.75; No. 1, $5.12 1-2; No. 2, $4.75; No. 3, $4.37 1-2; No. 4, $4.10 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $4.25.

Red Lead—Genuine in casks of 560 lbs., $5.25; ditto, in kegs of 100 lbs., $5.50; No. 1, in casks of 500 lbs., $4.75 to $5; ditto in kegs of 100 lbs., $5.25.

White Zinc—Genuine V. M., in casks, $6.50 to $7; Lehigh, in casks, $6 to $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 54c.; boiled, 57c.; 5 to 9 barrels, raw, 53c.; boiled, 56c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrels, 87c.; 2 to 4 barrels, 86c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

WINDOW GLASS—MONTREAL.

Shipments of window glass, which should have arrived last May, have just come to hand this week, and the Montreal glass market is somewhat relieved. Conditions in Belgium have improved, and the output will now be larger than at any time since the strike began. Another favorable condition is the end of the Belgium Summer, during which it is almost impossible for the glass workers to continue operations. It will take a long time to catch up to orders already in, but the situation this week is on the whole encouraging. Prices are firm, but no change is anticipated. We quote: First break, 50 ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 fe et,$4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

PERSONAL MENTION.

A site has been secured in Hamilton for a factory to manufacture tinware.

Mr. H. W. Aird, of the Canada Paint Co., is catching big fish at Prout's Neck.

The Winnipeg Paint & Glass Co. have opened their mill and warehouse in Fort Rouge.

The hardware business established by the late O. A. Rogers, at Middleton, N.S., is advertised for sale.

Mr. O. A. Cole, Toronto representative of the Philip Carey Roofing Mfg. Co., was in Montreal last week.

Mr. L. Wardell, representing the Peace Metal Weather Strip Co., has returned to Brantford to resume business.

A. H. Campbell, of A. C. Leslie & Co., Montreal, visited Toronto and Hamilton on business last week.

The George B. Meadows Wire, Iron & Brass Co. opened their new works on Wellington place, Toronto, this week.

Financial troubles of the new Imperial Hardware Co., Adelaide street, Toronto, are being aired in the courts.

Mr. Max Morrell, Toronto, representative of Lewis Bros., Limited, Montreal,

Mr. T. H. Newman, of Caverhill, Learmont & Co., Montreal, is taking a two weeks' vacation at Rothesay, N.B. was in the latter city during the week.

The Capewell Horse Nail Co., of Hartford, Conn., is establishing a factory in Toronto to supply the Canadian market.

Jos. Douglas, of McFarland, Douglas & Co., galvanized iron workers, of Ottawa, spent a day in Montreal, last week.

The employes of the Canadian Iron & Foundry Co., Hamilton, held their annual picnic at Niagara Falls last Saturday.

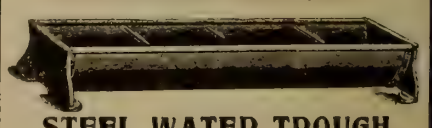
Mr. Edward Dowsley, of A. Ramsay & Son, paint manufacturers, Montreal, is spending his vacation on the Coast of Maine.

Wayland, Williams & Dadson, Montreal, dealers in machinery, are fixing up their new warerooms at 321 St. James street.

The employees of the Canada Screw Co., Hamilton, held their fourth annual picnic at Niagara Falls last Saturday.

D. W. Clark, Canadian representative of B. K. Morton & Co., steel manufac-

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. TWEED, Ontario Limited

turers, is taking a business trip through Quebec Province.

Mr. Sam Brewer, of Thos. Robertson & Co., Montreal, returned from his vacation on Thursday. He reports a good time in spite of the rainy weather.

The hardware firm of Stanley & McLaggan, Chesley, Ont., has been dissolved by mutual consent. The business will be carried on by Donald McLaggan.

Mr. E. Foucar, who has been conducting a hardware store at Wetaskiwin, Assa., for several months, has decided to dispose of his business and return to Ontario.

Thomas H. Dunham, of the 20th Century Mfg. Co., New York, manufacturers of oil and gas lamps, called on the Toronto office of Hardware and Metal a few days ago.

Mr. A. E. Cholette, late salesmanager of the Canadian Rubber Co., Montreal, has accepted a position with the Gutta Percha Rubber Co., with headquarters in the same city.

Deep anxiety is felt over the serious illness of Mr. W. J. Crossen, the head of the Crossen Car Mfg. Co., Cobourg, and the hope is everywhere expressed that he may speedily restored to his accustomed health.

Mr. Norman Wylie, of Lewis Bros., Limited, Montreal, has returned from his trip to England with the Canadian manufacturers. He is already back on the road, telling his customers about King Edward's fine cigars.

Mr. J. E. Lecours, of Amiot, Lecours & Lariviere, wholesale plumbing supply dealers, of Montreal is traveling through Eastern Ontario and Western and Northern Quebec. Mr. Lecours will be absent from the city for ten days.

Mr. I. H. Clucas, traveling representative in the western states of the Russell-Erwin Hardware Co., New York, has been spending a week in Toronto visiting his father, Mr. Clucas, Toronto representative of the Canada Paint Co.

Mr. J. D. Currie, of the firm of Currie & Sampson, machinists, Pilot Mound, has returned from an extensive trip through the States and West Indies. The partnership has been dissolved and Mr. Currie will conduct the business himself.

Mr. William Francis, one of Montreal's best known hardwaremen, passed away last Saturday afternoon. The deceased was a member of the firm of W. & B. Francis, hardware merchants, 490 St. Paul street, and had reached his eighty-eighth year.

Mr. F. Reddaway, of F. Reddaway & Co., Manchester, Eng., who is making a tour of his colonial branches, is expected to visit the Montreal office of the firm about September 1. Mr. Reddaway has been detained in his trip by labor troubles at Moscow, where his company have a large factory.

A new factory will be opened in Hamilton for the manufacture of wire goods, stamped tin, tacks, and castings, by the Consolidated Hardware Co., which is headed by Mr. F. E. Robson, of Toronto, formerly of New York. A building has been secured on Park street. About 30 hands will be employed.

A. H. Patterson, Chatham, is going out of the hardware business, and will shortly enter the field as a manufacturer. During his four years in Chatham Mr. Patterson has made a large circle of friends by his honorable and scrupulous methods of doing business.

Negotiations are under way by which the Imperial Lock Co., of Toronto, and the Fader Co., of Orillia, will amalgamate and start operations at the Lock Works, at Orillia. The Fader Co. have a fine plant, which has been lying idle for some time owing to legal complications.

Mr. C. C. Ballantyne, vice-president of the Canadian Manufacturers' Association, will preside at the banquet on August 17, to be tendered Mr. W. K. George. Among the speakers will be Mr. J. S. Larke, Canadian commercial agent for Australia. The affair will be held at the National Club, Toronto.

Reid Bros., machinists, who started in business in Regina about a year ago, with a staff of two men, have now a pay list of over fifteen hands. They are working overtime on their contracts for caps for the city sewerage system, and turning out some very heavy castings. Their building has been recently doubled in size.

The main body of the members of the Canadian Manufacturers' Association who went to Britain arrived home last Saturday. President W. K. George was not with them, having waited over to come on the Virginian. Mr. R. J. Younge, the secretary, stayed at Quebec to arrange for the coming annual convention.

Mr. Walter Grose, of the Ontario Lantern & Lamp Co., Montreal, has just returned from England, where he went with the Canadian Manufacturers' Association. Mr. Grose reports that although his object was pleasure rather than business, still he comes back crammed with new ideas applicable to his business.

Daly & Morin, manufacturers of window shades, poles and trimmings, and wholesale dealers in brushes, etc., are enlarging their Montreal warehouse on St. Sulpice street by the addition of two flats. They are also building a new factory at Lachine, Que., 200 x 45 feet, three-storeys high, thus nearly doubling their present capacity.

NOTICE IMPORTANT



We shall close our works for the annual stocktaking and repairs, from the 19th to September 4th, and consequently advise such of our customers that may require Files and Rasps before the middle of September, to send in their specifications without delay, so that we may be enabled to ship promptly.

Nicholson File Company, Dominion Works

WALTER GROSE, Selling Agent, Montreal.

A PERMANENT and Handsome Roof.



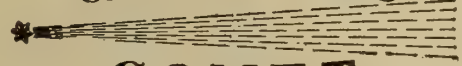
Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR

GILBERTSON'S



COMET

Brand Galvanized Sheets

The brand you should handle unless you want to pay a fancy price for something that will not work any better. Every sheet guaranteed.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

TRADE MARK

This design a guarantee of quality

WRAPPING PAPERS

ALL GRADES, AND BEST OF EACH
GREY, RED-BROWN, MANILLA, FIBRE, TEA, ETC.

WRITE US FOR SAMPLES AND PRICES.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

870. The names of Canadian exporters of minerals, metals, ores and timber have been asked for by a London firm.

871. A London firm exporting iron and steel goods, machinery, locomotives, etc., are desirous of appointing agents to represent them in Canada.

872. A London firm doing an extensive business in iron, steel, metals, cement, window glass and other export articles and also old materials, desire to enter into relations with Canadian merchants or consumers.

873. The addresses of companies working solalite deposits in Canada have been asked for by a London firm.

879. A large manufacturer in Germany wishes to be placed in communication with Canadian producers of spirits of turpentine or wood oil. The names and addresses of Canadian firms producing these goods are requested.

The new Presbyterian church at Regina is being constructed entirely of cement brick.

SOL-A-RINE

The Great Polish

For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO



OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, LIMITED

MANUFACTURERS OF

Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

Agent:

JOHN FORMAN, 644 Craig Street
MONTREAL.

YORK

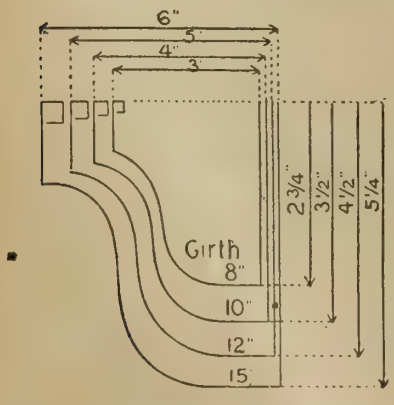
Metal Polish works with a rapidity and brilliancy not known in other polishes. Liquid or paste, 10c. and upwards. Better carry it.

ANGLO-CANADIAN SUPPLY CO.

3 Wellington St. E., TORONTO

O. G. EAVETROUGH

(SQUARE BEAD)



We supply the above in Round or Half-Round; also **Conductor Pipe**, Plain or Corrugated. Ten-foot lengths. At lowest market prices.

A full stock of Tinsmith's Tools and Supplies.

E. T. WRIGHT & CO., Hamilton, Ont.

STOVES AND TINWARE

CARE OF STOVE PIPES.

THE ruinous rusting of stove pipes is a matter that is often forcibly brought to the attention of users of anthracite coal stoves. Pipes which have been in use for two or three years will sometimes become so eaten by rust that little metallic iron is left and the pipe will crush in the hand. This destruction is more rapid and complete than with the ordinary weather rusting of sheet iron.

The cause is generally attributed to the sulphur in the coal. There is not much doubt that the destruction of the mortar in chimney tops is due to the sulphur acids; but some experiments made by the writer a number of years ago resulted in showing that the sulphur has little to do with this injury to pipes. The true cause is the production of ammonia compounds during combustion. Both the chloride or sal-ammoniac and the sulphate are formed in the pipe and mix with the ashes and soot. It remains harmless during the dry, cold weather, but readily absorbs moisture by contact with damp air as warm weather comes on, when its action begins, and continues, so long as the cause remains. The effect of sal-ammoniac to induce rusting in iron is well known. It is also well known that bituminous coal gives off ammonia when distilled, the supply obtained at the gas works being considerable. We would hardly expect amthracite coal to produce an appreciable quantity, but when the writer mixed a little slacked lime with some dust taken from flues or pipes a strong smell of ammonia was developed, thus practically demonstrating that this salt is produced in quantity sufficient to cause injury.

Spring is the season when stove and furnace pipes will be put away for the Summer, and knowing the cause of this vexatious rusting we must look for the remedy.

The removal of the ammonia salt is a matter involving difficulties. If we start with a new pipe and brush out every particle of dust before the dampness has been absorbed the removal will be complete and no harm will ensue. This, however, is an exceptional case. In our climate we are often obliged to keep up our stoves and furnaces through the first warm, damp days of May, and sometimes early June. When rust has once commenced, and particularly in the case of neglected pipes, the crust of rust persistently holds the ammonia salt.

Two ways seem to effect its removal from the pipes: First, by immersing and thoroughly soaking the separated sections for several hours in water—running water, if possible—and, second, by roasting the pipes over a fire to a red heat. In my experiments both methods were tried with equally satisfactory results. The pipes, however, in the second method, must be heated to a dark red to completely drive off the ammonia compounds. A stove that could be heated throughout by a brisk wood fire just previous to removal for storage might be made immune, as well as its pipe, so far up as the intense heat had reached; and it has been found of advantage to soak and wash the removable parts of a kitchen stove before leaving the same unused for the Summer. In the instance tested this course prevented the rusting that previously had regularly taken place.

The accumulation of ammonia salts seems to be slow. Just a few fires in a stove do not appear to leave the destructive element in serious quantity. The rusting effect on cast iron furnace flues is to form a scale to a limited depth every Summer, which gradually thins the cast iron. Under the same conditions wrought iron pipes or flues would be penetrated unless of good thickness. After testing a number of samples at different times the ammonia compound was found to be in some cases the chloride alone. Sometimes it was a mixture with sulphate, and in one instance there was present only the sulphate.

The dust from furnace flues has considerable value as a fertilizer. The ammonia will show its effect very noticeably in the increased vigor of the growth of grass on parts of a lawn where the experiment is tried.

THE "ONE ORIFICE" KETTLE.

Griffiths & Browett, Limited, of Birmingham, England, are introducing the "One Orifice" kettle made under Webster's patents, which cover not only boiling vessels, but hot water cans, tea kettles, watering pots, etc. The "One Orifice" design obviates the use of a loose or hinged lid, and does away also with the spout. Instead a pressed-out top is employed in which is embodied an orifice which serves the purpose of a filling opening, and a pouring spout. The top is at an angle to the body of the kettle, this ensuring the free passage of any steam generated, and consequently obviating any chance of boiling over. In order to give the kettle a finish, a brass ring is placed round the orifice. The patents provide for a lid if such is deemed necessary, as, for example, in the case of teapots, and in this last connection the invention covers a clever little detachable strainer.

SACKVILLE FOUNDRIES IDLE.

About 50 iron molders employed in the Fawcett and Enterprise stove foundries, at Sackville, N.B., were locked out last week owing to the men demanding a 10 per cent. increase in wages and deciding to go on strike.

One or two stoves, with plenty of space around them and well displayed, are better than half a dozen crowded together so that nothing but the top and front can be seen.

The "Up-to-Date" and the "Ordinary"

As a practical salesman wouldn't you rather sell an "up-to-date" range rather than the "ordinary" kind?

Particularly when the "up-to-date" is bristling with points of merit and is arranged with all practical features of convenience and utility?

And when through its modernness and thoroughness of construction it will save fuel and time, thereby eliminating expense and worry?

And when the up-to-date will assuredly make you a friend?

And when this friend will therefore give you his other business, and you will have obtained actual advertising results without actual expense?

Better decide to be "up-to-date" and handle the



Walker Pilot Steel Range

Because it possesses all the above "up-to-date" advantages, and yet ***sells at a competing price and makes you about double the usual profits.***

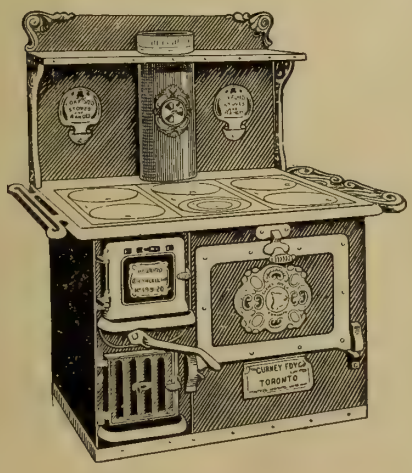
SEND A POSTAL FOR PARTICULARS

The Walker Steel Range Company, Limited

Grimsby, Ont.

When you get right down to "pay dirt" in digging out the reasons for trade success you find the nugget of wisdom to be the one word "SATISFACTION."

The selling force of the simplest words of satisfaction from a pleased customer to a prospective one, is greater than any selling effort you can make, either by word of mouth or printer's ink—and this applies to Ranges.



THE

Oxford Chancellor Range

has never failed to satisfy, and there is as much in it for the dealer in the matter of profits as if he sold some range not half as well known or time-tried as the **Oxford Chancellor.**

The **Oxford Chancellor** fairly beams with beauty, quality and workmanshi , and its reputation does most of the selling. It should be in your stock. If it isn't

SEND FOR PARTICULARS

THE GURNEY FOUNDRY CO., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

The Gurney Standard Metal Co., Limited, Calgary

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



RETURNED AUG 5 1905

We make

Artistic Gas and Electric Fixtures

For all kinds of Buildings,
Private Residences,
Office Buildings,
Churches, &c.

Write us for prices on

Electric Sockets, Shade Holders
Economic Electric Lamps.

A full stock on hand.

Manufacturers of High-grade

PLUMBING Goods



RETURNED AUG 5 190

***and* Supplies**

for the Up-to-date Bath Room.

THE JAMES MORRISON BRASS MFG. CO., LIMITED, TORONTO

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.

[Registered in accordance with the Copyright Act]

Article XI.

SWEATING IN LOW-DOWN CLOSET TANKS.

THERE is perhaps no other single article in the plumbing line which gives more trouble to the consumer, the plumber and the supply house than the low-down closet tank; not because, as a rule, it does not work well, or because it does not look well, but because it "sweats."

Why does a "low-down" tank "sweat" in the same room where a "high-up" tank will give no trouble? Why, indeed! for the reason, and the sole reason, that it is the product of unaccountable thoughtlessness, or inexcusable ignorance on the part of the men who have never asked themselves what difference exists between the "high-up" tank, which has proved so satisfactory, and the "low-down," which has been destroyed by "sweating" in, not dozens, or hundreds, but thousands.

Now, what causes sweating on plumbing fixtures and pipes? Let us answer the question indirectly by asking another, viz.: Why will dampness in the earth, in clothes, in wood; in short, in anything, dry up on a fine, warm day in Summer time, and remain damp on a cool, "muggy" day? The reason is that the warmer the air is the greater is its capacity for carrying moisture, and so it absorbs the dampness whenever and wherever it comes in contact with it, while cool air is "saturated" with a comparatively small amount of moisture and will not absorb any more from the damp places with which it comes in contact.

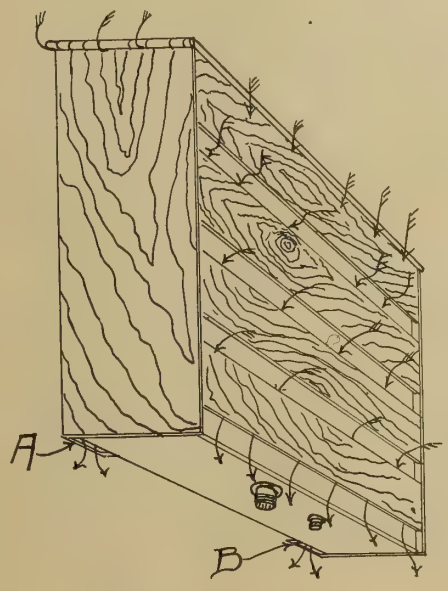
Now, if warm air can carry a large amount of moisture, and cool air a much smaller amount, it naturally follows that if the former has its full compliment of moisture and is suddenly chilled, that its moisture carrying power is reduced, and that the moisture in excess of its carrying power must be at once disposed of.

In the case of a cold water pipe on a Summer day we have a very good example of this condition. The air having a strong absorbtive power collects perhaps all the moisture it can carry, and in the course of its circulation comes in contact with the very cold pipe, where its moisture-carrying power is reduced, and what is more natural than that the excess of moisture should be deposited on the pipe surface which cooled the air, and in that way produce the condition known as "sweating."

This is exactly what causes the trouble in low-down tanks, which, in the first place, were made with reasonably tight woodwork, but not so tight, however, as to prevent a circulation of air between the wood and the copper lining, which caused sweating.

When this was discovered, a demand was made for a tank "with woodwork as open as possible," so that the sweating process would be overcome, and herein lies the reason for the criticism found in the opening paragraphs, because open woodwork in a closet tank is the cause of sweating.

In the illustration is shown a rear view of a low-down tank, as most of those in use to-day are constructed, and the arrows indicate how the air moving down between the tank and the wall passes in between the wood and the copper, leaving a deposit of moisture on



the latter, which spreads to the woodwork on every side of the tank, causing it to swell and split.

The spaces (indicated at "A" and "B") on each side of what are known as "recess" tanks are also channels through which a circulation of air takes place.

The obvious cure for the sweating low-tank evil then, is to make the woodwork solid; that is, without open joints of any kind, so that it will be impossible for a circulation of air to take place between the copper and the wood, and to make the wood a fair thickness, because this class of tank being invariably of "hard" wood, the grain of which being very close and compact, will, if thin, chill through and cause a certain amount of sweating on the outside surface.

If thin wood is used, however, a lining of good, soft felt paper whould be placed between it and the copper, and tacked in position, and if the woodwork is tight, perfect satisfaction will be the result.

In the case of an old tank which has been giving trouble through sweating, the plumber might take out the copper lining, then properly line the wood shell with soft felt paper and replace the copper; then paste heavy paper over the whole back and bottom, taking care to see that the edges, particularly, are stuck tightly to the wood. This will prevent the air coming in contact with the copper and consequently will stop the sweating.

OFFICE BUILDING VENTILATION.

THE heating of offices is well enough, but the ventilation is very largely neglected. These two are so closely related that they should be considered together. Present practice is to provide a radiator for heating controlled either by hand or a thermostat for each office unit, and to provide ventilation by opening the window, the foul air passing into the hall. The ideal arrangement would be to introduce a fixed amount of warmed, fresh, clean air to each office unit at any determined temperature automatically. In fact, there may be said to be no existing way of properly warming the bulk of the offices of an office building without the constant use of a little knowledge, intelligence and trouble. The foul air can be drawn off into a vent shaft placed at any convenient place. For banking and similar large rooms on lower stories the standand hot air heating system, with either exhaust or blast fans, works witu entire satisfaction and but little loss of valuable room, but the air inlets should always be 8 feet above the floor and at least 5 feet from the ceiling, and the outlets for foul air should be near the floor and large enough to have a very low velocity (less than 10 feet per second.) Then the occupants will not feel a draft. The inlet radiators must not be high up, because it is at times necessary to introduce the fresh air at a temperature lower than 100 degrees F. when it feels cold and produces the effect of a draft. If the fresh air forms a current flowing always in one direction, surfaces near it will get very dirty, and we are, therefore, compelled to keep away from the ceiling.—Geo. E. Hill, in Architectural Record.

PATENT FOR SALE.

An English firm, Nehemias Lee & Co., Limited, London, England, have a splendid patent for sale to some firm desirous of manufacturing to supply the Canadian demand for the "Noshado" burner. This invention casts no shadow downwards, and at the same time gives a full upward light. Besides reducing consumption, it gives increased candle power, and the mantle being secured at both top and bottom is very

hard to break. For full information regarding the advantages of the invention and the terms of sale, the firm should be written to, the name of this paper being referred to in the communication.

SHEET METAL RADIATION.

Paper read by H. W. Nowell, at the Chicago Convention of the American Society of Heating and Ventilating Engineers.

SHEET metal radiation has been in use for over fifty-four years, and in its varied forms is well known to be of more value as a heating agency than any other form or type of radiation. Undoubtedly one of the most efficient forms was the flat wall radiator invented in 1854, and one of the more recent date in corrugated form, made in France, both of which are still being manufactured on special order. The writer has knowledge of these that have been in actual use for over thirty-nine years, and the efficiency and apparent durability has not in any manner depreciated. The sheet metal radiator made in America, which, as before stated, was invented in 1854, was originally made of Swedish bloom iron and buttoned together on its flat surface with copper rivets. The originals of this first line are in use to-day, but when other makes of radiation came into the market the manufacturer of this radiator, in order to compete with the price, used a cheaper grade of metal, which was apparently Bessemer steel and riveted with iron rivets. The life of these was very short. They were not galvanized; were made entirely by hand, lap-jointed around the edge and soldered. The corrugated French radiator was made in a similar manner, riveted at the alternate points of corrugation. The writer has no record of the life of these, except a statement made by a manufacturer that he knew of their being in use for over thirty years. There was still another made up in tubular form, tube within tube, which was designed and used in Philadelphia twenty-eight years ago, and the writer knows of some of them still in use and claimed as giving better results than any other type of radiator.

The many different types of sheet metal radiation are conceded by engineers to be the most efficient, but questions have arisen regarding the durability, and pressures which they would stand, and among these lines the writer has had tests made of the metal used in the manufacture of a number of these, and chemists making the analyses and tests make unqualified statements that there should be no hesitation in guaranteeing this metal for any number of years.

Among the different types of sheet metal radiators, and the most modern, is one made along the lines of the cast radiator, in that it is of a vertical sectional type, and conceded to be more symmetrical and pleasing to the eye as to finish and design than other types, and have been demonstrated to stand 30 to 50 pounds pressure without leakage or bulging. Other features which appeal to the architect, engineer and steam fitter, are the lightness and space occupied by the sheet metal radiator, as the weight is about twenty-five per cent. of the cast and space occupied about one-half. As to efficiency in comparison with cast and wrought tubes, some exhaustive tests have been made, and I will take pleasure in mailing a copy of these tests to any member desiring them.

Some time in the year 1862 Professor Silliman, of Sheffield Scientific School, New Haven, made tests which were published, of the flat wall radiator. The efficiency was far beyond that of the wrought tube radiator made at that time.

The sheet metal radiator made at the present time is manufactured of No. 18 and No. 20 metal, and the joints are pressed under heavy pressure, no solder is used—the inside and outside of each section is completely covered with spelter, which prevents oxidation, after which the sections are assembled by male and female joints expanded together as a boiler tube is expanded into a boiler tube head, and the mechanical construction is such as to preclude any possibility of breakage by reasonable pressures, such as are used on present heating plants

This paper is not written for the purpose or intention to advertise any distinct line of radiators, but purposely to bring forward a line of discussion or argument relative to the merits of sheet metal radiation, and for the benefit of all to receive what enlightenment we can on this class of radiation.

CANADIAN AGENT WANTED.

Goodison & Co., gas engineers, 13 Maze Pond, London Bridge, London, S.E., England, are looking for a firm or agent who will represent them in Canada. They manufacture the "Wastenot" gas burner and Goodison's patent self-acting gas governors. By using these it is claimed that large savings are made in the amount of gas burned, and mantles are not so easily broken as when the governors are not in use. Hardware and Metal should be mentioned in writing the firm.

FIRST PRIZE FOR ABSENT-MINDEDNESS.

Francis Wilson, the comedian, believes the most absent-minded man lives in New Rochelle. Last Summer Mr. Wilson's front door bell got out of order and refused to ring, and meeting a friend, an electrician, he asked him to call and make the necessary repairs. Meeting the man several days afterwards, he reminded him that the matter had not been attended to and inquired when he could find it convenient to look after it. The electrician indignantly replied:

"Why, I called at your house the very day you asked me. I rang your front door bell, time and time again, and no one paid the slightest attention to me."

PLUMBING GOSSIP.

The American hotel, Brantford, is installing a new heating system.

Mr. Frank Morrison, of the James Morrison Brass Manufacturing Co., Toronto, is away on a holiday trip.

Robt. Ross, plumber, Sarnia, has disposed of his lime, cement and tile business, but will continue his plumbing business.

The Toronto Plumbers' and Steamfitters Union hold their annual excursion to St. Catharines by boat on Saturday, Aug. 19.

The James Robertson Co. have installed some handsome office fixtures in their Toronto offices. Work on the handsome new showrooms is nearly completed.

Mr. Robert Ross, president Dominion Master Plumbers' Association, was in town during the week. He has been on a farm for some time endeavoring to regain his health.

The Provincial Board of Health are meeting this week at Port Carling. An inspection of the septic tanks in the Muskoka District will be made by the members of the board.

Mahoney Bros., Guelph, have secured the contract for the plumbing work on the fine $4,500 residence to be erected in the Royal City by H. B. Callendar, of the Louden Machine Co.

L. Legrow has secured the contract for the plumbing for the extension of the Huron street school, Toronto, and W. F. Rutley for the heating and ventilating, the latter to cost $3,100.

The James Morrison Brass Manufacturing Co.'s employes had an enjoyable outing last Saturday, several hundred going to Niagara Falls, where games and sports were pulled off.

The Toronto Traders Bank have been allowed to vary the terms of the by-law so as to use wrought iron instead of cast iron soil pipes in the new building, on the advice of Dr. Sheard, who said experience showed wrought iron to be better in sky scrapers.

Amongst the plumbing and heating men from Ontario points who called upon the trade in Toronto this week were Messrs. Fred. Heximer, Niagara Falls Centre; A. Riddle and H. A. Bald, St. Catharines; John Bailes, Oshawa, and Charles Harper, Goderich.

Mr. E. A. Rogers, city traveler for the James Robertson Co., and one of the best-liked men in the trade in Toronto, leaves in a few days on a holiday trip to the Pacific Coast, visiting Banff, Vancouver, Victoria, Portland, Oregon, and other points before returning home.

The board of fire underwriters of St. John, and the town council of Sussex, have come to terms in regard to installing a gasoline engine in the new pumping station. There will be two pumps, and the station is to be of brick. All precautions against fire will be taken and the work will be proceeded with at once.

Canadian Fairbanks Co., Limited, are now getting settled in their magnificent new quarters at 26 and 28 Front street west, Toronto, having removed from their temporary offices at 100 King street west.

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PENBERTHY
MARK.

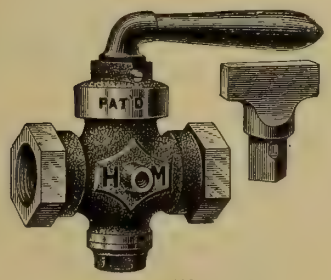
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A bulky looking stop cock does not necessarily mean a strong cock; this is more a matter of the character of the metal and where it is placed.

Mueller stop cocks not only have the bulk to indicate strength, but they are made of fine-grained red brass so distributed by design that they have as much strength as they appear to have. They are strong in fact as well as in appearance.

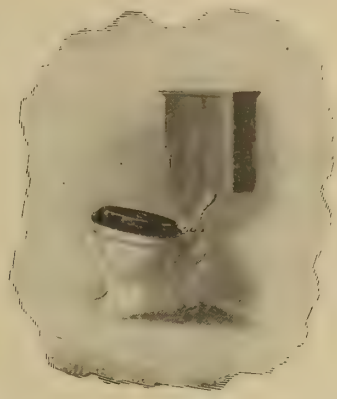
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PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 4, 1905.

QUEBEC plumbing trade continues strong in spite of the fact that recent strikes have produced a falling off in the local Montreal demand. Plumbers are not able to go ahead with their contracts, so long as the carpenters and bricklayers are out, and conditions locally will not improve until the labor troubles are settled. The surprisingly good sales in the rest of the province, however, more than compensate for this.

Contrary to expectations, no rise is yet reported in lead pipe, though the continued firmness of pig lead has induced the supply houses to prepare for a better price on pipe.

It is thought that present quotations on all other lines, will prevail for some time yet, as business continues brisk.

Range Boilers—A steady demand keeps the prices firm. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The expected jump in this line has not yet occurred, but the present quotations will undoubtedly advance in the near future. We quote: as follows: Discount 30 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—This market has settled down, and no fluctuations have transpired during the week. We quote: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Prices remain the same, though the market is scarcely so firm as last week. Some houses are quoting new discounts favoring the buyer. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent. 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—Nothing of note has occurred to change prices durthe week. We quote: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
August 3, 1905.

BRASS goods are now being sold on the new list, the general result being a 5 to 10 per cent. drop on some lines, others remaining stationary and a slight advance being made on a few scattered articles.

Lead pipe has not changed as yet, but the advancing prices on pig lead presage an early rise as soon as the metal market settles somewhat. Heavy buying of lead pipe is reported, particularly from the west.

General business is very satisfactory, every month this year having shown an increase over last year's trade, according to some houses. Certainly no complaints are being registered by any branch of the trade as to the volume of business being done.

Lead Pipe—The expected increase has not yet materialized, although buying is heavy. Our quotations are as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Large sales are reported at unchanged prices. Our quotations are as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Call for goods is heavy and discounts continue the same. Our quotations are as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Good sales are being made, but no fluctuation in price has occurred. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Buying is active and prices remain firm. Our quotations are as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 3 1-2 inch, $23; 3 inch, $30.

Solder—Demand is steady and prices the same. We quote: Bar solder, half and half, guaranteed, 18c.; wiping solder at 16 1-2 to 17c., and refined 17c.

Enameled Ware—Local houses are having difficulty in supplying the strong demand for Canadian ware. Prices remain the same as last week. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50. special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

NEW STEEL PROCESS.

AN important invention for the manufacture of steel has just been commercially effected by the manager of a South Wales steel works. Under the new process it is estimated that the cost of producing steel of all grades of quality, will be reduced fully 20 per cent. Samples of the steel, both in sheets and bars, have been submitted to Birmingham experts, who have pronounced a most favorable opinion upon them, and arrangements are in contemplation for establishing works in South Staffordshire for the manufacture of the steel. One of the advantages of the new process is that it can be produced by any of the existing iron and steel-making plants with comparatively slight adaptation, and consequently it will be an enormous boon to the small manufacturers, who hitherto have had to purchase their raw material. To the decaying iron industries of South Staffordshire it is anticipated that it will mean renewed life and activity. The samples of steel which have been locally tested are considered to be particularly suitable for black sheet making, also for steel wire, and for all kinds of stamping goods. The steel is also adapted for railmaking and structural requirements of every description. It is claimed that the new steel can be produced and sold in the market at from $5 to $7 a ton below the cost of producing either Bessemer or Siemens-Martin.

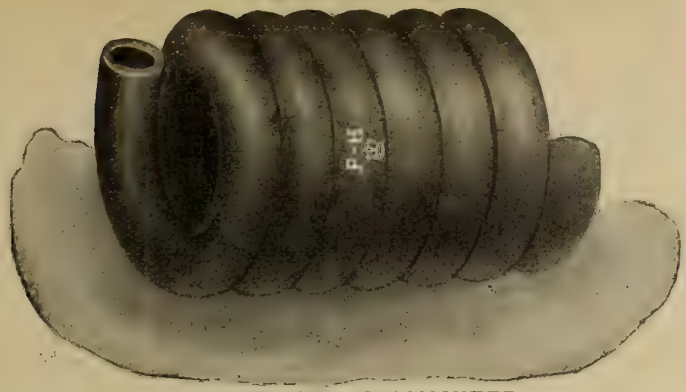
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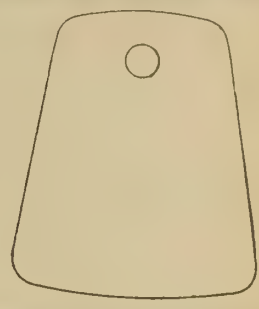
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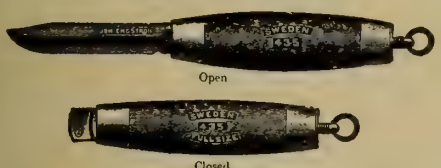
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Best quality Razor Steel.

Crocus polished blades, curly grain handles, brass linings.

Lengths of blades, ⅞ to 5 inches.

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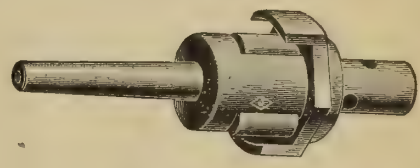
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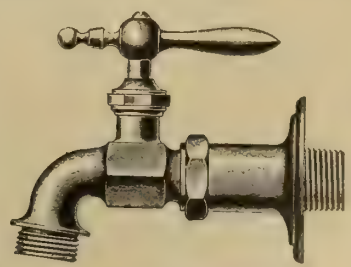
Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

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Positively **NON-HAMMERING** on high pressure.

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BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

ALL PARTS Made to steel gauges and are always interchangeable.

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UNIQUE CELEBRATION AT "SOO."

AN international celebration took place this week at the "Soo," the occasion being the fiftieth anniversary of the opening of the first Sault Canal. While the United States take to themselves the honor of building the first Sault Canal, the truth is Canada was many years in advance of them. As long ago as 1797 a canal on the Canadian side was constructed. The Northwest Co. was at that time competing with the Hudson's Bay Co. for the fur trade. As will be remembered, the Northwest Co. was a Canadian corporation, with headquarters at Montreal, while the Hudson's Bay Co. was English. The Hudson's Bay people operated via James Bay, drawing their supplies that way, and sending out their furs by the same route. The Northwest Co., on the other hand, traded through Canada. That corporation found it necessary to send its batteaux up the Georgian Bay, and across the head of Lake Huron, to Lake Superior. In order to reach the latter lake the Sault Rapids had to be overcome, and here the canal was built. The remains of this structure, which was abandoned when the company failed, are extant to this day, and it is understood that they perform the duty of a flume for the power company.

The Modern Canals.

The growth of business on the upper lakes led, in the early fifties, to an agitation for the construction of a ship canal on the Michigan side. The State of Michigan pressed the enterprise, but ultimately the United States Congress took it up, and built the now celebrated waterway as a national work. It is related that some of the greatest of United States leaders opposed the project as useless. Thus Henry Clay is credited with having spoken against it in Congress in sarcastic terms. He is alleged to have said that the idea of developing trade west of the St. Mary's River was a dream beyond the conception of the wildest fancy. But Clay had little knowledge of the possibilities of his own country or he would not have objected to an enterprise which has been a prime factor in the development of the great west.

The Sault business has been of such rapid growth that the canal as originally constructed was soon too small to accommodate it, and as a consequence new locks were opened. To-day the mammoth vessels can be floated from lake to lake, and it is estimated that there passes through the locks 35,000,000 tons of freight annually. The Sault Canals—that on the Canadian side and that on the United States—do two and one-third times more business than the Suez Canal, which is a waterway of some importance. Canada used the United States canal for some years under the Washington treaty of 1870, which requires each country to give the other equal rights in the canals. This was an advantage to Canada, but it was not nearly so great a benefit to Canada as the reciprocal use of the Canadian canals was to the United States.

Why Canada Built a Canal.

In 1888 Canada decided to have a waterway of her own, with a view to being completely independent of our neighbors. The circumstances which resulted in this decision were numerous, and were spread over a number of years. In the first place, Canada found that she could not send her troops through the United States canal, although on her own vessel. This was an awkward situation, especially during the rebellion. It was legal enough; but then it was not convenient. The obstruction to traffic could easily have been extended by the United States, so that the restricted use of the canal would not really be of any service to Canada. Again, there was no guarantee that the United States Government would continue the free navigation of the canal. There were movements making for discrimination. One of these was successful in President Cleveland's time. Because the tolls on wheat passing through the Welland to Montreal, via the St. Lawrence Canals, were no higher than those on wheat passing through the Welland, but going no farther than Ogdensburgh, Uncle Sam assumed that he was discriminated against, and placed a heavy toll on vessels using the Sault Canal.

Canada was not willing to be cut in two from the maritime standpoint, and to be at the mercy of a sometimes whimsical neighbor. Canada therefore struck for freedom and the cost was just $4,000,000. Canada's canal is a structure of superior character, and does her a great deal of credit. It is furnished with all the latest improvements, and is capable of accommodating vessels drawing 20 feet. The lock is 900 by 60, and this will take in anything afloat. The Canadian and United States canals are free to everybody. Thus, the two countries are in co-operation in the work of facilitating intercommunication. Now the canal provisions of the Washington treaty can be set aside if the people next door so desire. Canada is completely independent of them, and if they go the result will not at all affect her.

With the canals on both sides of the international line, and with traffic growing rapidly, the Sault has a great future to look forward to. It is the pivotal point in Canada, and is bound to grow in importance and in wealth. That the celebration of the event which has made the Sault what it is should be entered upon heartily is not to be wondered at. The opening of a system of through navigation was a contribution to the progress of the country of the highest value.

NEW TAX INJURES BUSINESS.

MONTREAL hotelmen who cater to the commercial trade report that their business is being seriously affected by the tax recently imposed by the Provincial Government on foreign commercial travelers who enter Quebec to sell goods.

Numbers of salesmen who come to the city with the intention of staying anywhere from two to ten days, leave immediately on hearing that they cannot sell goods without complying with the tax law. Most of them do not even bring their trunks up from the station, and very few have been willing to pay the $300 tax demanded of them.

As the news of this law becomes more generally known and understood among foreign firms who have done business in Quebec, their travelers will probably cease to visit Montreal altogether, and the effect upon the business of hotelmen who look to the commercial trade will be serious.

BUSINESS CHANGES.

Ontario.

J. Rodger & Co., painters, Hamilton, have dissolved partnership.

C. Wilson & Son, Limited, manufacturers of scales, Toronto, have suffered loss by fire.

The Oshawa Wire Fence Co., Limited, Oshawa, have advertised their business for sale by tender.

D. A. Baker, tinsmith and plumber, has assigned to A. Hagar, and a meeting of creditors was held August 3.

Quebec.

Z. Berard, contractor, Montreal, has gone out of business.

J. R. Durand, dealer in tins, Berthierville, has assigned.

Wm. Francis, of W. & B. Francis, hardware merchants, Montreal, is dead.

Nova Scotia.

W. B. Arthur & Co., wholesale and retail hardware merchants, Halifax, have assigned for the benefit of their creditors.

Manitoba and N.W.T.

Builders' Supply & Fuel Co., Winnipeg, have sold out to H. C. McQuarrie.

F. W. Ferguson, dealer in implements, Sedley, has been succeeded by Ferguson & White, J. H. White having gone into partnership with Mr. Ferguson.

British Columbia.

Shephard & Elliott, hardware dealers, Fernie, have been burned out.

R. F. Anderson & Co., hardware dealers, New Westminster, have been succeeded by Anderson & Lusby.

ST. MAURICE FORGES OF QUEBEC.

A FEW days ago a Canadian newspaper paragraph related to the St. Maurice Forges, in the Province of Quebec, with a statement by Dr. W. H. Drummond, that they are the oldest in North America, says the Canadian Manufacturer. A full historical account of these forges is contained in a paper contributed by F. C. Wurtele, librarian of the Quebec Literary and Historical Society, to the Royal Society of Canada, and published in their transactions of 1886. A copy of this paper is to be found in one of the bound volumes of Canadian pamphlets in the Ontario Parliamentary Library.

Mr. Wurtele's paper contains extracts from two descriptions of the forges, one by Professor Peter Kalm, who, in traveling through New France, stopped at Three Rivers in August, 1749, and described the forges in his travels in North America, published in London in 1771; the other in the Haldimand collection, being replies by Col. R. Burton to questions transmitted to General Murray by the Lords of the Board of Trade and Plantation, in London, when they required information on the resources of Canada. These replies were published in 1762, and were in answer to inquiries as to the number of forges in the province, what iron was made, and in what form and quality.

At the time of the conquest the forges fell into the hands of King George III., and were worked under the direction of the military authorities for five years, at a profit, but were then transferred to the civil government of Three Rivers. They were afterwards leased to a company for sixteen years, at the rate of



A Summer Dollar

Do you know what this is we are advertising?

It is something that will make a few dollars for you in the quiet summer season.

COW-EASE

made expressly to give rest and ease from flies and vermin to cattle and horses. Farmers must have this. It sells easily for **$1.00,** and yields a profit for you. Write us for particulars at once.

A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Sole Agents

ONE MAN DOES

THE WORK OF TWO WITH

The "Toledo" Adjustable Die Stock

Threads pipe from 1 inch to 2 inch, inclusive.
A new principle in Hand Power Pipe Threading.



No. 1

With this device one man can thread 2-inch pipe easily with one hand and we

GUARANTEE IT

Ask your jobber about them; if he don't know write us for Catalogue and Discounts.

THE TOLEDO PIPE THREADING MACHINE CO,

Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO

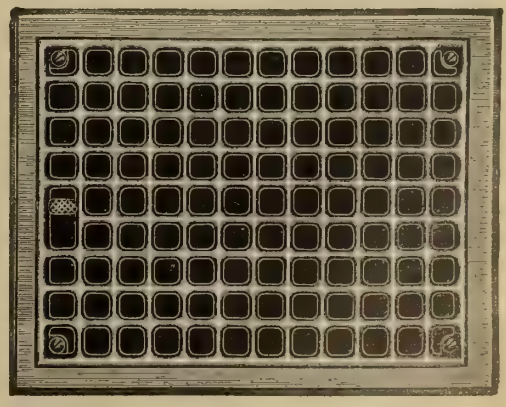
Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.

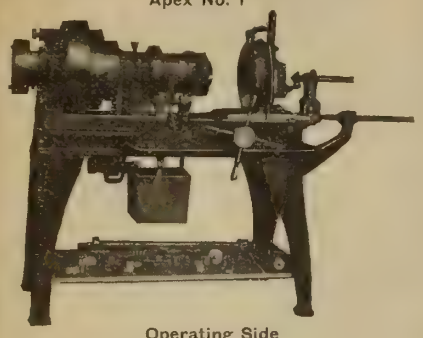
HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.



THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

This machine is especially adapted for making nipples. The gears are all machine cut and enclosed within a cone on the machine, thus being protected from chips and dust, and out of the way of the operator. The cone is a three step, giving six speeds to the machine. Capacity of this machine from ¼ to 2 inches inclusive.

Write for Catalogue

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Weber Iron Body Gate Valves

Are recognized as the leading Gate Valves

"MADE IN CANADA."

Every valve is tested and packed before shipment. Send for Catalog.

The KERR ENGINE CO., Limited

MANUFACTURERS

WALKERVILLE, ONT., CANADA

£25 a year. When Montgomery made his ill-fated expedition against Quebec he passed through Three Rivers, and Pellissier, the manager, who was not very loyal, ordered a quantity of shot and shell to be cast for Montgomery in his attack on Quebec. The works thereafter passed through various vicissitudes till 1883, when they were finally closed, the ore and wood in the neighborhood having become exhausted.

DEATH OF WILLIAM JESSOP.

CABLE advices announced the death of Wm. Jessop, Esq., on July 4, at his country estate, Thornsett Lodge Bradfield, Eng., after a long illness. Mr. Jessop was born October 1856, was educated at Repton, Germany, and at Cambridge. At the time of his death, and since 1887, he was chairman of William Jessop & Sons, Limited, steel manufacturers, of Sheffield, England, and was the head of the fourth generation of the Jessop family in control of the firm—the business having been established in 1774. He was also president of the Jessop Steel Co., of Washington, Pa., president of the Jessop Hospital for Women, an institution founded by his father, the late Thomas Jessop, to which he contributed over $200,000, and which was zealously and liberally supported by his son. He was also a trustee of the Sheffield Royal Infirmary, and a member of the Bradfield Game Association, controlling shooting rights over a large area of moors in the Bradfield district, and formerly director in the Sheffield & Rotherham Bank and Yorkshire Engine Co. He was a large land owner, and worked an estate of 4,000 acres at Huggat, in the northeast of England, and also an estate at Fosdick, and was keenly interested in agricultural pursuits, and an ardent sportsman. He was noted for his kindness and generocity to his tenants, and those in need, and made an excellent landlord, and was greatly esteemed by all. He visited Australia, Japan and America, in 1903.

CHANGE OF ADDRESS.

A. Shaw & Son, makers of glaziers' daimonds, who are represented in Canada by G. S. Pelton, Montreal, have been obliged to move into larger and more commodious quarters at 60 Spencer street, Clerkenwell, London, Eng. A. Shaw & Son have been before the Canadian trade for a considerable while, and their goods are well known amongst users of glaziers' materials.

The Ingersoll-Rand Co. will take possession of its new offices on the 14th floor of the Bowling Green building, 11 Broadway, New York, on August 1st. At that time the offices of the Ingersoll-Sergeant Drill Co., at 26 Cortland street, and the Rand Drill Co., at 128 Broadway, will be given up and the united forces moved to the new offices.

T. H. Burnham, of Carberry, Man., has accepted a position under Manager Stethem, of the Wells Hardware Co., Fort Francis.

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing British and American Manufacturers. Correspondence invited from firms wishing to be represented in Canada.

BRONZE POWDER AND LIQUID

is used by every steam-fitter. Ask your supply house for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street, MONTREAL
29 Melinda Street, TORONTO

North West Machinery & Iron Co.

LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

SAVED—LOST.

One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL

TELEPHONE, MAIN 3893

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

TRADE WITH ENGLAND

Every Canadian who wishes to trade successfully with the Old Country should read

"Commercial Intelligence"
(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)
Moreover, regular subscribers are allowed to advertise without charge in the paper. See the rules.

Buy the Best.

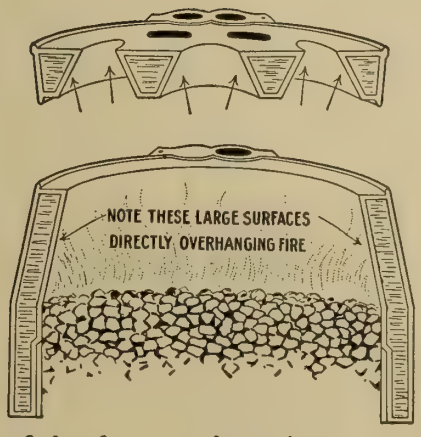


HERCULES
Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.

THE MONEY SAVING
OXFORD BOILER



The Oxford Boiler ("B" Series) saves money by saving coal and utilizing heat that other boilers would waste.

The Oxford creates the maximum amount of heat from a given amount of coal.

Over the fire the walls of the firepot slope inward, forcing the heat in its upward rush to impinge thereon and yield itself up to the surrounding water jacket.

Bell-shaped flues in the large, lower water section take up still more heat in the same way. No heat is lost.

No leaky rubber joints—Steel Push Nipples make all connections metal to metal.

Our book will convince you of Oxford superiority for domestic heating purposes.

The Gurney Foundry Co., Limited
TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

SPIRAL LAMP GUARD.

Sayer Electric Co., of Montreal, have secured the Canadian agency for the spiral lamp guard. The guard, as will be noticed by the accompanying illustration, protects the glass, and for this alone should be of great value in a room where obstacles are likely to come in contact with the glass. The guards are neatly packed when ready for shipping. Each guard, when packed, is flat and these may be placed away in stock in this shape, saving considerable space.



The following directions may be found both practical and valuable to users of this guard.

NEW BARN DOOR HANGER.

Barn door hangers have proved to be a valuable line for hardwaremen, and it is, therefore, of interest to note that a new invention is being put on the market by a Canadian concern, the Safety Door Hanger Co., of Hamilton, who manufacture the new "Wizard" Adjustable.

This hanger, besides having the flexible and stay-on features, has the distinct advantages of both lateral and vertical adjustments, and we are informed that it is the only hanger of its kind ever offered to the trade. It is a patented device of which Safety Door Hanger Co. are the originators and sole owners. The adjustments overcome the annoyance of doors binding on the building and dragging on the ground. By simply turning a set screw a door that binds may be released, while a reverse operation of the screw places the door as close to the building as desired, thus excluding rain, sleet, and snow. A door that drags on the ground may be raised by turning the vertical adjusting screw, and by the same means a door may be adjusted so as to be self-closing.

The numerous features of the hanger are unique, and the ease with which it overcomes all sliding-door troubles indicates that "Wizard" is not a misnomer. The Safety Door Hanger Co. are known to the trade as originators in their line of manufacture, and the new hanger is in keeping with their usual progressiveness.

CYCLE TRADE IN BRITISH ISLES.

UNITED STATES Consul Moe, of Dublin, Ireland, writes about a proposed combine of cycle manufacturers, and explains why there is no demand in Ireland for American bicycles. The consul says:

Considerable discussion has taken place with regard to the proposed combine of the various cycle manufacturers in the British Isles. The object practically appears to be to make no bicycle to be sold under 8 guineas ($40.87), and it would seem that several firms in the big English manufacturing centres have already come to such an agreement. It is a movement against the production of inferior, cheap machines, and carries with it the question of how the trade will be affected. Inquiries elicited statements from several agents and dealers in Dublin that such a combination would be received with favor by all the best houses. In this city the chief demand is for good wheels, the 10 and 12 guinea ($51.10 and $61.32) machines having the best sale.

There is no demand here for American makes of bicycles. This is due to the generous guaranty which English makers give with their machines, which are very well made, and the apparent unwillingness of American manufacturers to supply their wheels with metal rims instead of the wooden variety. The great amount of dampness in Ireland at all seasons of the year makes wooden-rimmed wheels practically useless. The demand for bicycles has increased enormously, and it is no exaggeration to state that cycling here is as popular this year as it was in the United States in 1896 and 1897. There is a splendid demand for motor cycles, most of which come from Coventry at present and give entire satisfaction.

IMPORTANT DISCOVERY.

An Hungarian chemist has described in a paper his discovery of the liquid chemical compound which renders certain kinds of matter, including metals, proof against the effects of time. It imparts to metals qualities which defy oxygen, and is also a germicide of hitherto unequaled power. The compound is a yellow liquid, which the professor has termed Zorene. In experiment this solution is said to have accomplished results hitherto thought impossible. A piece of ordinary and easily breakable slag, after immersion in Zorene, defied the full blow of the hammer. It was then immersed in water for a long time. When taken out and weighed with delicate scales, the presence of not a single particle of moisture could be detected. An ordinary table knife which had lain open for five months did not show the slightest stain.

WAXENE IN GREAT DEMAND.

I. H. Wiley & Co., Sudbury street, Boston, manufacturers of "Waxene," and wholesale paint dealers, have been compelled to move into larger premises across the street from their former stand. Their sales of "Waxene" are extending in Canada as well as throughout the United States.

We Make

accurate fitting **Fire Bricks** in a multitude of styles. Prices low. We also make

Furnace and Stove Cement and Stove Castings

We would like to correspond with you, give you our catalogue, forward you our prices. Write.

JONES BROS., - Bracondale P.O., Ont.



DID YOU EVER

think how important it was to have on hand always, for particular people,

Sterne's Asbestos Stove and Furnace Cement

They will take no other. Neither should you. We give you the goods and the price—what more?

WRITE TO-DAY FOR PARTICULARS.

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

PALMETTO PACKING

We have been appointed Canadian Sales Agents for the above packing which is so well and favorably known, and respectfully solicit orders for same.



BECAUSE

It will not wear or score rods.
Has great durability.
It is self-lubricating.
Does not get hard in service.
Does not deteriorate with age.

The Reasons are

That only the best materials are used.
It is entirely free from grit and acid.
Lubricant is forced into each strand before braiding.
It is braided several times and it holds lubricant until worn out.

EVERY HARDWARE AND SUPPLY DEALER SHOULD HANDLE IT.

SAMPLES AND CIRCULARS FURNISHED ON REQUEST.

"PALMETTO TWIST" "THE HANDY HIGH-GRADE PACKING."

The Canadian Fairbanks Co., Ltd.

Montreal Toronto Vancouver Winnipeg

UNITED FULLER WORK

INSTALLED BY LEADING PLUMBERS EVERYWHERE

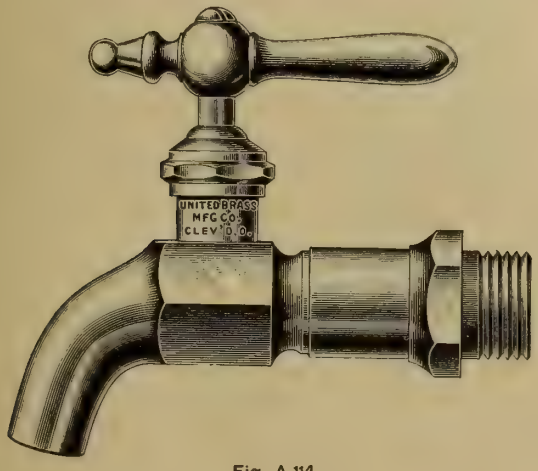


Fig. A-114

We Manufacture a Complete Line of High Grade

STOPS and STOP and WASTE COCKS, COMPRESSION WORK, FULLER WORK, SOLDERING NIPPLES, UNIONS, VALVES, ETC.

WRITE FOR CATALOGUE AND DISCOUNTS.

United Brass Manufacturing Co.

CLEVELAND, OHIO, U.S.A.



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

LET US KNOW

if your shelves are ***empty.*** We can fill them with a class of goods that will cause them to be ***empty*** once more within a short time.

QUICK SALES MEAN A LARGE PROFIT

IF you have not heard anything of these three brands of building paper ***let us know*** and we will supply you with some thing that would be a downright shame to miss.

Black Diamond **(Registered)**

Joliette **and** ***Cyclone*** **(Registered)**

ALL MANUFACTURED BY

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Aug. 4, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$35 00 $36 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
I Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
X	6 75

X Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. " 14x60, " " 14x65.	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 50 7 75
" " 26 "	8 00 8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel -		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M." Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co. —		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00 10 00
" ¼ "	5 60
" 5-16 "	4 45
" ⅜ "	3 85
" 7-16 "	3 70
" ½ "	3 55
" 9-16 "	3 45
" ⅝ "	3 35
" ¾ "	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 00	16 50

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00 23 00
" round and square,	
Cut 1 to 2 inches	21 00 23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz	22 00
inned copper sheet	24 00
lanished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb	4 00
Bar, "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06¼
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ " "	17 50	15 50
5½ "	2½ " "	19 00	17 00
Plate 123 E, lavatories		1st quality	8 90
" 123 E, "		2nd "	7 50
" 127 E, "		1st "	5 70
" 127 E, "		2nd "	4 80
" 128 E, "		1st "	5 60
" 128 E, "		2nd "	4 70
" 129 E, "		1st "	5 40
" 129 E, "		2nd "	4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c.
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " " "	1 75
No .7 Fuller's "	2 10
No. 4½, " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

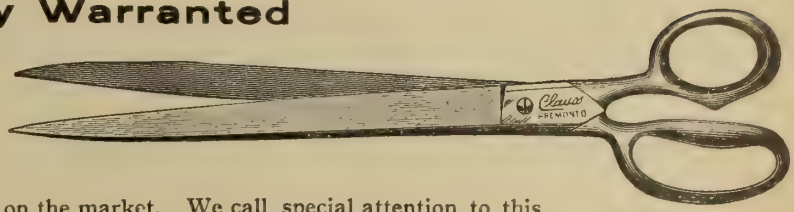
GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand

Fully Warranted

Paper Hangers' Shears



Hand forged from finest steel and welded on our composition metal, hardened in water and tempered by natural gas. This shear is made purposely for paper hangers' use, and is more durable than other of its kind on the market. We call special attention to this Shear. Japan handles and finely finished blades. Ask for discounts.

Clauss Shear Co., 169 Spadina Avenue, Toronto

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 17¾
Wiping	0 15½
Refined	0 16¼

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2		5 05
No. 3		4 12½
No. 4		4 05
Munro's Select Flake White		5 50
Elephant and Decorators' Pure		5 50
Tiger brand, pure		5 75
Decorators' Special for exterior use		5 00
Monarch		5 75
Decorator's Pure		5 50
Essex Genuine		5 00
Sterling Pure		5 75
Island City Pure		5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06¼
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era"	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13¼
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.2 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, case, from	assorted to 1 gal., $2.50.	

GLUE.

Common	0 08½
French medal	0 14
White, extra	0 22
Gelatine	
Strip	0 18 0 20
Coopers	0 19 0 20
Huttner	
Ground	0 12 0 16
Cologne, genuine	

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.

	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

	Per M.
Chemically prepared black edge grey cloth wads, in boxes of 250 each—	
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 90
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07¾	0 12

BOLTS AND NUTS

	Per cent
Carriage Bolts, common ($1 list	
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅞ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M.	1 25
Small heel	"	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt	per ton 45 00
Heavy Straw Sheathing	per ton 35 00
Dry Sheathing	per roll, 400 sq. ft. 0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels	per gal. 0 17
Roof " small packages "	0 25
Refined Tar	per barrel 5 00
Coal Tar "	4 00
Coal Tar, less than barrels	per gal. 0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt	per roll 0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz. 1 00	1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross 7 50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt. 0 60	0 65
Red	0 05	0 06
Crayon	per gross 0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English	per doz. 2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz. 5 00	9 00
man	" 0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse	per doz. 0 55	1 00
Axle	" 0 22	0 33
Screw	" 0 22	1 00
Awning	" 0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

When You See
"RED STARS" and "ANCHORS"

You're all right, providing they appear on the Tarred Felt, Ready Roofing and Building Papers you sell. Those are Paterson's Registered Brands and stand for **Perfection** so far as it can be attained in the manufacture of the above kind of goods.

The Paterson Mfg. Co., Limited
Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanleys, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2¼ 2 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" " 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" " sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up		3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro.. No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned c 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut		$ 8 50 to $11 00
Star, 9 -in.	"	6 00 to 6 50
Daisy, 8 -in.	"	5 25 to 5 75
Philadelphia, 7½-in.	"	6 00 to 7 50
Woodyatt, 10½ in., ball bearing		13 25 to 18 00
Grass Boxes		1 75 to 2 00
King Edw'd 12-in., 14-in. cut		9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem ..... each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		10 00
Davidson oilers, discount 40 per cent.		
Zinc and tin, discount 50, 50 and 10 per cent.		
Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

PLANES.

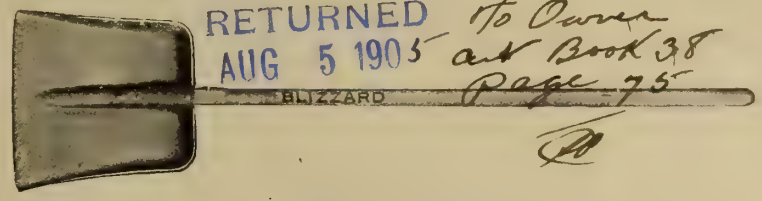
Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

RETURNED AUG 5 1905

THE BLIZZARD

Solid, Strong, Steel Shovel for Stable, Store or Furnace

Crowning at point for Cutting Ice.



RETURNED To Owner AUG 5 1905 at Book 38 Page 75

Two Sizes: No. 1, 14 in. wide; No. 2, 9¼ in. wide.

Factories: NEWMARKET, ONT.

Branches: WINNIPEG, OTTAWA, MONTREAL.

The best and strongest STEEL SHOVEL of its kind ever offered to the trade. Write for quotations.

THE OFFICE SPECIALTY MFG. CO., Limited

Everything in Business Furniture and Card Systems in Stock.

97-105 Wellington St. West, (near York) TORONTO

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up

RAZORS. per doz.

Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros. " Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 11
Pure Manilla	0 14½
"British" Manilla.....	0 11
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" 60 feet ..... "	0 80
" 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century.....$6	25
" " No. 1 Maple Leaf.....	5 25
" " Happy Medium.....	4 25
" " Watch Spring.....	4 25
" common frame.	4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	....	0 85
" 18 x 30.....	....	1 00
" 18 x 36.....	....	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'	4 50	11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " " ...	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 85
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ½ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	0 13½
Brook's.....	0 12½
Pipe Vise, Hinge, No. 1.....	3 50
" " " No. 2.....	5 50
Saw Vise	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No.31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15 —No. 9, $2.55 — No. 10, $3.20 to $3.20 —No. 11, $3.25 to $3 25 — No. 12, $2.65 —No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 small lots and $2 20 for carlots. fo

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net..	1 50

Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

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In this paper cost 2 cents per word first insertion, 1 cent per word subsequent insertions. Contractions count as one word, but five figures (such as $1,000) may pass as one word. Cash remittance to cover cost **must in all cases** accompany orders, otherwise we cannot insert the advertisement. When replies come in our care 5 cents additional must be included for forwarding same. Many large business deals have been brought about through advertisements of 20 or 30 words. Clerks can be secured, articles sold and exchanged, at small expenditure.

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THOS. C. IRVING, Gen. Man. Western Canada. Toronto.



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Aluminum Castings.
Canadian Aluminum Works Montreal.

Anvils.
Taylor-Forbes Co., Guelph, Ont.

Art Glass
Hobbs Mfg. Co., London, Ont.

Ash Sifter.
Cutts, C. M., & Co., Toronto Junction.

Babbitt Metal.
Canada Metal Co., Toronto.
Canadian Fairbanks Co., Montreal.

Belting, Hose, etc.
Birkett, Thos., & Co., Ottawa.
Canadian Rubber Co. of Montreal.
Dominion Belting Co., Hamilton, Ont.
Gutta Percha and Rubber Mfg. Co., Toronto.
Sadler & Haworth Montreal & Toronto.

Bicycles and Accessories.
Johnson's, Iver, Arms and Cycle Works, Fitchburg, Mass.

Box Straps.
Warminton, J. N., Montreal.

Brass Goods.
Canada Brass Rolling Mills, Toronto.
Glauber Brass Mfg. Co., Cleveland, Ohio.
Lewis, Rice, & Son., Toronto.
Morrison, Jas., Brass Mfg. Co., Toronto.
Nicklin, J., & Co., Birmingham, Eng.
Penberthy Injector Co., Windsor, Ont.
Taylor-Forbes Co., Guelph, Ont.
United Brass Mfg. Co., Cleveland, Ohio.

Bronze Powders.
Thorne, R. E., Montreal.

Brushes.
Ramsay, A., & Son Co., Montreal.
Skedden Brush Co., Hamilton, Ont.

Cans.
Acme Can Works. Montreal.

Carpenters' and Builders' Tools and Supplies.
Covert Mfg. Co., West Troy, N.Y.
Frothingham & Workman Co., Montreal.
Gurney, Tilden Co., Hamilton.
Howland, H. S., Sons & Co., Toronto.
Hyde, F., & Co., Montreal.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Lockerby & McComb, Montreal.
Lufkin Rule Co., Saginaw, Mich.
Metallic Roofing Co., Toronto.
Newman & Sons, Birmingham.
North Bros. Mfg. Co., Philadelphia, Pa.
Pedlar People, Oshawa, Ont.
Phillips, Chas. D., Newport, Eng.
Smart, James, Mfg. Co., Brockville, Ont.
Smith & Hemenway Co., New York.
Silica Barytic Stone Co., Ingersoll, Ont.
Stanley Rule & Level Co., New Britain.
Stanley Works, New Britain, Conn.
Stephens, G. F., Winnipeg.
Taylor-Forbes Co., Guelph, Ont.
Union Mfg. Co., New Britain, Conn.
Waggoner Ladder Co., London, Ont.
Warnock, James, Galt, Ont.
Winnipeg Ceiling & Roofing Co., Winnipeg

Carriage and Waggon Accessories.
Covert Mfg. Co., West Troy, N.Y.
Guelph Spring & Axle Co., Guelph, Ont.
Lougheed, J. S., & Son, Sarnia, Ont.

Cattle and Trace Chains.
Greening, B., Wire Co., Hamilton.
Oneida Community Co., Niagara Falls.

Churns.
Dowswell Mfg. Co., Hamilton.
Maxwell, David, & Sons, St. Marys.

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American Shearer Mfg. Co., Nashua, N.H.
Dorken Bros. & Co., Montreal.

Clothes Reels.
Waggoner Ladder Co., London, Ont.

Cordage.
Brantford Cordage Co, Brantford, Ont.
Consumers' Cordage Co., Montreal.
Hamilton Cotton Co., Hamilton.

Cork Screws.
Erie Specialty Co., Erie, Pa.

Customs Brokers.
Turnbull & Henderson, Vancouver, B.C.

Cutlery—Razors, Scissors, etc.
Birkett, Thos., & Son Co., Ottawa.
Butler, Geo., & Co., Sheffield, Eng.
Clauss Shear Co., Toronto.
Dorken Bros. & Co., Montreal.
Heinisch's, R., Sons Co., Newark, N.J.
Rouna, John, & Son, Sheffield, Eng.
Silberstein, A. L., New York.
Smith & Hemenway Co., New York.
Walter, E. F., & Co., Montreal.
Wiebusch & Hilger, New York.
Wilkinson Sword Co., London, Eng.

Electric Fixtures.
Canadian Aluminum Works, Montreal.
Mechanics' Supply Co., Quebec.
Morrison James, Mfg. Co., Toronto.
Munderloh & Co., Montreal.

Fence Machines.
London Fence Machine Co., London.

Files and Rasps.
Barnett Co., G. & H., Philadelphia, Pa.
Disston, Henry & Sons, Philadelphia, Pa.
Grose, Walter, Montreal.

Financial Institutions.
Bradstreet Co.
British America Assurance Co., Toronto.
Canadian Bank of Commerce, Toronto.
Confederation Life Ass., Toronto.
Metropolitan Bank, Toronto.
Reed, Joseph B., & Son, Toronto.
Western Assurance Co., Toronto.

Fire Brick, Furnace and Stove Cement, etc.
Jones Bros., Bracondale, Ont.
Sterne, G. F., & Son, Brantford.

Firearms and Ammunition.
Hamilton Rifle Co., Plymouth, Mich.
Harrington & Richardson Arms Co., Worcester, Mass.
Johnson's, Iver, Arms and Cycle Works, Fitchburg, Mass.
Walter, E. F., & Co., Montreal.

Food Choppers
Enterprise Mfg. Co., Philadelphia, Pa.
Lamplough, F. W., & Co., Montreal.
Smith & Hemenway Co., New York.

Galvanizing.
Ontario Wind Engine and Pump Co., Toronto.

Glaziers' Diamonds.
Sharratt & Newth, London, Eng.
Shaw, A., & Son, London, Eng.

Glue.
Grove Chemical Co., Lancashire, Eng.

Hardware Specialties.
Erie Specialty Co., Erie, Pa.
Gurney, Tilden Co., Hamilton, Ont.
Mast, J. M., Mfg. Co., Lititz, Pa.
Smith & Hemenway Co., New York.

Hollow Ware.
Welsh Tinplate and Metal Stamping Co., Llanelly, Wales.

Horseshoe Pads.
Canadian Rubber Co. of Montreal.

Horseshoes and Nails.
Canada Horse Nail Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Peck Rolling Mills Co., Montreal.

Hot Water Boilers.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.

Ice Cream Freezers.
North Bros. Mfg. Co., Philadelphia, Pa.

Ice Cutting Tools.
Erie Specialty Co., Erie, Pa.
North Bros. Mfg. Co., Philadelphia, Pa.

Injectors—Automatic.
Morrison, Jas., Brass Mfg. Co., Toronto.
Penberthy Injector Co., Windsor, Ont.

Iron Pipe.
Montreal Rolling Mills Co., Montreal
Page-Hersey Iron and Tube Co., Guelph.

Iron Pumps.
McDougall, R., Co., Galt, Ont.

Ladders—Extension.
Waggoner Ladder Co., London, Ont.

Lanterns.
Kemp Mfg. Co., Toronto.
Ontario Lantern Co., Hamilton, Ont.
Wright, E. T., & Co., Hamilton.

Lawn Mowers.
Birkett, Thos., & Son Co., Ottawa.
Maxwell, David, & Sons, St, Marys, Ont.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.

Ledgers—Loose Leaf.
Crain, Rolla L., Co., Ottawa.

Locks, Knobs, Escutcheons, etc.
Gurney, Tilden Co., Hamilton.

Machinery Supplies.
Armstrong Bros. Tool Co., Chicago, Ill.
Canada Foundry Co., Toronto.
Canadian Fairbanks Co., Montreal and Toronto.
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Kerr Engine Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Morrow MachineScrew Co., Ingersoll, Ont.
Penberthy Injector Co., Windsor.

Mantles, Grates and Tiles.
Batty Stove and Hardware Co., Toronto.

Manufacturers' Agents and Brokers.
Gibb, Alexander, Montreal.
Jenking, A. C., & Co., Montreal.
North West Machinery and Iron Co., Winnipeg, Man.
Pearce, Frank, & Co., Liverpool, Eng.
Thorne, R. E., Montreal and Toronto.
Turnbull & Henderson, Vancouver, B.C.

Metals.
Booth Copper Co., Toronto.
Canada Iron Furnace Co., Midland, Ont.
Canada Metal Co., Toronto.
David, R. Sullivan, Montreal.
Deseronto Iron Co., Deseronto, Ont.
Fotheringham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson, W., Pontardawe, Wales.
Henderson, J. A., Montreal.
Ironside, Son & Co., London, Eng.
Jackson, C. F., & Co., Vancouver, B.C.
Johnston, Rd., Clapham & Morris, Manchester, Eng.
Kemp Mfg. Co., Toronto
Leslie, A. C., & Co., Montreal.
Lewis, Samuel, & Co., Dudley, Eng.
London Rolling Mills Co., London, Ont.
Lysaght, John, Bristol, Eng.
Montreal Rolling Mills Co., Montreal.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
Samuel, Benjamin & Co., Toronto.
Saunders, Franklin & Co., Montreal.
Summers, John, & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

Metal Lath.
Metallic Roofing Co., Toronto.
Pedlar People, Oshawa, Ont.

Metal Polish, Emery Cloth, etc.
Anglo-Canadian Supply Co., Toronto.
Solarine Company, Chicago.
Oakey, John, & Sons, London, Eng.

Milk Cans and Trimmings.
Davidson, Thos., Mfg. Co., Montreal.
Kemp Mfg. Co., Toronto.
McClary Mfg. Co., London, Ont.
Wright, E. T., & Co., Hamilton, Ont.

Mops.
Tarbox Bros., Toronto.

Nails and Spikes.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

Office and Warehouse Trucks.
Monteith, Nixon & Co., Toronto.

Office Furniture.
Office Specialty Mfg. Co., Toronto.

Paints, Oils, Varnishes and Glass.
Berry Bros., Detroit and Walkerville.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works, Windsor, Ont.
St. George, H. E., London, Ont.
Winnipeg Paint and Glass Co., Winnipeg

Perforated Sheet Metals.
Greening, B., Wire Co., Hamilton.

Plumbers' Tools and Supplies.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co. Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Thompson, B. & S. H. & Co., Montreal.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.
Page Wire Fence Co., Walkerville, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Disston, Henry, & Sons, Philadelphia, Pa.
Lewis Bros., Montreal.
Shurly & Dietrich Galt, Ont.
Spear & Jackson, Sheffield, Eng.

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Acme Lathe Products Co., Manchester
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co. Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.

Stable Fixtures.
Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

Steel Rails.
Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel & Coal Co., New Glasgow, N.S.

Storage Warehouse.
Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co. Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Gurney Foundry Co., Toronto.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
Pease-Waldron Co., Winnipeg.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont
Wright, E. T., & Co., Hamilton.

Tacks.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Stauntons Limited, Toronto.

Washing Machines, etc
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.
Voss Bros. Mfg. Co., Davenport, Iowa.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

Wire, Wire Rope, Cow Ties, Fencing Tools, etc.
American Steel and Wire Co., New York, Montreal, Chicago.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
United Factories, Toronto.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.

FINANCE

THE affairs of the Equitable Life Insurance Co. have stirred up public interest in more ways than one. In the first place, the manipulation of funds by the officers for the financing of questionable private schemes has come as a shock to the large number of policy-holders. Where the companies founded and owned banks, and where colossal organizations for promoting companies were started, the possibility of an incentive to private use of trust funds was great. The investment of the funds of a life insurance company should be in the safest place possible. Policy-holders, while they figure on getting some accrued profits on their payments, nevertheless go in primarily and almost exclusively, not for an investment, but for a protection in case of death. It is of small importance to them that a little higher per cent. of profit can be made if a greater risk is taken. The all-important thing with them is to be assured that on their death a certain minimum sum will be paid to their beneficiaries. That assurance is what the insurance company is bound to give. Yet, when the officers of a company like the Equitable indulge in wholesale stock jobbing, exploiting in such enterprises as the whisky trust, and so on, what certainty can any man have that the amount of his policy will be forthcoming? The exposure of the methods of high finance which have been going on for some months will do much to clear the atmosphere and compel the companies to travel the road of honesty and fair dealing with their members.

* * *

The second point which has come up for consideration is the whole question of mutualization. A mutual company is one in which the members share in the profits. Hitherto these profits have been allotted at the end of twenty years or when the policy fell due. "Why," it is asked, "are not these profits divided each year as they would be in any other money-making company?" That such a system is feasible is shown by the new policy now being issued by the Equitable, by which the profits are divided every five years. If all policy-holders are members of the company, as is claimed when the policy is being written, then why should they not get the benefit of the investments? The final distribution is undoubtedly small compared with the total amount which has been made through the investments and speculations with the company funds. Such questions as these will press for settlement in the near future.

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Head Office Toronto, Ont.

Capital - $1,500,000.00
Assets, over - - 3,300,000.00
Annual Income - 3,890,000.00

HON. GEO. A. COX, President.
J. J. KENNY, Vice-President and Man. Director.
C. C. FOSTER, Secretary.

BRITISH AMERICA ASSURANCE COMP'Y
FIRE AND MARINE.
Incorporated 1833
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TOTAL ASSETS, $2,043,678.59.
LOSSES PAID SINCE ORGANIZATION, $25,868,544.80.
HEAD OFFICE, - BRITISH AMERICA BUILDING,
Cor. Front and Scott Sts., Toronto.
HON. GEO. A. COX, President. J. J. KENNY, Vice-President
P. H. SIMS, Secretary. and Managing Director.

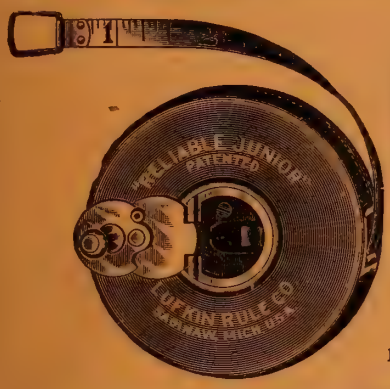
CAPITAL PAID UP, - - $1,000,000.
RESERVE FUND, - - 1,000,000.
THE METROPOLITAN BANK.
DIRECTORS
R. H. WARDEN, D.D., President S. J. MOORE, Esq., Vice-President
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THOS. BRADSHAW, Esq. JOHN FIRSTBROOK, Esq.,
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GENERAL BANKING BUSINESS TRANSACTED
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CAN BE SAVED BY MEANS OF AN ENDOWMENT POLICY.
YOU CAN ONLY SECURE SUCH A POLICY WHILE YOU ARE IN GOOD HEALTH.
Pamphlets and Full Particulars regarding the New Accumulation Endowment Policy sent on application.
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ASSOCIATION
W. H. BEATTY, President.
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J. K. MACDONALD, MANAGING DIRECTOR.
HEAD OFFICE, - TORONTO, CANADA.

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Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

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NIAGARA WIRE LINK
OPEN RING TYPE

Also made in CLOSED RING, THREE CHAIN and DOMINION (or "Short") TYPES.

Oneida Community Cow Ties can be had of all the leading jobbers. We invite correspondence where any difficulty is experienced in obtaining our goods.

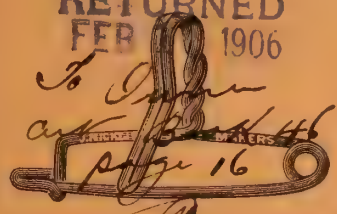
ONEIDA COMMUNITY, Limited
NIAGARA FALLS, ONT.

RETURNED FEB 1

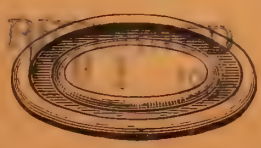
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About Brass Goods

RETURNED FEB 1906







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CURTAIN RINGS
CURTAIN HOOKS
MILL BAND FASTENERS
SAIL EYELETS
ETC., ETC.

Drop a line for list and quotations to our Canadian Agent,

F. P. ROGER, Toronto

J. Nicklin & Co.
Gt. Charles St. BIRMINGHAM, ENG.



Est. 1868. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve Medals



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By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



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The Fisk
Detachable Motor Tire

Some of the things that experts say about it:

"Fisk Tires are giving us such excellent satisfaction and are making friends so fast among those who are using them that it will soon be impossible to sell anything else, regardless of what efforts the salesmen may make on other tires."

"I recommend them to anyone desiring a tire that is very easy riding, that will stand a great amount of wear, that does not blow off or roll off the rim and, above all, that can be detached and replaced by any one not a tire expert."

"We congratulate you on having in this tire a construction that seems to solve the tire question."

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Most any Galvanized Sheets will last if carefully protected, but

AMERICAN SHEET & TIN PLATE CO. APOLLO BEST BLOOM TRADE MARK REGISTERED PITTSBURGH

Galvanized Sheets

last anywhere. They're made to give protection, not to seek it.

Apollo sheets are reasonable in price, and when trueness to gauge, superiority of material, easy-working qualities and long life are considered, they are the only ones that should be used.

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American Sheet and Tinplate Department
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IT WILL PAY YOU TO BUY IT.

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CIRCULATES EVERYWHERE IN CANADA
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HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, AUGUST 12, 1905 NO. 32

BUTCHERS' KNIVES
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CELEBRATED
"PEPPERCORN AND DIAMOND"
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TRADE MARK
BUTCHERS' STEELS
Canadian Agents: DORKEN BROS. & CO., Montreal

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Classified List of Advertisements on Page 67.

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NEW PATTERN TOOLS

OF ALL KINDS

NEW PATTERN TOOLS

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ORDINARY JOINTER

RETURNED AUG 12 190

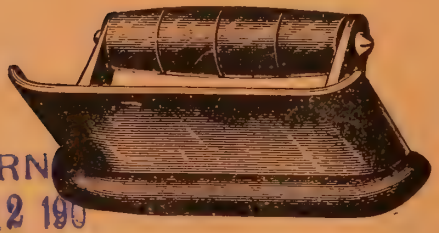


POUNDER

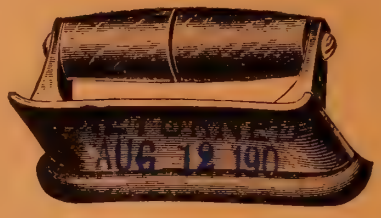
RETURNED AUG 12 190



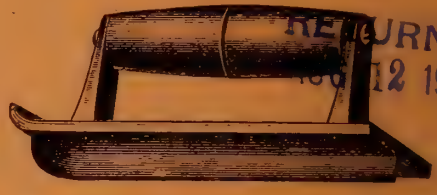
BRONZE ROUNDER



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OUT-CURVE EDGER



STRAIGHT-END JOINTER

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DOT ROLLER
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Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2 50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

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Ready Roofing
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Saturated Tarred Felt
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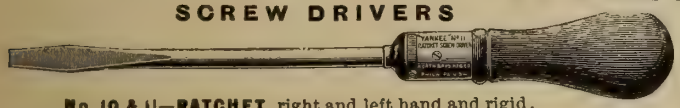
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WHOLESALE HARDWARE MERCHANTS
OTTAWA, ONT.

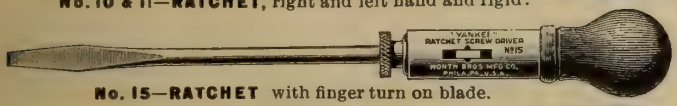
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The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

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No. 10 & 11—RATCHET, right and left hand and rigid.



No. 15—RATCHET with finger turn on blade.



No. 30—SPIRAL RATCHET—right and left hand and rigid.
No. 31— " " (heavy pattern)
No. 20— " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.

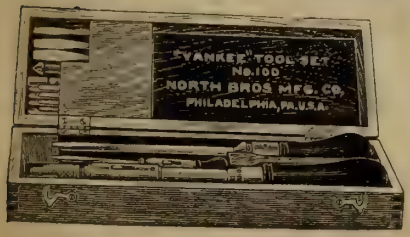
No. 12—RATCHET, with stub blade



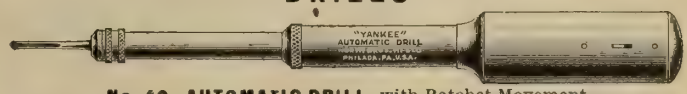
No. 60—POCKET SCREW DRIVER.



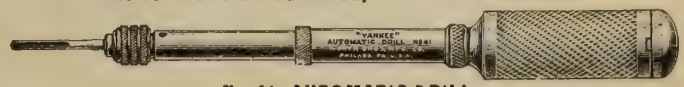
Countersink, for spiral ratchet screw driver.



DRILLS



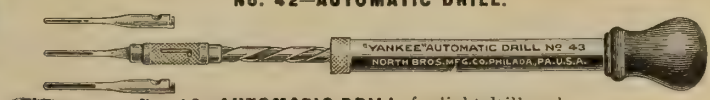
No. 40—AUTOMATIC DRILL, with Ratchet Movement.



No. 41—AUTOMATIC DRILL.



No. 42—AUTOMATIC DRILL.



No. 43—AUTOMATIC DRILL, for light drills only.



No. 44—AUTOMATIC DRILL, with adjustable tension on spring.



No. 50—RECIPROCATING DRILL, for wood or metals.

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SEND FOR OUR NEW "YANKEE" TOOL BOOK

NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

Davidson's Cereal Steam Cooker and Vegetable Boiler



Stew Pan with Enamel Cover



Wire Egg and Vegetable Boiler



White Cereal Dish

Using the well known application of Steam in a novel and convenient manner.

The inside Cereal Dish being suspended in the Stew Pan by means of a useful wire basket; is always surrounded by steam, ensuring the perfect and hygienic cooking of the contents.

The Wire Basket has many additional advantages, as it can be used for either boiling Eggs or Vegetables, and having wire handles at the sides it is very easy to handle.

The inside Cereal Dish is readily removed, and can be used on the dining table in a plated receptacle, or without, as this dish is always supplied in White Enamel only.

SIZES AND DESCRIPTION

No. 13—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; One 3 quart Cereal Dish.
No. 15—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; One 5 quart Cereal Dish.
No. 35—One No. 5 Stew Pan; One Wire Vegetable or Egg Boiler; Two Cereal Dishes, one each 3 and 5 qt.

Made in "Premier" and "Colonial" Enamelled Steel Ware.

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Antimony, Copper, Lead, Tin, Zinc.

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That in the majority of cases Merchants know where they can buy Nails, Felt, and other staple lines.

But Does Your Hardware Jobber Always Have What You Want?

RETURNED AUG 12 1905



UPRIGHT

No. 1. Wood Frame.
Average weight, 21 lbs.

ANGULAR

No. 3. Wood Frame
Average weight, 27 lbs.

Undoubtedly there are times when you are looking for **something a little out of the regular line,** and also a big assortment to choose from. If you will send us your order for anything in the hardware line we think we can fill it. You, at least, will have the benefit of the largest and best assorted stock in Canada.

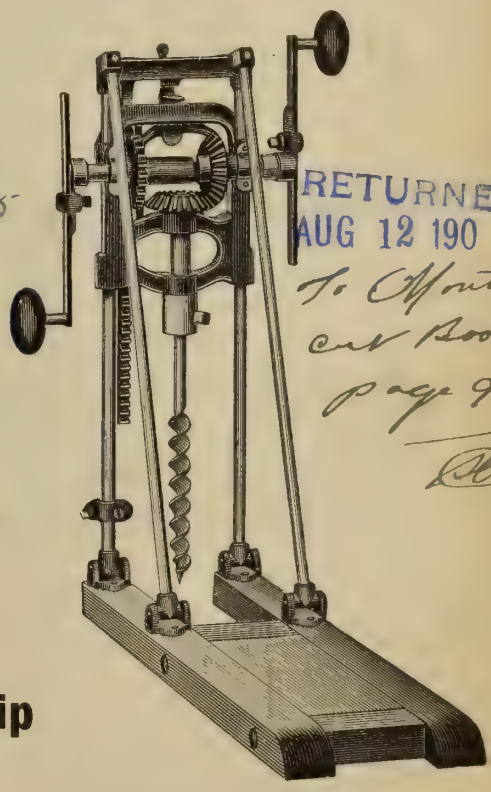
RETURNED AUG 12 1905



AJAX

Average weight, 31 lbs.
Does not require a special auger.

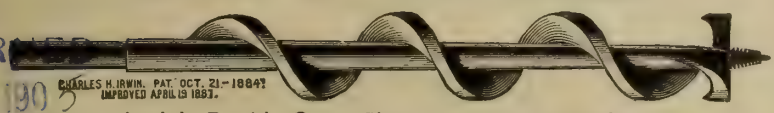
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To Montreal
our Book
page 92



MILLER FALLS ADJUSTABLE

The Frame and Braces are made of ½-inch Round Steel Rods.

BORING MACHINE AUGERS



Irwin's Double Cut. Sizes 1, 1¼, 1½, and 2-inch.



Bate's. Sizes 1, 1¼, 1½, and 2-inch.

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PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

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AT TORONTO, AUG. 26 to SEPT. 11.

$45,000 in Premiums. - $38,300 in Attractions.

The Irish Guards Band

By permission of His Most Gracious Majesty King Edward VII, the band of the Irish Guards, His Majesty's favorite household band and the finest military musical organization in the Empire, will give two concerts each and every day.

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In an especially built, extensive, fire-proof art gallery will be presented the grandest collection of art and art treasures ever got together on this continent, including loans from the King, the Corporation of the City of London, the great English Universities, the Republic of France, South Kensington Museum, Lord Strathcona, the Lieut.-Governor of Ontario and other distinguished bodies and gentlemen.

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By special command of His Majesty the King, Abbey's noted and historic painting will be on exhibition during the entire fair.

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The greatest pyro military display ever produced before the Canadian people. Scenes in this most recent of the world's most appaling event will be vividly portrayed with real Japanese and Russian soldiery taking part. The fireworks display will be on a brilliant scale, introducing new features of an Oriental character.

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The Process Building, Samples of all the Industries and Resources of the Country, Thousands of Horses, Cattle, Sheep, Swine, Poultry and Dogs, All Canadian Cereals and Minerals, good Trotting and Pacing, a superb Variety Show, the World's latest Inventions.

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Special cheap railway and steamboat excursions have been arranged. Enquire of your nearest station or ticket agent for rates.

W. K. McNAUGHT, President.

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J. O. ORR, Manager and Secretary

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The "WIZARD" Adjustable, Flexible Door Hanger

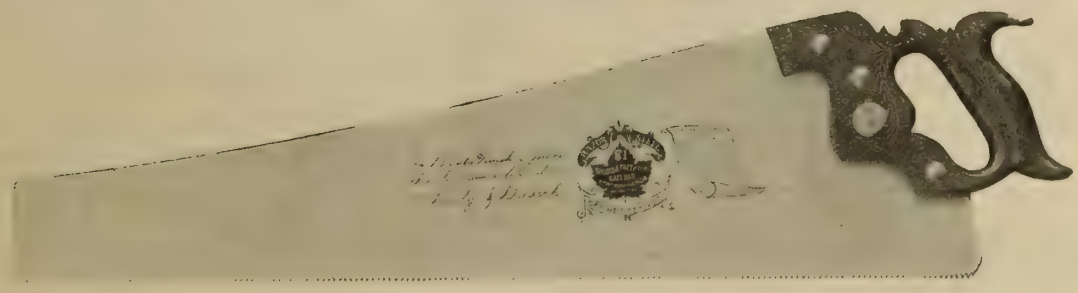
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IN YOUR MIND
AND
WATCH THE ADS.

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SAFETY DOOR HANGER CO.

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No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

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PATENT SAFETY SHAVER

Neatest and **simplest** of its kind.

The patent anti-friction roller, which revolves behind the cuting edge, enables the shaver to run smoothly over the face, instead of scraping away the lather (as is the case with most other safety shavers). It feeds it on to the part to be shaved.

The blade is made of the **finest sword steel.**

THE WILKINSON SWORD CO., LIMITED,
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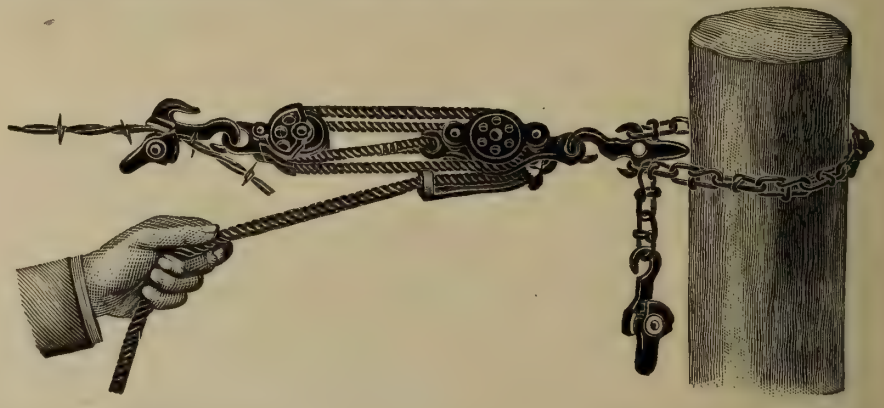
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204 St. James St., MONTREAL.

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OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

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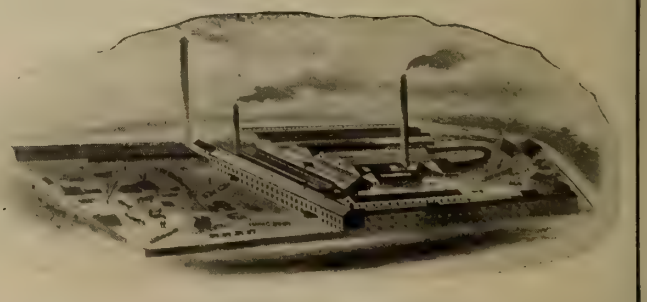
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.

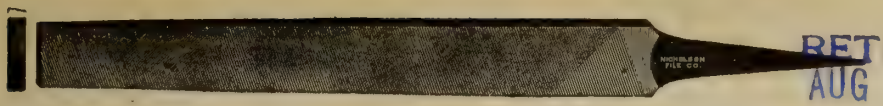


LARGEST MAKERS OF

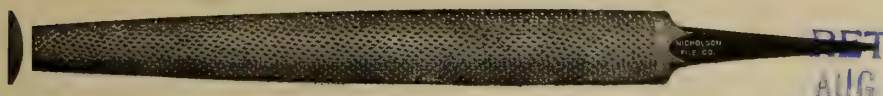
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The sheets made by John Summers & Sons, Ltd., in one week, if laid end to end, would measure over 400 miles in length, or equal to the whole length of England.

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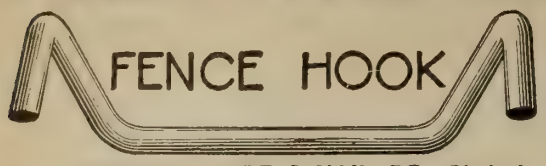
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Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE



31197.—E.P.N.S. CAKE BASKET

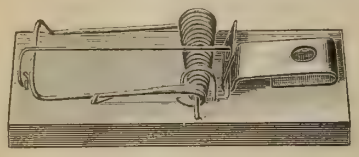
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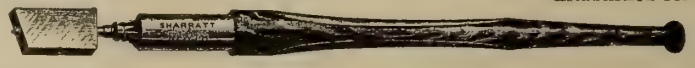
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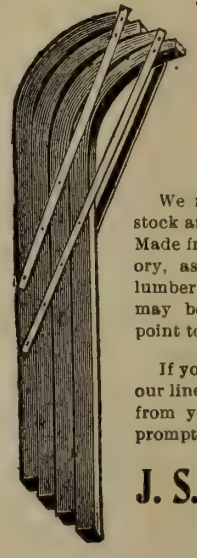
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GUELPH, ONT.

The Sarnia Hub, Spoke and Bent Goods Mfg. Co.,

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HEAVY WAGON, SLEIGH, BUGGY, —and— CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory, as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

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SARNIA, ONT.

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STITCHED COTTON DUCK

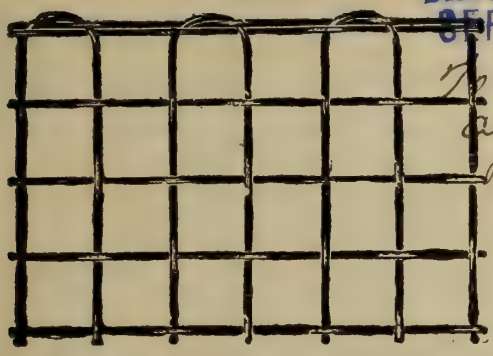
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WIRE CLOTH

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To Owner
Ent Book 39
Page 93



Special Regalvanized Cloth for Apple and Fruit Drying.

Stock widths, 24, 30 and 36 in.
Other widths and meshes made to order.

Also ½-in. Galvanized Netting.

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Also Wire Cloth and Netting

FOR ALL PURPOSES.

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Dillon Hinge-Stay Fence



Don't let YOUR farmer customer go to the OTHER Hardware for his fencing because you have none. If so, he is likely to get his Stove, Harvest Tools and other goods there, too.

Put in a small attractive stock of our 1905 DILLON fence ing, keep it where it can be seen and it will attract farm custom. Good margin in it for you, too.

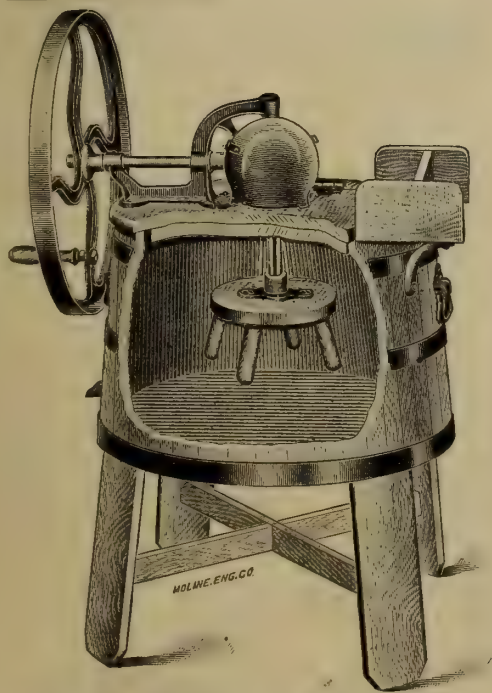
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Accident Proof! Dust Proof!

SPECIAL FEATURES:

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We do not use **wooden** Dasher Pole.

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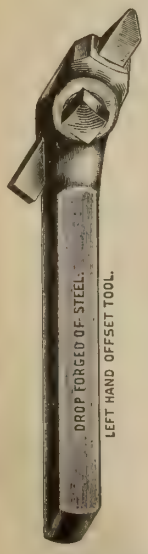
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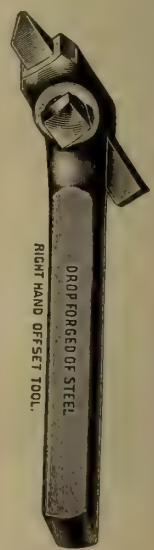


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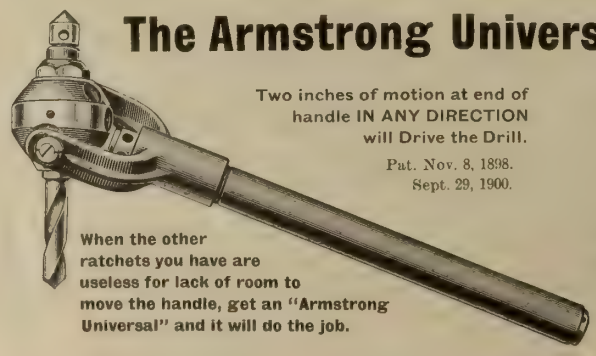


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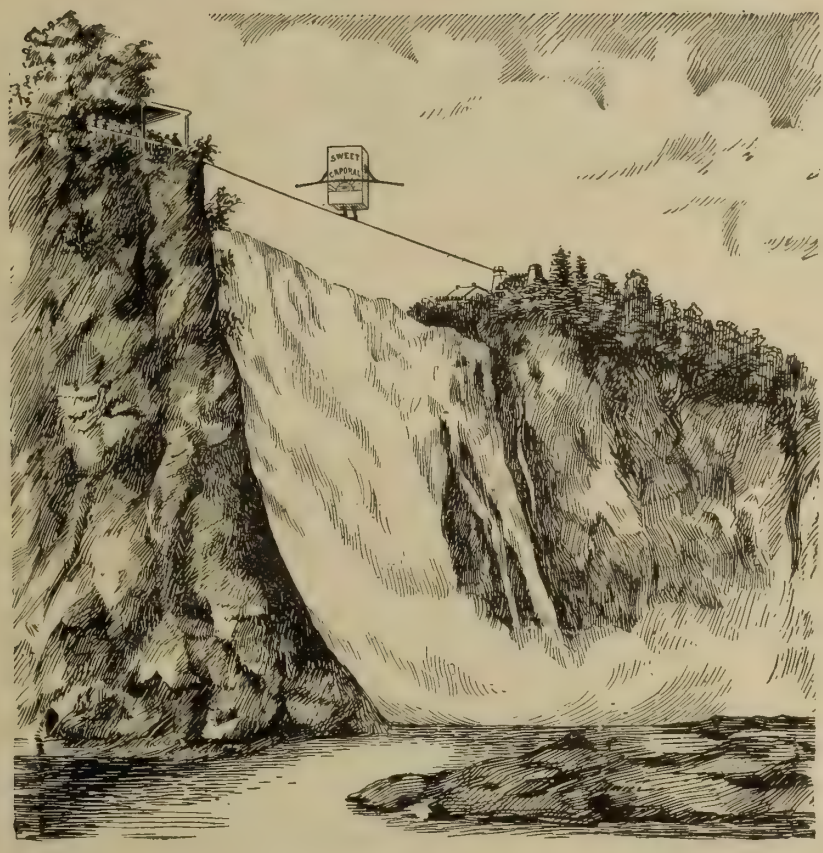
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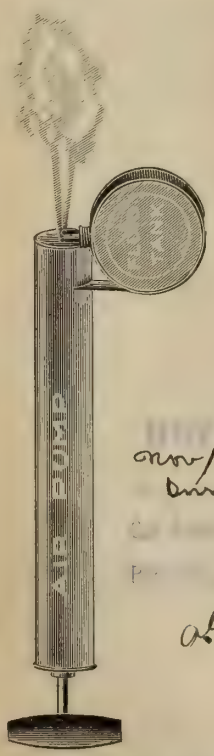
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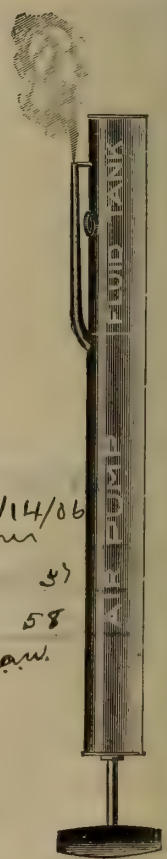


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CANADIAN MANUFACTURERS IN ENGLAND

By W. L. E.

THE TRIP TO PARIS.

BOTH of what may be termed our first and last official functions, were surprises. The first was the reception given to us by the King and Queen. The last was the invitation from the Paris Chamber of Commerce, through the French ambassador in London, to



Excursionists on Steamer at Liverpool.
In the foreground is Mr. Burns, of Burns & McClurg, Toronto. The gentleman with the silk hat is Mr. Hutchins, of the Great West Saddlery Co., Winnipeg.

visit "Gay Paree." The invitation was of the heartiest kind, and it was intimated the more that came the better would our host be satisfied.

The invitation came when we were in the midst of our provincial tour, and when hospitality was being heaped upon us with such rapidity that we were threatened with annihilation. But it was accepted with pleasure, and in fact, enthusiasm. The three weeks' of British hospitality had made us veteran campaigners in the field of pleasure. And so 160 of us shouldered our baggage (pardon, Monsieur, luggage,) and started for the French capital.

As in our provincial tour, so in this journey to Paris, representatives of the London Chamber of Commerce accompanied us to the French capital to see that no harm befell us. Our guardian angels in this particular instance were Messrs. R. S. and L. Fraser, (who had scarcely lost sight of us since we reached the British capital) and Col. Sir Roper Parkington.

Two hours after leaving London we were steaming out of Dover harbor, and 70 minutes later we were entering Calais. The mayor of Calais, other officials of the town, and Mr. Poindron, the Canadian commercial agent at Paris, were on hand to welcome us. They were full of smiles, and courtesies. In the restaurant at the landing stage, luncheon was awaiting us, and as we were awaiting the luncheon, the latter soon became a part of ourselves.

Of course, there was speechmaking. The words that were spoken were not understood by all present, but no one misunderstood the sentiments expressed.

The mayor of Calais proposed the health of King Edward, and Mr. W. K George, in responding, said, amid much applause, that to the harmonious relationship existing between the English and French speaking people of Canada was largely due the progress of the Dominion of Canada. A remark that also came in for warm approval, was that made by the president of the Calais Chamber of Commerce, when he said that the ties of relationship between Canada and France were of a peculiar and special kind. Another remark to the effect that a special order had been issued by the customs authorities, exempting our baggage from examination, was naturally cordially welcomed.

At Paris, the representatives of the



Excursionists at the Firth Bridge.
Young man in the rear of the brake is Mr. Northway, of Northway & Son, Toronto.

Chamber of Commerce and Senator Rolland of Montreal, were on hand to receive us. About eight hours after we left the British capital we were located in the French capital.

On the first day of our visit to Paris we were allowed to have our own sweet way. We had neither receptions nor dinners, for all of which we were truly thankful. But we did not waste the day. We utilized our freedom by getting acquainted with the city, and studying the customs and habits of the people, incidentally, of course, admiring the dress and beauty of the Parisian belles.

But the second day of our stay in Paris was well filled in. In the morning there were drives; after luncheon there were visits to the Chamber of Deputies and the Senate, both of which houses were in session. Then came the reception tendered by the Paris Chamber of Commerce, while the day was closed with a banquet.

Nothing could have been more cordial than the reception, and no one could have done more for our entertainment. The Weather Clerk was the only one against whom we have any complaint to make. He simply roasted us. But probably it was more the mistake of the head than of the heart. He might possibly have been laboring under the erroneous idea that we needed to be thawed out after coming from Canada. At any rate, whatever may have been his preconceived notions, he certainly melted us. But we enjoyed the function none the less. We were welcomed in English as well as in French, and the replies from the representatives of our party were also couched in both languages. President George spoke in English, and was profuse with apologies because he was unable to speak in French. The duty of replying in French devolved upon Senator Rolland, and well did he acquit himself.

* * *

The French want to do more business with us. And it is not all born of the monetary desire either. Canada is lost to France, but while the political ties have been severed, those of sentiment are still strong. This fact was much in evidence at every function, and on all occasions. It is to be devoutly hoped that this sentiment will always be strong. It is a good thing for business as well as for peace.

* * *

On the great national fete day, the day in commemoration of the fall of the Bastile, we were honored with seats on the grand stand at Longchamps, from



Some of the female employes of Lever Bros., Port Sunlight.

which we had a magnificent view of the review of the garrison of Paris, some forty thousand men. And here our joy was made complete by the hearty cheers that were accorded the British naval officers who had come up from Brest to, like ourselves, see the review. The

British naval officers wore gratified smiles indeed as they drove away.

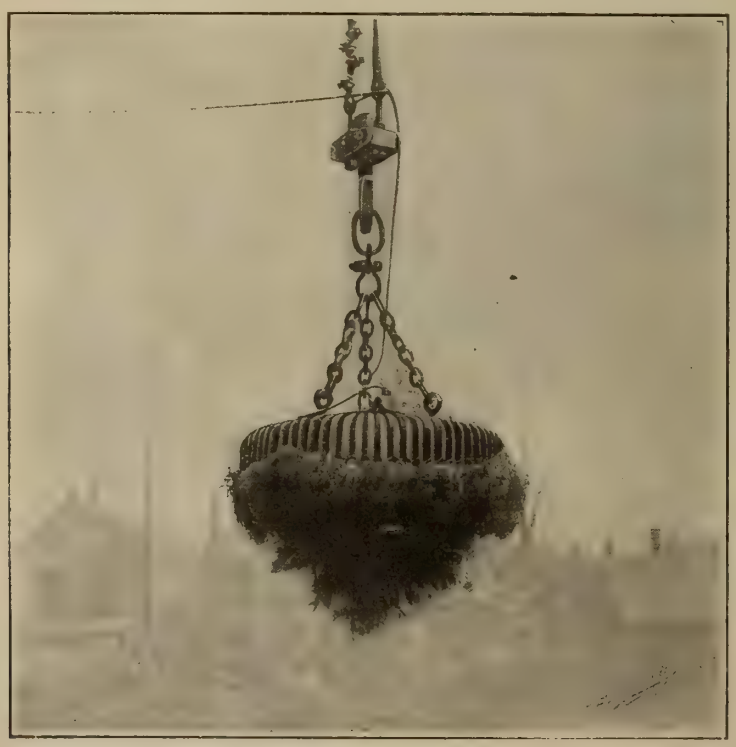
* * *

On the evenings of the fete days we had an exceedingly good opportunity of seeing the light-hearted people of Paris abandon themselves to pleasure. At 7 p.m. street car and 'bus traffic was suspended, and then the fun began. The streets were literally filled with people. Brass and string bands, and in lieu of bands, hand organs, were stationed at short intervals all over the city. Every street and public square became a dancing platform until far after the "rosey hue of morn" had appeared, and the necessities of business demanded that the drays and other vehicles should again be allowed to travel their accustomed route. Tell it not in Gath, some of our Canadian fellow travelers vied with policemen, soldiers and citizens generally in tripping the light fantastic over street car rails and cobble stones. And they appeared to enjoy it just as much as the natives themselves.

* * *

Mr. Anatole Poindron, the Canadian commercial agent in Paris, did much to make our stay in the French capital pleasant. He came down to Calais to help us, and in Paris he was here, there and everywhere, anxious to be of service to us; and he was of service. From what I could gather he is a good man for the position he holds. He is certainly anxious for the extension of trade between Canada and France, and was ready at all times to place himself at the disposal of those in our party who could find time to visit those in Paris who might be interested in trade between the two countries.

While in Paris I was impressed with the opportuneness of the present for the development of trade between Canada and the French republic. As I have already pointed out the sentiment of business men in France, towards Canada is most favorable, and they are ready to buy from us as well as to sell to us. It is up to our business men to take advantage of this, and I am sure Mr. Poindron, the Canadian commercial agent, 101 Rue Reaumur, will be glad to lend all the assistance in his power to those who may seek it .

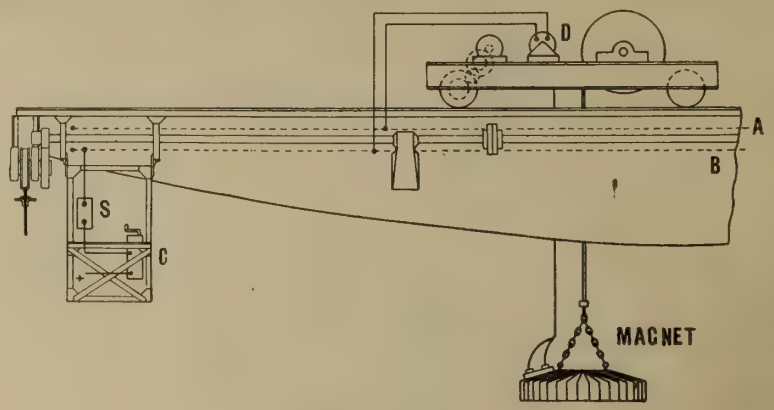


Magnet Handling Machine Boring.

ELECTRO LIFTING MAGNETS.

WHERE it is necessary to handle steel or iron in quantities by means of a crane, a magnet will effect economy in time and labor sufficient to pay for itself in from one to six months. This has been borne out by experience in steel mills, jobbing houses, safe works and other metal industries. Different illustrations are shown herewith of electro magnets, together with diagram of connections, embracing a line manufactured by the Electric Controller & Supply Co., Cleveland, Ohio.

In all cases an electro magnet is used, suspended from the hook of the crane; direct current at any of the common voltages being employed to energize the magnet. A flexible twin conductor cable is used to convey the current to the magnet and a small switch operated by the crane man is usually the only additional apparatus necessary. The amount of current used is small, being from one to twelve amperes according to the service for which the magnet is designed.



Method of Wiring.

In operation, the magnet is lowered upon the material to be lifted, and the switch closed, thus causing the magnet to attract and hold the material, which may then be hoisted by the crane and transported to the desired point. By simply opening the switch the material is instantly released.

Comparing this method of operation with the common methods of connecting the load to the hook of the crane with chains, hooks or clamps, the saving in both labor and time is apparent, as, in general, the attachment of the magnet to the load, as well as the release of the load, may be accomplished by the crane operator without assistance, thus saving the labor of one or more men for prying up the material, attaching hooks and chains at the point of loading and additional men at the point of delivery for unhooking the load from the crane.

Magnets can be so quickly attached to and detached from a load that by their use the work which may be done by a given crane is greatly increased, in some cases more than doubled. It frequently occurs that the attachment of lifting magnets to existing cranes so increases their capacity for handling material that the purchase of additional cranes for

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

handling an increased output is rendered unnecessary.

Again, lifting magnets require much less headroom than hooks or chains for lifting material of considerable width, such as plates. Therefore, by the use of



Unloading Pig Iron.

magnets, material can be conveniently piled to a greater height in the storage space under a given crane than is possible when chains are used, thus increasing the capacity of a given storage space without altering the crane runway



Magnet Lifting 11,000 lbs.

or increasing the size of the building.

Lifting magnets may be used to great advantage in handling pig iron, scrap, rivets, bolts and similar articles inibulk, as shown in Figs. 1 and 2. Ingots, blooms slabs, billets, bars, plates, rails, structural shapes, pipe, etc., may also be handled to advantage; Fig. 3 being an example.

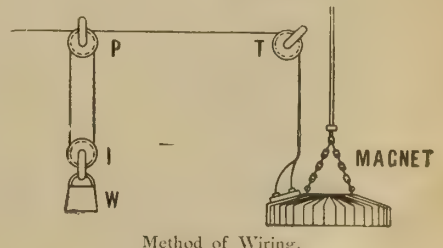
The Illinois Steel Co. uses fourteen magnets in its South Chicago works alone, and has found the economy in time and labor so substantial that it has decided to use them wherever possible in all its works.

A single design of magnet is not adapted to handling the full range of material above mentioned; on the contrary, the magnet must in every case be designed to meet the form of material to be handled. For instance, there is a wide difference in the design of a magnet for lifting ingots or blooms and one adapted to the handling of thin plates. A magnet which would handle five tons in the form of an ingot might not handle five hundred pounds in the form of thin plates. It is therefore necessary to understand in each case the operating conditions with special reference to the form and range of material to be handled.

A small controller or switch for operating is conveniently mounted in the crane cab.

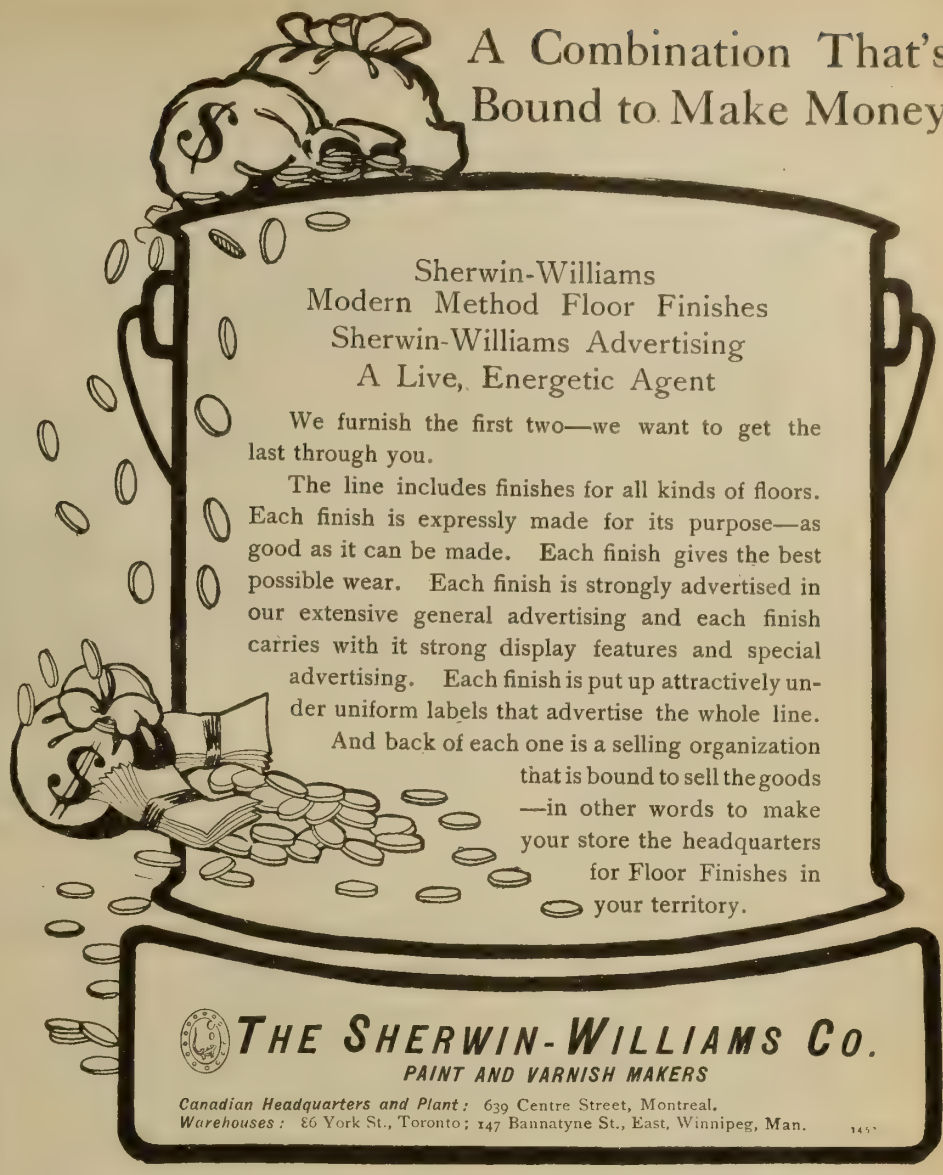
A drum "D" is mounted on the trolley and geared to a hoist shaft. A twin conductor flexible cable conveys the current to and from the magnet, the drum taking care of the slack. The cable is connected to a pair of contact rings on the drum and the current is conveyed from the controller in the cab to the drum through an extra trolley wire "B" and returned through the common return trolley wire "A."

In this case the twin conductor cable



Method of Wiring.

goes up through a pulley block "T," attached to the crane trolley; back to a block "P," attached to the girder near the cab; down through an idle block "I," and back through block "P" to the switch or controller in the cab. A weight "W" is attached to pulley "I" which rises and falls to take care of the slack cable required.



CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

"Nature, the Factory and the Home."

A sample of what the printer's art may accomplish. The National Cash Register Co., Dayton, Ohio, in this handsomely illustrated booklet, tell the story of the wonders that have been worked in landscape gardening about their manufacturing plant at Dayton. Thousands of employees are grateful to this enterprising concern for their eminently successful attempt to adjust the relations between nature, the factory and the home, and the welfare movement thus initiated, has spread to many parts of the United States. Such truly philanthropic work is to be recommended to manufacturers the world over.

Canadian National Park.

The Department of the Interior deserve special commendation for their latest publication illustrating Canada's national Park in the Rockies. The cuts are well chosen and the reading matter of such a nature as to make the publication extremely valuable to the tourist.

Vancouver Board of Trade.

The eighteenth annual report of the Vancouver Board of Trade gives in its usual concise and readable form, a statement of the year's official work in addition to an account of the leading industries and natural resources of the City of Vancouver, and British Columbia generally. The volume will be read with interest by those watching the evolution of the Pacific Province.

Hose and Fittings.

A neat catalogue has just been issued by the Canadian Rubber Co., of Montreal, dealing with the many different lines of hose manufactured by them. The booklet contains sixty-four pages and cover, the latter being of heavy, dark brown paper, printed in black, and decorated with gold. Prices are given on all kinds of rubber hose, including garden, steam, air drill, pneumatic tool, air brake, brewer's, etc. An idea of the growth of this company is obtainable from comparing illustrations of their present factories with that of 1854. Dealers who are interested in these lines, should send for Catalogue E. and mention Hardware and Metal.

Power Transmission Goods.

Condensed price list No. 25 has been issued by the Dodge Manufacturing Co., 419 St. James street, Montreal, the booklet comprising 16 pages and containing illustrations of the various classes of goods on which prices are quoted. If the name of this paper is mentioned a copy will be sent to any dealer or user of these goods.

There are **HAMMERS** *that "Knock," and there are* **HAMMERS** *that convince. We employ the convincing kind; for instance, we say contact with the Hammer will not discharge an*

IVER JOHNSON REVOLVER

And then we use our **HAMMER** *just to demonstrate the truth of our assertion. We call this a convincing argument, not "Knocking."*

Hammer the Hammer



Send for literature.

IVER JOHNSON'S ARMS & CYCLE WORKS,
FITCHBURG, MASS.
New York Office: No. 99 Chambers Street.

Cordage and Binder Twine.

The Consumers' Cordage Co., Limited, of Montreal, have sent out a price list for Manila rope, sisal rope, Russian jute, packing and sundries, with particular emphasis on transmission rope. Mention this paper in sending for a copy.

Art Metal and Wire Work.

Chas. Amos & Co., Detroit, Mich., have issued an interesting series of catalogues giving prices on fences, entrance gates, decorative bronze and brass, art grille work, and builders' wire, iron and brass work. All of these booklets are well illustrated, and will be sent to any dealer interested in these lines, who mentions Hardware and Metal. Catalogue 50-A deals with decorative bronze, brass, iron and wire work for buildings, and grounds, the designs being very artistic and the general lines illustrated being too numerous to describe singly. Catalogue 60 deals more particularly with bankers' and commercial metal furniture and wire goods. Catalogue 70 comprises those lines used by builders, such as iron stairs, fire escapes, window guards, sash, bars, counter and floor railings, while catalogue 90 is devoted to fences, entrance gates, mausoleum doors, grills, art glass, memorial tablets, vases, settees, crypt handles, etc. The passing of wood and the coming into more general use of metal and wire goods makes this class of goods very salable and such catalogues as those described should be in the hands of every hardwareman who considers himself up-to-date.

MONTREAL WHOLESALER BURNED OUT.

Starke Hardware Co.'s warehouse, Montreal, was completely gutted by fire early Monday morning, and the total loss was in the neighborhood of $125,000. The flames originated on the top storey of the building, and worked down to the basement, the trouble, apparently, being due to defective wiring.

The Starke Co.'s premises are situated in the north end of the stone block on St. Peter street, owned by the Grey Nuns. The stock included a large amount of cartridge ammunition, the explosion of which seriously injured one of the firemen.

The thick fire walls kept the flames from spreading over the whole building, but, as it was, the Montreal Suspender & Umbrella Co., and the Hiram L. Piper Co., Limited, manufacturers of railway supplies, suffered from fire and water.

There is $80,000 insurance on the stock of the Starke Hardware Co., and $7,000 on the building. The Royal and Hartford Insurance Companies carry the heaviest risks, each being liable to $15,000.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

RETURNED AUG 12 1905
To Owner
Cut Book 38
Page 93



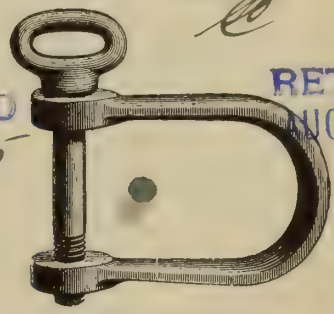
Ironed Waggon Neckyokes



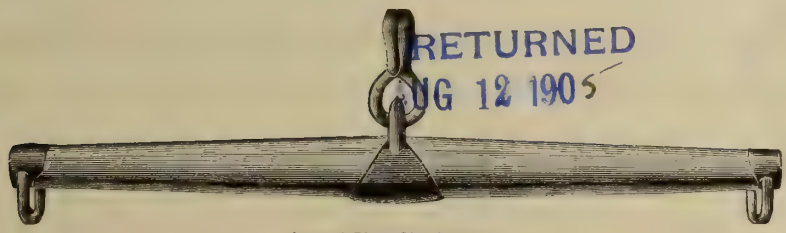
Neckyoke Irons



Malleable Plow Clevises



Malleable Clevises



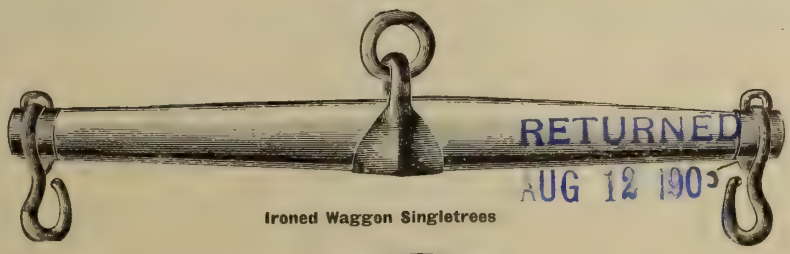
Ironed Plow Singletrees



Ferrule and Rings



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Centre Irons



Ferrule and Hooks

RETURNED AUG 12 1905

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Factory: Dufferin Street, Toronto, Ontario.

Our prices are right

"DOMINION BRAND" TARRED FELT

(THE OLD RELIABLE QUICK SELLER)

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WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

CONSULT THE WELL-KNOWN MANUFACTURERS

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Your Responsibility



In the relation of seller to user is an important one. Your customer is probably your neighbor and friend and he looks to you for goods that are right. He expects you to give him his money's worth. When you handle the Atkins Celebrated Silver Steel Saws you feel secure in the knowledge that you are selling the finest goods it is possible to obtain in the Saw line. Are you selling them? If not, NOW is a good time to make a change for the better. Write for Catalogue and Discounts.

E. C. ATKINS & CO., INCORPORATED Leading Saw and Tool Manufacturers Factories and Home Office . . . **Indianapolis, Ind., U.S.A.**

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What We have We hold



No. 650

What You have You hold

We have our way of making Cylinder Locks. We will hold to it. When a better way comes we will adopt it. You have your way of selling **Gurney Cylinder Locks.** Sell them. When better locks come along buy them. The advantages of carrying our locks are these: You get thoroughly reliable goods; You get a guarantee; You do not pay "duty" price; You get quick shipments; You get Canadian trade.

Have you had the Supplements to Catalogue No. 7?

THE GURNEY, TILDEN CO., Limited

HAMILTON

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Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

BUILDING NOTES.

Wm. Hendrie, jun., is to erect a $9,000 residence at Hamilton.

The Goderich Elevator & Transit Co. will likely rebuild their elevator.

The Bank of Montreal are erecting a two-storey brick building at Raymond, N.W.T.

About 100 single and twenty double houses are being built at Guelph this Summer.

Since March 1 building permits have been issued at Edmonton amounting to $341,695.

The Boharm Elevator and Trading Co. will erect an elevator at Boharm, near Moose Jaw.

J. W. Woods, Ottawa, has bought a block of property in Hull on which to erect a factory.

The Great Northern Railway are to construct a depot at Fernie to replace the one burned down recently.

E. J. Taylor, Edmonton, is to build a $3,300 resibence, and R. S. Parkin, of the same town, a $1,400 one.

Barrie has had a record year in building $200,000 being spent, in addition to which the G.T.R. spent about $180,000 there.

A movement is on foot to build a Jewish synagogue at Berlin. It is likely that a large opera house will be erected there in the near future.

C. E. Benell, Brandon, has secured the contracts to construct a line of elevators for the Dowd Milling Co., on the Arcola branch of the C.P.R.

Real estate sales in Montreal last week reached a total of over half a million dollars, which is, so far, the best showing for any week this year.

The new Kelly-Burnett block at Vancouver will cost $35,000. The Blue Ribbon Tea Co. will also erect a $26,000 building at the Terminal City.

A public meeting of the Montreal Board of Trade will be held next month, to consider the fire protection of the city and to suggest needed improvements.

N. R. Darroch, St. Thomas, has prepared plans for three-storey cement warehouse on Railway street for Joseph Griffin. Building will be 40 x 75 feet.

Among the large buildings to be constructed at Guelph are the new C.P.R. station, to cost $40,000; the Homewood Sanitarium additions, $100,000, and the armory, $100,000.

The value of buildings for which permits were issued in Vancouver during the month of July is greater by $57,700 than the value for June. Permits issued during July totaled in value $189,200, while the total for the month of June was only $131,500.

The C.P.R. are to erect twelve new stations on its new Guelph and Goderich iln. At Guelph and Goderich fine new stations will be built at a cost of from $35,000 to $45,000 each. At Elmira, Blythe and Milverton the stations will cost $8,000, and Monkton, Millbank, Weisenburg, Wellington, Linwood, Walton and Auburn will get $6,000 depots.

Robert Simpson & Co., of Toronto, have purchased two buildings on the corner of St. Catherine and Windsor streets, Montreal, and will commence the erection of a large department store there next May. In the meantime, the company will try to purchase a block of the adjoining property. The price paid for the land already acquired was $18 per foot.

The Lehigh Portland Cement Co., of Allentown, Pa., have closed for the purchase of some 10,000 acres of limestone and clay lands lying east of the Belleville Portland cement plant, and will commence shortly to make clearings and erect storehouses, machine shops and dwellings, preparatory to erecting a plant next spring of 4,000 barrels per day capacity.

Amongst the new buildings to be erected at Hamilton are the following: W. H. Northcott, residence;, $1,900, and two brick houses, $3,000; H. Gumms, house, $1,500; T. Lovejoy, two houses, $2,900; S. McPhie, five brick houses, $5,000; J. Hummill, dwelling, $1,600; T. Robson, three dwellings and greenhouse, $5,600; Hamilton distillery, $3,000; and D. Brown, residence, $2,400.

Hon. Raymond Prefontaine this week inspected the immense works now going on at the Tarte wharf at Hochelaga, Montreal. He was enthusiastic in his commendation of the work, which is the greatest wharf structure in the new world. When completed, this huge wharf will be able to accommodate six steamers as large as the new turbiner Virginian. For four years this work has been in progress, and it is expected that in a couple of months it will be ready for business.

The season's building at Winnipeg is steadily creeping towards the eight million dollar mark. Up to date 2,050 permits have been issued, and the aggregate cost represented totals about $7,700,000. If things keep on at the present rate the $10,000,000 mark will be reached before the end of the building season. This year there are few very extensive buildings, and the permits for the most part cover residences and blocks.

STREET PAVING and SIDEWALKS a SPECIALTY

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OF ONTARIO Limited
Head Office:
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Ask for quotations for Septic Tanks.

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses Cheese Factories, Cellar, Stable Floors, etc.



Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
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HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application.

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"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
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The Best Door Closer Is . . .
NEWMAN'S INVINCIBLE FLOOR SPRING
Will close a door silently against any pressure of wind. Has many working advantages over the ordinary spring, and has twice the wear. In use throughout Great Britain and the Colonies. Gives perfect satisfaction. Made only by
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ONT WIND ENGINE & PUMP CO. LIMITED.
TORONTO, ONT.

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Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOSEPH QUE.

Give that man a **UNION PLANE** when he asks you for a

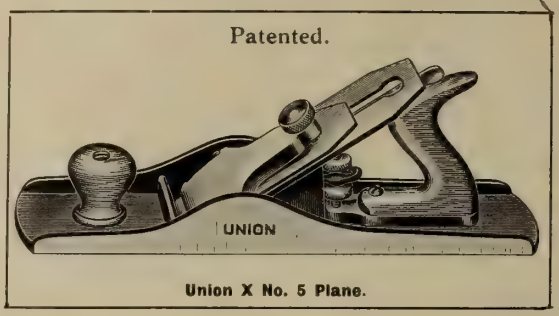
GOOD PLANE

They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

Have you seen the

UNION X PLANES?

The one with the Locking Lever adjustment and Solid Frog



Union X No. 5 Plane.

Pronounced by all who have used it to be the best Plane made, and a decided improvement over all others.

Also a complete line of Wood Bottom Planes, Fancy Planes, Block Planes, Scrapers and Spoke Shaves. Write for complete Catalogue.

Union Manufacturing Co.

WAREHOUSE: 103 Chambers Street, NEW YORK.

New Britain, Conn., U.S.A.

NO MATTER HOW NARROW

the street or alley, nor how high the walls of opposite buildings, **MAXIMUM LIGHT GLASS** will introduce the light and make the interior space as bright as if it were a corner room overlooking wide streets.

MAXIMUM LIGHT GLASS

draws light from the sky in its own "particular" way, which is the secret of its being able to distribute that light in the "right" way and to the "right" extent. The cost of installing this glass is but a trifle. Would you like to know the cost and also test samples of the glass?

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Glass Importers and Manufacturers.

MONTREAL BUILDING PERMITS.

Jos. Ferron, 1186 St. Hubert street, dwellings, $1,500.
Jos. Ferron, 1180 St. Hubert street, dwellings, $1,500.
P. Clermont, 452 Frantenac street, dwellings, $3,000.
O. Dinell, Havre street, Hochelega ward, dwellings, $3,000.
Estate L. Prevost, 116 St. Audre street, dwellings, $4,000.
L. Carbiel, Lascall street, Duvernay ward, dwellings, $2,000.
Geo. Slack, Grey street, St. Andrew's ward, dwelling, $5,000.
S. Lafleur, Logan and Champlain streets, dwelling, $2,000.
S. Ricci, Labelle street, St. Denis ward, dwellings, $1,500.
J. S. Prince, Cadieaux and Ray streets, dwellings, $4,000.
J. P. Gervais, Mt. Royal street, St. Denis ward, dwelling, $8,400.
Laframboige and Germont, 719 Cadieux street, dwellings, $4,500.
E. Ray & Co., Boucher street, St. Denis ward, dwellings, $5,400.
Jos. Ward, 327 Commissioner's street, alterations to warehouse, $6,000.
A. L. Pacaud, 2453 St. Catherine street, alterations to store, $30,000.
Seminary of St. Sulpice, 32 Sulpice street, alterations to store, $2,000.
Chas. Berger, Mt. Royal street, St. Jean Baptiste ward, dwellings, $9,000.
Hon. P. Butheaume, St. Urbain and Prince Arthur streets, dwelling, $1,500.
J. P. Forest, Esplanade street, St. Jean Baptiste ward, dwellings, $6,000.
J. A. Godin, 944 St. Lawrence street, alterations to dwellings and store, $1,900.
Jeannotte & Lachapelle, 876 St. Lawrence street, alterations to store, $2,000.
P. Saulmers, 886 St. Lawrence street, alterations to dwellings and store, $2,000.

TORONTO BUILDING PERMITS.

E. C. Wilson, dwelling, Rusholme road, $4,000.
Geo. Rennie, one pair dwellinbs, Shaw street, $4,000.
Mr. Waters, brick building, Vermont avenue, $2,500.
Thos. McIlwain, dwelling, Sorauren avenue, $4,000.
Chas. H. Maybee, brick dwelling, Nowstead avenue, $2,000.
Oliver C. Pook, roughcast dwelling, Clinton street, $2,000.
Robert Taylor, brick residence, 677 Bathurst street, $3,000.
J. M. Henderson, brick residence, McPherson avenue, $3,200.
J. M. Henderson, brick residence, McPherson avenue, $3,200.
Miss Bessie Hicks, brick dwelling, 133 Montrose avenue, $2,000.
Robert G. Unwin, brick dwelling, Markham street, $5,000.
A. T. Stewart, stone and brick dwelling, Grace street, $2,000.
Chas. Locke, one pair roughcast dwellings, Crawford street, $4,000.
James Witney, one pair brick dwellings, Gibson avenue, $2,700.
James Burford, one pair brick dwellings, Bathurst street, $3,600.
W. H. Grant, stone and brick dwelling, Farnham avenue, $5,700.
Thomas Berrie, brick store and dwelling, Broadview avenue, $4,000.
T. & J. Reid, one pair roughcast dwellings, Deleware avenue, $1,800.

Our **SPIKES**

are made from our own rolled product on machinery built in our own Machine Shops. We believe in "knowing" everything from the start to the packing in kegs, which we also turn out. It's the only way to maintain

"QUALITY"



We manufacture a full line of

PRESSED SPIKES
RAILWAY SPIKES
DRIFT SPIKES
WHARF SPIKES
SHIP'S SPIKES

Our aim is to make them a little better than the other fellow.

Specify R. Co. the brand which "Stands for Quality."

THE MONTREAL ROLLING MILLS CO.

RETURNED AUG 25 1905 To Owner Cut Book 39 Page 26

Ask for the J.C.M. Brand of Canadas

Galvanized—3 Crown, Black half-polished—1 Crown.

APPLY TO First-class makes at low prices.

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND.

H. & R. SINGLE GUN

Automatic and Non-Ejecting



Simplest "Take Down" Gun Made

12 and 16 Gauge, Steel and Twist Barrels
20 Gauge, Steel Barrel

Superior in Design, Workmanship and Finish and the most popular Gun on the Market.

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WHY NOT HANDLE THE BEST?

You know that in the race for Trade, Quality always wins in the end.

Be a winner and sell

"Pease Economy" Furnaces

"Pease Economy" Boilers

and our

"Florence" Boilers

When people want to sell a house, why do they say "Pease Heating?"

YOU KNOW

YOU ARE WELCOME AT ALL TIMES AT OUR SHOWROOM

Write for Catalogues.

Pease Foundry Co., Limited

189 and 191 Queen St. East

TORONTO

Pease-Waldron Co., Limited

WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

POWER was turned on last week at the plant of the Wahnapitae Power Co. and active work will be commenced soon. The plant is established at the falls two miles below the Village of Wahnapitae, and the company have expended $100,000 in building and plant. They propose to develop 5,000 horse-power, and the expectation is that when the C.P.R. establishes a divisional point at Sudbury the company will furnish them with the power they need. In the meantime the Town of Sudbury will be supplied with power to operate its municipal electric light and water works system.

A patent wire fence factory is to be established at Emerson, Man.

The Canadian Northern Railway will build a spur line into Battleford this Fall.

Tacoma capitalists have secured a site for a $30,000 furniture factory at Vancouver.

A large factory to manufacture mining machinery is likely to be established at Vancouver by J. P. Smith, of Colorado.

The Sutton Lumber and Trading Co. propose to erect a large saw mill at Clayoquot on the western coast of Vancouver Island.

Eri, Pa., capitalists have invested a large sum, said to be $50,000, in the Ontario Pipe Line Co., and will carry on the company's work.

Tenders for the construction of 275 miles of the Grand Trunk Pacific Railway on the main line west of Portage la Prairie have been called for.

Arrangements have been completed for the erection of the Maple Leaf Flour Mills, with 2,000 barrels capacity, at Kenora, power to be taken from the Winnipeg River.

Over 3,000,000 logs will be brought down the Ottawa River this season by the Upper Ottawa Improvement Co. This is a much greater number than has been brought down for some years.

Elliott, Woodard & Logue, Phoenix, B.C., have been awarded the contract for the clearing of the balance of the right of way for the high tension pole line of the West Kootenay Power & Light Co., for their extension from Bonnington Falls into the Boundary.

Three hundred men are at work installing a power plant at Kakabeka Falls, and the company hope to have electric energy available in Fort William this Fall. The foundation of the Ogilvie mill at Fort William has been finished, and work on the superstructure begun.

Electric power will be furnished for the western part of New Brunswick by the large power plant now being built at Aroostock Falls, N.B. Amongst the towns to be served are Fort Fairfield, Presque Isle, Caribou, Limestone and Houlton in Maine, and Andover and Perth in New Brunswick.

The Tariff Committee of the Canadian Manufacturers' Association complains that the anti-dumping clause of the tariff is evaded by German and French manufacturers shipping through Great Britain. The committee wants more rigid inspectorship by Canadian officials and additional legislation if necessary to put a stop to this.

The Canadian Pacific Railway Co.'s two new steamships for their Atlantic service are to be called the Empress of Germany and the Empress of Austria. The first will be launched noxt month and the second in October, and they will register 14,000 tons and will sail 18 knots an hour. The company claim that will be five and a half day boats.

Railway development of Southwestern British Columbia is progressing rapidly. The Nicola, Kamloops and Similkameen and the Midway and Vernon railways are now under construction. Midway seems to be a coming place. President Hill is operating from there on the construction of the V., V. & E., and the British Columbia Copper Co. have made arrangements for the construction of a large smelter there.

The Canadian Pacific Railway management have practically decided to double track their line between Winnipeg and Fort William. This decision on the part of the company means the expenditure of $10,000,000. The company will do most of the work, very little of it being given to contractors. It will take three years and the distance covered will be 429 miles. This will be a great advantage in handling the Northwest crop.

Mr. C. D. Warren, president of the Lake Superior Corporation, speaks very hopefully of the condition of affairs in the district. Steel rails are being made at the rate of more than 500 tons a day, 1,000 tons of wood pulp are manufactured daily, and more than 4,000 men are employed. Contracts for steel rails are booked as far forward as next January, the amount being 75,000 tons, sufficient to construct 1,200 miles of railway.

The Electrical Development Co., of Ontario, whose construction of a transmission line between Niagara Falls and Toronto is nearing completion, have decided to extend their line westward to London as quickly as possible, touching Brantford, Paris, Ingersoll, Woodstock and intermediate points. It is also the intention of the company to build branch lines to Guelph, Galt, Preston, Hespeler, Berlin, Waterloo and other towns throughout the western peninsula.

On the American side of Niagara Falls are at present three power stations, the aggregate output from which is about 150,000 horse-power. The three great stations on the Canadian side will have a total of 285,000 horse-power and two stations on the Welland Canal have at present 26,000 horse-power. This makes a total for the region of 460,000 horse-power, or more than 30 per cent. of the 1,483,000 estimated as the world's present equipment of hydro-electric power. It is expected that the three Canadian Niagara companies will add 120,000 to their present capacity, while provision has been made for doubling that of the Welland companies. The ultimate total comprised within present plans is there-

fore no less than 600,000 horse-power, of which it is estimated not more than 400,000 can be utilized in the immediate Niagara Falls region for a generation to come. It is evident therefore that if the present ambitious plans are carried into effect a considerable quantity of the available power will have to be transmitted a very long distance.

The wonderful Lake-on-the-Mountain at Glenora, near Picton, is likely to be used for the production of electric power. A company has been formed for the purpose of testing the capacity of the lake to see if the supply of water is likely to be sufficient for the purpose. The peculiarity of the lake is that no one knows where its supply of water comes from. Perched on the top of a bluff, 200 feet above the level of the Bay of Quinte and so near the edge of the rock that at one point it is not more than a hundred yards from the side, the little lake, 400 acres in extent, seems designed by nature to be a reservoir for power. A flour mill and a foundry at present lie at the base of the rock and are run by an outflow of about 1,580 cub. ft. of water per minute. This apparently does not fail, and, when the mills are shut down and this draught on the lake is discontinued, the level of its water does not rise. Is it a state of equilibrium with a source of supply at some distance off? And how great draughts can be made upon this source of supply?

—

Companies Incorporated.

The Dominion Automobile Co., Limited, of Toronto, have been incorporated with a share capital of $100,000, for the purpose of manufacturing and dealing in automobiles, motor boats, etc. The directors are: A. H. Beaton, C. L. Wilson, J. McArthur, J. Barber, and C. E. Holland, all of Toronto.

The London Pressed Stone & Concrete Co., Limited, of London, have been incorporated with a share capital of $40,000, for the purpose of manufacturing and dealing in all kinds of cement blocks, artificial stone, bricks, etc. The directors are J. Nicholson, J. C. Judd, E. A. Shoebotham, H. F. Whetter and T. C. Knott, all of London.

The Canadian School of Scientific Salesmanship, Limited, of Winnipeg, has been incorporated with a share capital of $90,000, for the purpose of educating pupils in science and the art of scientific salesmanship, etc. The directors are: L. S. Weber, M. C. Bowman, N. C. Bowman, I. S. K. Weber, all of Berlin, and E. O. Weber, of Winnipeg.

The George Taylor Hardware Co., Limited, of New Liskeard, have been incorporated with a share capital of $40,000, for the purpose of carrying on the business of general merchants and to purchase the stock and trade of Messrs. Taylor Bros., of New Liskeard. The directors are: George Taylor and W. A. Taylor, of New Liskeard, and George E. Taylor, of London.

The Universal Nut Machine Co., Limited, of Montreal, have been incorporated with a share capital of $200,000, for the purpose of manufacturing and dealing in machines for the manufacture of nuts, washers and other hardware. The directors are: A. Hendry and W. Eckenstein, of Montreal; C. A. Duclos, Westmount, H. L. Dinning, of Lachine, and C. Ralph, of Longueuil, all of the Province of Quebec.



No. 16. OSHAWA, ONT. AUGUST 12, 1905

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Perfect Metal Lath at 10c. per sq. yd. is within the reach of all. It is the only metal lath made in this country worth enquiring about, for it alone is made on the new principle and by the new process.

WOOD DEMERITS

Wood lath has had its day. Only indifference and want of knowledge permits its use at all. It costs as much as **Perfect Metal Lath,** though not as much as other metal laths, it piles up needless insurance on buildings and renders everything completely subservient to fire, etc. Now, listen! when you are contracting for the hardware for new buildings put in a "word" for **Perfect Metal Lath.** Be sure and say it **costs no more than wood** and is immeasurably superior. We will ship the goods direct to the premises. All you have to do is to put in the "word" and correspond with us. Your reward is the discount. Is this worth your attention? We think so.

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of OSHAWA, ONT.

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PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

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LLANELLY, WALES



"FAMOUS" BASE BURNER

No. 113 SERIES

Made in two sizes for parlor and in one size with oven.

Has 12½ and 14 inch fire-pots. Large Oven and Duplex Grates.

The fire-pot can be taken out through the front doors and the operation is a very simple one.

The "Famous" has a full nickel dress very artistically arranged, and is equal, if not superior, to any other stove in its class.

THE McCLARY MANUFACTURING CO.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER
ST. JOHN, N. B. HAMILTON

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HARDWARE AND METAL

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JOHN BAYNE MACLEAN

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Safety Door Hanger Co., Hamilton.
20th Century Mfg. Co., New York.
Dominion Sewer Pipe Co., Swansea, Toronto.

ANNOYING CUSTOMS REGULATIONS.

A LARGE firm of hardware merchants have forwarded us the accompanying letter sent them by an English firm in reply to a request that the latter conform to the Canadian Customs regulations in shipping goods to Canada and facilitate the labor of passing them through Customs on the receipt of the goods. The importers merely desired new invoices with proper Customs certificate upon and they were much annoyed on the receipt of the reply from the London house. The letter reads:

"Gentlemen,—In answer to your letter of the 14th inst., if you will send us blank sheets of foolscap with space left for us to make out the invoice, but with the necessary declaration written on by your clerk, we will fill in the invoice part and attach our signature and return to you. These Customs declarations are becoming such a nuisance that it is being discussed here amongst manufacturers whether they will not decline to send any other than the plain invoice. The profit we get on our goods does not admit of our clerks wasting their time in complying with foolish rules such as are demanded by your Government. A simple statement that the goods are of English manufacture should be quite sufficient.

"We are, yours truly, etc., etc."

It would appear that the English firm has a just cause for complaint because of the increasing labor involved in overcoming the red tape surrounding the Customs houses of our importing centres, but it should be equally clear that the proper method to adopt to remedy the evil is not to treat their customers as though they were at fault and make matters more difficult for them, but rather to co-operate with other exporters, as suggested in their letter, in taking steps to secure a repeal of the cumbersome regulations. The importers are not likely to give the English firm any future business unless they give evidence of a desire to treat their customers fairly. It is an old proverb that "when in Rome do as the Romans do," and the Canadian firm is quite justified in taking the view that the senders of the curt letter are not desirous of extending their trade in Canada.

The subject of Customs regulations is an interesting one, and Hardware and Metal would be glad to hear from readers in Canada and the Mother Country regarding their experiences. Can the present regulations be simplified and the importation of goods accomplished with less inconvenience to both exporter and importer?

AN EXHIBITION COMMISSION.

H. J. HILL'S death a week ago has drawn attention to the wonderful development of Toronto's annual industrial exposition, the success of which as an annual event has not been equalled by any city on this continent, or, in fact, in the whole world. Mr. Hill was associated with the Exhibition Association during the last two decades, and aided greatly in its growth from infancy as a fair to the sturdy manhood of a national exhibition. Illness caused his retirement a couple of years ago, and permanent disability has been followed by an early death.

In importance to the industrial development of Toronto, and the whole Dominion, the Canadian National Exhibition is outranked by no existing institution of a similar character, and it is important, therefore, that its conduct should be in the hands of public spirited men, free from lodge and political influence, and exempt from the worry of finding positions for job hunters who have given political service, or have strong lodge influence.

Fortunately the Exhibition Board has been under the control of strong men, whose executive ability has not only resulted in the remarkable growth of the exhibition, but has also kept the board free from charges of corruption or jobbery. Those who have in the past given their time and energy to the board deserve the thanks of the community for their public spirited work. But the question arises: Is not the exhibition growing too large to be considered a semi-municipal institution, and would it not be better to place its conduct in charge of a commission of public men of high standing, whose term of office would be more lengthy than under the present management?

The MacLean Trade Newspapers put forward this suggestion in the belief that the commission form of government of semi-industrial and semi-public institutions is the most modern and successful method of organization, providing the best and most economical service to the community. Dozens of cities have established parks and gardens commissions, and no traveled person will deny that the public secures better service under the commission plan than by having the parks under the control of the municipal council. A comparison of the results of the commission plan in Detroit, Mich., will show its superiority over the aldermanic committee system in Toronto.

The Queen Victoria Parks Commission, and the railway and power commissions, are other examples of the success of the placing of semi-public institutions in the hands of well-known and successful business men, who are prepared to serve the community for the honor of the position. While we have nothing but congratulations to offer the Exhibition Board on the success of their efforts in the past, we contend that their sphere of usefulness would be extended by the establishment of a commission to carry on the important work of the National Exhibition in the future.

TO LOWER EXCHANGE RATES.

FOLLOWING the lead of the American Bankers' Association, the Canadian Bankers' Association will try to recover the money order business of Canada, which is now almost entirely done by different express companies and the Government Postoffice Department. This action will end the practice of banks of charging 15 cents on a cheque whether it was for $3 or $50, and any amount under $5 will, according to the new rates agreed on, be put through for a charge of 3 cents; from $5 to $10 for a charge of 6 cents; from $10 to $20 for 10 cents, and from $20 to $50 for 15 cents.

Retail grocers and general merchants ought to welcome the proposed change to a man, if for no other reason than because it will mean a saving in dollars and cents. If the average retailer stops to consider, his exchange account amounts to no small item in the course of the year. Suppose he accepts one draft a day, and receives payment from customers at the rate of one cheque a day, by no means a high average, since drafts are drawn for any amount from $1 up, it means twelve exchanges a week, forty-eight a month, and 576 a year, from which must be deducted the

number of drafts on which the bank charges a nominal collection fee and cheques payable at par. If 400 exchanges are paid during the year they will average at least $60, an amount which may be out of all proportion to the actual cash turnover.

It is because the wide-awake retailer has become wise to this fact that express and postoffice money orders are coming into general use, particularly for small remittances. The banks, realizing that this trade is theirs by right, and at the same time impressing upon the retailer that it is an advantage to him to have his collections, etc., go through one channel, are endeavoring to make this possible by lowering the present rates of exchange.

MAY CARRY U.S. MAILS.

THE Allan turbiner Virginian is experimenting with United States mails on her present trip from England, and stands to outdo all previous records. She left Moville at 3.20 p.m. on Friday, Aug. 4, and passed Belle Isle at 6.55 p.m. on Tuesday, Aug. 8, a distance of 1,760 knots, an average of seventeen knots an hour. The Virginian landed her mails at Rimouski on Thursday, Aug. 10, at 8.20 a.m. This is equivalent to five days and twenty hours from Moville to Rimouski, not taking into account the seven hours allowed for detention from fog, and breaks all records. For the first time letters posted in England one Thursday were delivered in Montreal the following Thursday.

The question now before the public is, "Can mails for the United States be delivered sooner if carried by Canadian mail steamers?" Can her mails be delivered in Chicago not more than twenty-four hours later than if they were carried by the Lucania running her usual speed? If the Virginian succeeds in doing so the supremacy of New York as a port for postal steamers on the Atlantic run will be seriously threatened. Canada will become not merely the shortest route to the Orient, but to the greater part of the United States as well. Anticipating the fact that there will be even faster steamers than the Virginian on the Montreal route in the near future, the success of her present voyage may mark the beginning of a great change in the mail route between Great Britain and the United States.

TARIFF INQUIRY.

IT has been officially announced that the committee of ministers who are to inquire into the operation of the Canadian customs tariff at the next session of Parliament, will enter upon their work about the end of August or the beginning of September. Meanwhile it is well for parties interested to prepare such information as they intend to submit and to select representatives to appear before the commission. This paper has to listen to a tale of woe from time to time from members of the trade. Such complaints should be aired publicly before this commission if they are to be remedied. Otherwise the customs authorities will conclude that everything is running smoothly, and proceed to pass approval on the present regulations. If it is the dumping regulations that are at fault, a strong representation on this subject should be arranged without delay.

All who come before the committee should be prepared with accurate information respecting the requests they have to make and be ready for cross-examination in matters about which there may be diversity of opinion. Reasonable notice will be given of the visits of the committee to the several points selected, which will include one or more places in every province of the Dominion. All inquiries should be directed to Mr. John Bain, assistant commissioner of customs, Ottawa, secretary of the tariff commission.

THE PLUMBERS' CONVENTION.

A FULL report of the convention of the National Association of Master Plumbers will appear in next week's Hardware and Metal, it being impossible to secure a complete report for this issue. According to telegraphic reports a large delegation is present and in the absence, through illness, of President Robert Ross, Vice-President Hammond is presiding. Secretary Kirkham, of the Winnipeg Association, was stricken with typhoid a few days before the convention opened. This is regrettable, he having done much to perfect the arrangements for the gathering.

TORONTO BRANCH C.M.A.

AN increase of 102 in membership for the year was reported at the annual meeting of the Toronto branch of the Canadian Manufacturers' Association, held on Thursday last. The membership now comprises 497 manufacturers, and the influence of the body is growing in proportion to its increasing size.

Chairman Donald's report was a very painstaking and important document, dealing with many questions of first importance to the City of Toronto. Under the heads: "The Trunk Sewer," "Straightening of the Don," "The Radial Railway," "Front Street Expropriation," "The City Beautiful," Mr. Donald touched upon civic affairs and arraigned the city authorities on several charges of laxity and dilatoriness. The delay in providing better sewage disposal and the delay in straightening out the Don were subjects of comment.

With regard to the question of radials, he said: "The matter of incoming radial railways is very important, and no opportunity should be lost on encouraging these desirable adjuncts to modern city and suburban life. At the same time no greedy corporation should by any means obtain rights which eventually are to be used as a lever to render more valuable interests which at present are clearly defined."

He blamed all concerned for the delay in securing the Front street station site. It was a shame, he said, that a year and a half should pass without some tangible results. Could not some method be evolved whereby this reproach of delay in bridges, wharves, shelters and every convenience, could be done away with?

He was pleased to say that the transmission lines from Niagara were now complete, and that power would be available in a few months.

The report was made that nothing had been accomplished as yet in regard to securing special arrangements with the railways for traders' weekly excursions to Toronto, similar to those prevailing in the States.

Regarding the parliamentary inquiry with respect to the telephone service of Canada, the branch expressed itself as follows: That municipalities should have an absolute right to control the placing of wires within the city. That the trunk telephone lines should be owned by the Government. That all citizens resident in a municipality in which any company has established a telephone system, and who are prepared to pay for services, should be provided with a telephone at whatever rate is established, and the same rate shall apply to all. That all telephone companies should have equal rights in all railway stations.

The branch had passed resolutions approving of the immediate construction of a trunk sewer in Toronto, requesting the Government to put express companies under the jurisdiction of the Railway Commission, and approving of the $300,000 by-law for improvements to the Toronto Exhibition.

The election of officers resulted as follows: Chairman, W. B. Tindall; vice-chairman John Firstbrook; committee, H. W. Beatty, S. B. Brush, C. N. Candee, J. W. Cowan, P. W. Ellis, Ed. J. Freyseng, S. R. Hart, A. Jephcott, J. S. King, J. S. McKinnon, R. E. Menzie, W. H. D. Miller, John Northway, A. S. Rogers, Frank A. Rolph.

OBJECTING TO QUEBEC TAX.

ANOTHER aspect of the tax recently imposed on foreign commercial travelers in Quebec has presented itself. This time, the chief objection comes from the Montreal wholesale hardwaremen, who are put to considerable inconvenience and expense by the new state of affairs. Formerly, travelers for large American manufacturing firms, whose goods every wholesale hardware house has to handle, came to Montreal in large numbers, and displayed their samples. Local firms could then buy just as satisfactorily in their own city, as if they visited the manufacturers' premises.

Under the new order of things, however, Montreal wholesalers are compelled to order by letter, or to send their buyers to different parts of the United States to make necessary purchases. The first of these plans is unsatisfactory, and the second is expensive.

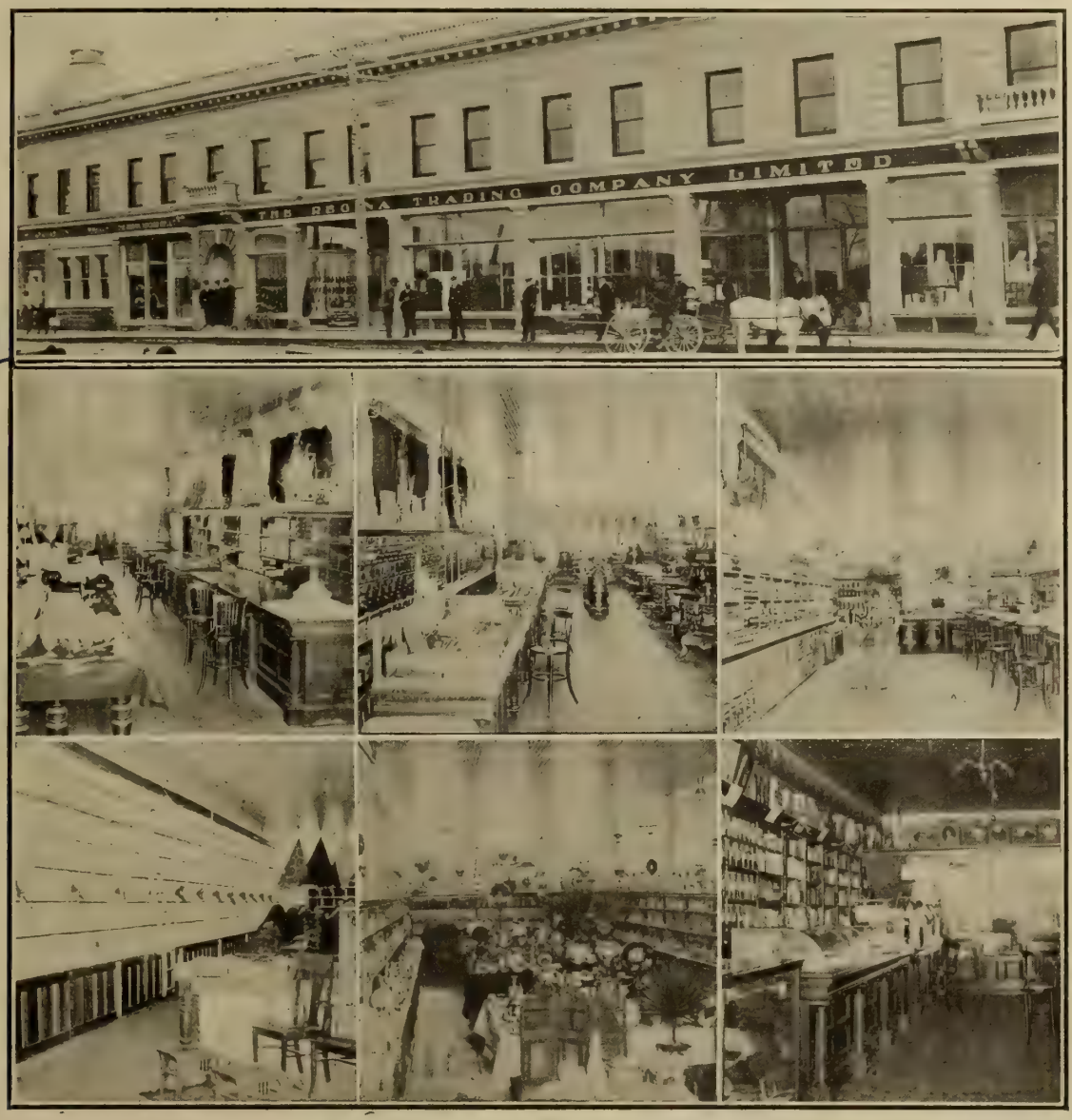
As a result, the wholesale hardwaremen will join forces with those who are working for a repeal of the tax, and every effort will be put forth to quash this very shortsighted legislation.

SOME SPLENDID AGENCIES.

Mr. Arch. MacFarlane, Montreal, spent a few days this week on his return from a trip to Pittsburg, Pa., he having just been appointed Canadian sales agent of the American Axe and Tool Co., Glassburg, Pa., and the Prentiss Vise Co., New York two very strong and desirable companies. Mr. MacFarlane is also manager of the Canadian sales departments of the Stanley Works Co., New Britain, Conn., the U. S. Steel Lock Co., Lyons, Iowa, besides other well-known and successful American manufacturing concerns.

ENTERPRISING REGINA STORE.

ONE of the most important commercial enterprises in the Northwest is the immense store of the Regina Trading Co., Limited., which is illustrated in the accompanying engraving, showing the great frontage of 128 feet and views of a number of the important departments. The store occupies a whole block, and is said to have a greater frontage than any store between Toronto and Victoria.



ONE OF WESTERN CANADA'S MOST UP-TO-DATE STORES.

The company began business in 1898, but in 1903 it built larger premises, the enlargements providing 35,000 square feet of floor space. A stock of $100,000 is carried, and thirty employes are required to conduct the various departments, which include hardware, plumbing, tinsmithing, groceries, dry goods, boots and shoes, clothing, drugs and stationery, china and glassware. A feature of the business is the mail order department, which has proved a great convenience to customers in the outlying districts.

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PERSONAL AND TRADE NOTES

Toronto.

Mr. W. Brown, of Drummond, McCall & Co., Montreal, is enjoying a week's vacation in Toronto.

Mr. C. A. Stewart, of Wells & Emmerson, Port Arthur, was a caller on Hardware and Metal in Toronto this week.

Mr. Eager, manager of the Toronto branch of the firm of Wood & Vallance, Hamilton, and Mrs. Eager, are spending a couple of weeks in Muskoka.

H. A. Croxall and R. Binch, of the Imperial Hardware Co., Toronto, are in Orillia, getting the plant and machinery of the Faders Foundry in shape for the manufacture of knobs, locks and hardware.

Mr. C. A. Wilson, Barrie, was a caller on Hardware and Metal in Toronto this week. Mr. Wilson has disposed of his interests in the Wilson & McFarlane hardware store at Barrie, and Mr. J. C. McFarlane will carry on the business in future.

Mr. C. A. Moorey, assistant manager of the American Steel Crucible Co., Wellington street, Toronto, lost his life by drowning in Lake Joseph, Muskoka, last Saturday. During a storm the boat capsized and Mr. Moorev in saving the lives of his wife and others in the sail boat, lost his own. He was only about 30 years of age.

Elsewhere.

Stivers and Sanders is the name of a new coal firm at Goderich.

The hardware business of Harry Walker, Orono, has been sold to Alfred Outram.

The Brantford Screw Works are closed down for a few days while a new boiler is being installed.

Sheppard & Elliott, hardware merchants, Fernie, B.C., lost $20,000 in the recent fire in that town.

Thomas Hudson, manager of the Dominion Wire Co., of Toronto, is at Fort William in the interests of his firm.

Mr. W. E. Thompson has purchased Walden's hardware store at North Vancouver for $5,000. The sale merely includes the real estate.

J. R. Deacon, manager of the Manitoba Iron Works, Winnipeg, rescued a young boy from drowning by jumping from his buggy over the railing of a high bridge into twenty feet of water.

Montreal.

Mr. John Reche, of the well known firm of Blaicher & Reche, Hamilton, was in Montreal for a few days this week.

Mr. Edward Leblanc, of the Canada Paint Co.'s staff, Montreal, has just returned from a two weeks' trip up the Ottawa.

Mr. W. W. Mount, of the Sayer Electric Co., Montreal, is spending his vacation at Beaulace, in the Laurentian Mountains.

Geo. H. Pedlar, Jr., assistant manager of the Pedlar People, Oshawa, spent Monday as the guest of Mr. Ramsay, their Montreal representative.

Mr. Gordon Seybold, of Seybold & Sons Co., wholesale hardware dealers, Montreal, is combining business and pleasure on a trip up the Ottawa.

Mr. J. W. Shorney, vice-president of the Toronto Lead & Color Co., Toronto, spent several days this week visiting the leading paint and varnish factories of Montreal.

A. A. Cattanach, of the invoice department of Lewis Bros., Limited, Montreal, left for the west on August 9. Before leaving he was presented with a gold watch and chain by the firm and members of the staff, who expressed their best wishes for his future prosperity.

WILL CHANGE FISCAL YEAR.

The Government have decided to change the fiscal year of the Dominion, so that instead of the Federal accounts, trade statistics, etc., being calculated each year up to the end of June, they will be made up at the end of March. The general opinion is that the beginning of Spring is a better time to open the fiscal year than the present date, especially from the point of view of trade returns. The change to the first of April will allow of the Department's reports being printed in time for Parliament to meet in October or November, beginning with 1906.

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SEWER PIPES

in sizes from 4 inches to 24 inches.

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ONE COAT

Brant-Lac is a varnish and stain in one coat. Nothing to equal it anywhere. It works wonders on Furniture, Woodwork, Floors, etc.—gives a finish unknown in other varnishes or stains. Is



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BRANTFORD, CANADA

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MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 62.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 11, 1905.

AFTER July's phenomenal business, a reaction for August was predicted by some. This has come true only so far as the city trade is concerned, a slight falling off being noticed in the local demand owing to the fact that an unusually large number of Montrealers are patronizing the Summer resorts this year. Country busines, however, is coming in faster than ever, as the travelers are now settled down on their routes again.

The feature of the week has been the great business done in sporting goods. One wholesale house reports the biggest orders on record, for guns. Those on demand are mostly of the cheaper grades, though a few inquiries have been received for the better qualities.

Fall business is now opening up. Orders have come in, during the week, for skates, sleigh bells and horse blankets, which are added to our price list in this issue. A big Fall business is expected, and will probably be in full swing in the course of two or three weeks.

Axes—Are in fair demand, though the season is early. Our prices are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Naturally enjoy the same condition as axes. Our quotations are as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—Sales are still good, and prices remain steady. We give prices: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—There is little activity shown, owing to the fact that retailers booked orders some time ago, when prices went down. Quotations remain as follows: Cold blast, $4.50; No. 0, Safety, $3.50.

Barb Wire—Practically no sales are now being made. Prices quoted are still: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Only a few sorting orders have been received. The market for these goods is ended for this season. We quote: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—Good business is being done, and prices remain as before. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—A brisk demand is reported, mostly on sorting orders. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—No change has occurred on this market. Good orders are being received daily. Our prices are as follows: Three-eighths and smaller, 60 to 10; seven-sixteenths and larger 55 to 5.

Wire Nails—Are always in brisk demand, and no falling off is noticed this week. We quote: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails— Business is slow, with prices remaining at $2.20 per keg f.o.b. Montreal.

Horseshoes—The Fall business is beginning, and a good many orders have been received during the week. Prices are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, ten cents per hundred pounds. More than three sizes twenty-five cents.

Sporting Goods—An immense business is being done especially in ammunition, and guns of cheaper grades. This trade is easily the feature of the week. Our quotations are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax

Building Paper—Business quiet, but satisfactory for the season. Prices remain at our last quotations.

Cordage—Some orders are being sent out into the country from all the local houses.

Cement and Firebrick—Conditions are quiet. There is a good demand for jobbing, but no large orders are being received. Our prices are: English cement, $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—Good orders are coming in from the lumbering districts. Prices are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Spring Hinges—Everything is quiet in this market. Prices are No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Demand is only fair. Prices remain at our last week's figures: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Cherry Seeders—Only a few scattered sales are being made. Prices range from $7.50 to $12.00.

Skates—The Fall demand for these goods has opened up. Prices are 25c. to $2.50, according to quality.

Sleigh Bells—Another indication of the "Fall opening" is seen in the large orders received for sleigh bells. Prices given are: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common 70c. to $1.50, pear shape $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—A wide range of prices is given, according to the quality of goods desired. Quotations are from $4.50 up.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Aug. 11, 1905.

FOR this time of the year business is reported very good. Being holiday time, somewhat of a lull in business is to be expected, and the fact that in spite of the season, sorting orders are coming in freely, is appreciated by the wholesale men.

The price of sash cord has been raised this week. "Hercules" has gone up 2 to 3 cents, and "Star" 1 cent. This is the only change in market quotations this week.

Sporting Goods—The season is now well advanced, but fishing tackle is still in demand.

Washing Machines—Buying is as active as could be expected at this season.

Chain—The ordinary Summer trade is being done. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demands for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—Demand is reported good and country merchants are ordering in fair quantity.

Wire Nails—Active building is responsible for the record business being done. Nominal quotations are $2.25 f.o.b. Toronto.

Cut Nails—Trade continues satisfactory. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is particularly good for this season. We quote as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonable trade is noted. Prices are the same.

Screws—The mills are busy, but stocks are satisfactory. The strong demand keeps prices firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—No shortage in stocks is expected, although buying is quite active. Prices are firm.

Cordage—Sorting orders are being received. The price of sash cord has gone up, "Hercules" now being 32c. to 35c. instead of 30c. to 32c., and "Star" having advanced 1c. We quote as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.: calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is brisk, demand being strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper— The general activity in building circles has resulted in a good business being done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—Trade in hides and wool is reported as still active, and prices are expected to be well maintained in view of continued activity. Country hides are showing an advance of an easy ½c. per lb., with lamb skins and shorn pelts at an easy 5c. rise. We quote as follows:

Hides, No. 1 green steers, per lb		0 10
" " 2 " " "		0 09
" No. 1 green, per lb		0 09½
" " 2 " " "		0 08½
Country hides, flats, per lb	0 08¾	0 09¼
Calf skins, No. 1, selected		0 10
" " No. 2		0 08
Lamb skins, each		0 60
Shorn pelts		0 50
Rendered tallow, per lb	0 04	0 04½
Unwashed wool, new clip, per lb		0 16
Wool-washed fleece		0 26
Rejections		0 20
Pulled wools, super, per lb	0 21	0 23
" " extra "	0 22	0 24

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, August 11, 1905.

NOTHING new has developed in the metal markets during the past week, the chief interest being in tin. Ingot tin showed an advance early in the week, but dropped back again to the old figures.

Great difficulty is being experienced in getting shipments of antimony, and some firms find it next to impossible.

The activity in pig iron continues, though there is little prospect of another advance, in the near future. Ingot zinc continues strong, and may be advanced at any time.

Pig Iron—Demand is still brisk, and prices are firm. We quote:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19 25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.25 to 18.75	delivered	Montreal.
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Bar Iron—The market continues lively, at same quotations as last week. Our quotations are as follows: Merchant bar, $1.80; horse-shoe iron, $2.02 1-2; forged iron, $2.05; best refined iron, $2.20 net cash thirty days.

Tool Steel—An improvement in tone is noticed, though prices have not fluctuated. Our quotations are as follows: Colonial Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—The market is good. Prices remain: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—The market is firm at the following prices: Cold rolled shafting, 3-4 inch to 17-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Canada Plates—There is a big demand for plates which keeps prices steady as follows: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized, 52's, $3.90 to $4; 60's, $4.15 to $4.25.

Galvanized Iron—Is active at unchanged prices. We quote: as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra

Black Sheets—No fluctuation in price is reported. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The condition of the market is worse than ever and there is practically no antimony available. Prices are nominal therefore: 14 1-2c. to 15c.

Sheet Zinc—Is also hard to obtain, and the market is consequently very firm. We quote: Cask lots, $7.25; small lots, $7.50.

Tin Plates—Owing to the fluctuations in ingot tin, plates are being anxiously watched. Prices current are: Cokes, $3.75; charcoal, $4.

Ingot Tin—After the jump of early in the week, the market has settled down, and ruling prices are: 34 1-2c. to 35c. per pound.

Ingot Zinc—There is a great scarcity on the market, and an advance is momentarily expected. We quote: 6 1-4c. to 6 1-2c.

Pig Lead—Continues strong, and further advance may be looked for. We quote: $3.75 to $4.50 per 100 lbs.

Boiler Tubes—Last week's conditions still hold good. Our prices are as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12 1-4; 3 1-2 inch, 16c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Scrap Metal—Business is very quiet at present. There is little demand for wrought scrap iron, and prices are nom-

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Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

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KING, QUEEN and WELLINGTON STS.
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DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

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Direct importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc., etc

inal. The American market is strengthening, but prices have not yet reached the stage when it would pay local scrap dealers to export: We quote: Copper and wire, 12 3-4s.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to 9c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, Aug. 11, 1905.

AS usual, the holiday season has caused a slight falling off in the sales, but the market continues to maintain its strength. Antimony is steady this week, but the market is quiet. The demand for zinc spelter has been improving and is now quite active. Copper is very active. Should the Eastern war come to an end the purchases that Russia and Japan have been making in copper will fall off, but how much that will affect the market is difficult to say.

Pig Iron—The usual amount of buying for this time of the year is being done. Quotations continue unchanged, as follows:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—Market is quiet, but there is an upward tendency to prices, and it is expected that the demand will pick up before long. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—Market is very strong and buying active. We quote: 35c. to 36c. per lb.

Tin Plates—The market continues active.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market has been improving and is now quite active. Prices steady. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

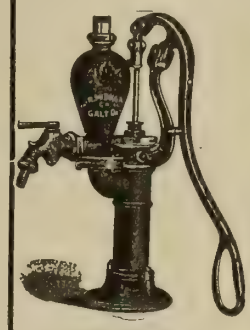
Copper—An active market is ruling. Quotations are unchanged. If the war in the East is closed the purchases from Japan and Russia will be less, but it is difficult to state to what extent that will affect the market. Our quotations are as follows: Ingot copper, 15 3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—The market is steady this week, and buying is quiet. Quotation is 15c.

Old Material—There is a very active market, with prices unchanged. Deal-

Tinplates
"Dominion" B.B. Charcoal
"Alloway's" Best Charcoal.
"Trym" and "Lydbrook" Best Coke.
Standard brands, best value.

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WELL KNOWN
B.C. BRAND
DRILL STEEL
AGENTS
E. G. PRIOR & CO., Victoria
BAINES & PECKOVER, Toronto
CANADIAN REPRESENTATIVE:
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NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

ers' buying prices are as follows: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Prices are unchanged. We quote the following: Anthracite in cars at bridges: Grate, $5.15 per gross ton; egg, stove and nut, $5.40 per gross ton; pea, $3.80 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35: 3-4 inch, $1.25; run of mine, $1.05: nut, 90c.; N. P. and S., 60c.; slack, 40c.: box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run. $2.35; slack, $1.80.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, August 10, 1905.

WHAT moderate movement has taken place in pig iron has been in basic pig. A large consumer in the St. Louis district has purchased about 25,000 tons, of which about 15,000 tons were from Alabama and the balance from Virginia makers. In eastern Pennsylvania a structural plant has purchased two lots of 4,000 tons each, with additional tonnage pending. All this iron is for delivery during the latter part of the year and into 1906. It is reported that the business was done on the basis of $13, Birmingham, and $15.50, delivered eastern Pennsylvania.

The most interesting fact in connection with the pig iron markets, however, is that it is likely that the Unites States Steel Corporation may re-enter the market as a buyer for next month if the demand for the lighter steel products develops as expected, and as indicated thus far. It is understood that, with its furnaces running at the present rate, the Steel Corporation is drawing upon its stocks at the rate of about 20,000 tons per week, and that if this continues the level of what is considered safe as to the stock of iron will be passed. As an indication of the pressure for iron it may be noted that with the blowing in during the past few days of one furnace at South Chicago and one at Joliet, the Illinois Steel Co. have every stack in the Chicago district in operation.

As throwing a sidelight upon another branch of the industry, we may mention that the charcoal pig iron makers of the northwest were only recently working out the details of a plan for reducing the output by 25 per cent. So large have been the sales during the recent buying movement that that plan is now in abeyance.

It is yet too early to judge whether the strike against the American Bridge Co. is likely to develop any troublesome features. It is not believed that it will be of any consequence locally. Contracting for bridges and buildings has now been practically completed for the season, and comparatively little new work is being added to the overflowing order books of the fabrication shops and the structural mills.

The expected betterment in the Atlantic Coast ship-building industry has come. On the Delaware, six new boats are to be built, the Cramps taking four and the Roach yard two.

The pressure in the rail trade continues and the mills are full of work. The southern and southwestern lines in particular lagged earlier in the year in placing their orders and are now pushing the makers for delivery before the close of the year. Some additional round lots have been placed lately.

Attention is centred now on the lighter lines, since it depends upon the buying movement in them whether the capacity of our producers is to be put to an unusual test. If there should be added to the enormous tonnage now in hand in the heavy branches any really large volume of business in the lighter lines, then our productive capacity will be heavily strained and this will work back to the raw material.

Thus far the indications for good buying are encouraging. The leading interest booked 20,000 tons of wire products in one day lately, and sheets and tubes are being contracted for more freely.

There has been quite a heavy movement for export, among the larger orders recently taken being one lot of 45,000 tons of sheet bars for delivery during the next six months to a leading sheet manufacturer in England and 10,000 tons of skelp for a pipe mill in Canada.

The monthly pig iron statistics collected by the Iron Age show that production in July, a month of 31 days, was 1,741,935 gross tons, as compared with 1,793,289 tons in June. The active capacity on August 1 was 410,088 tons per week, as compared with 408,617 tons on July 1. Stocks have increased from 474,894 tons on July 1 to 500,604 tons on August 1. The increase amounts to 13,089 tons in the east and to 38,357 tons in the central and northwest. Stocks declined in the south 25,736 tons.

LONDON METAL MARKETS.

From Metal Market Report, Aug. 9, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 46s. 10 1-2d., and Scotch warrants at 49s. 4d., making prices, as compared with last week, 6d. higher for Middleboro. and unchanged for Scotch warrants.

Tin—Spot tin opened easy at £149, futures at £147 15s., and after sales of 50 tons of spot and 80 tons of futures closed easy at £148 10s. for spot, and £147 for futures, making price as compared with last week. £3 lower on spot and £3 lower on futures.

Copper—Spot copper opened firm at £69, futures £68 17s. 6d., and after sales of 50 tons of spot and 75 tons of futures, closed quiet at £69 for spot, and £68 17s. 6d. for futures, making price as compared with last week, 15s. 9d. higher on spot, and 7s. 6d. higher on futures.

Lead—The market closed at £13 17s. 6d., making price as compared with last week, 2s. 6d. lower.

Spelter—The market closed at £24 7s. 6d., making price as compared with last week, 7s. 6d. higher.

MINES AND METALS.

An excellent coal pocket, known as the Wadsworth Mine, is being opened near Raymond, Alberta. A tunnel has been run 85 feet into the seam, which shows three feet of clear coal.

* * *

Professor Miller, provincial geologist. has returned from a trip in Eastern Ontario, during which he inspected six mines, each producing a different metal. All of these he found in active operation. At Madoc he visited the talc deposits. At Eldorado he observed the working of a copper mine. The iron pyrites mine at Queensborough, the zinc vein at Parham, and the feldspar deposit at Bedford were also inspected.

* * *

It is understood in well informed circles that the Government, when it takes up the cobalt question, will inaugurate a change of policy respecting minerals, and impose a royalty on all mineral products. Under the present law the miners take hundreds of thousands of dollars worth of wealth from the earth for which the province gets nothing. This is one reason why roads are not constructed through the mining districts. The prospectors and speculators are opposed to the royalty, which it is understood the Government will adopt in the near future on an adjustable basis.

* * *

The Dominion Coal Co. has ordered 150 pressed steel cars for hauling coal.

* * *

Officials of the Dominion Coal Co. think the output this year may reach the record total of 3,250,000 tons. Last year the output was 3,023,522 tons, and in 1903 was 3,147,766 tons, or the largest on record. The company owns and has chartered for its trade this season 19 steamers, 20 tugs, and 8 barges. Seven of the steamers are 6,000 tons and over, and four of 5,000 tons and over. The July output was 329,164 tons, against 333,926 tons in June. July shipments were 343,198 tons. against 332,285 tons in June, and 274,486 tons in May.

* * *

The Temiskaming Railway Commission has put a staff of prospectors on the town site of Cobalt, the title to which has been vested in it by the Ontario Government. As the site covers quite a large area right in the heart of the ore-bearing territory, it is quite likely that rich finds will be made, and the province's assets considerably increased thereby.

* * *

The new thirty-drill air compressor at the St. Eugene, the big silver mine in East Kootenay, was set in motion a few days since. It is one of the largest pieces of mining machinery in East Kootenay. The new plant has a capacity of 3,000 feet of air per minute. It will furnish power for thirty machine drills, bringing the number of these machines used in the mine up to fifty.

* * *

A discovery of cobalt has been made near Massey, Ont., on the Whisky Lake copper property of Mr. John A. Montague, of Sault Ste. Marie. The formation is the same as in the Temiskaming cobalt fields. It is thought that the Temiskaming cobalt belt extends right

across New Ontario. Another alleged field of cobalt is reported from Pennefather Township, a few miles north of the Sault, although opinions differ as to whether this find is really the genuine article or not. There is no doubt, however, about the Montague find.

* *

An English syndicate has purchased the Bruce Copper Mines in New Ontario for $1,000,000. A smelter will be built and 100 men employed from the start.

British Columbia Trade News

Vancouver, B.C., Aug. 4, 1905.

A CANADIAN saw mill outfit complete will be in operation in Canton, China, as soon after the C.P.R. steamer Tartar reaches Hong Kong as it is possible to erect the plant. The complete plant for a modern saw mill has been shipped to the "Wan Yip Timber Co., Canton, China," by the Waterous Engine Works Co., of Brantford, through their local representative, Mr. H. B. Gilmour. The purchasers are Chinese, members of the Wan Yip Timber Co., who propose to go into the lumber manufacturing business on modern lines in old China. Practical men, Chinese, of course, who have had years of experience in British Columbia saw mills will operate the mill, and as the raw material can be obtained, there is no doubt the Chinese will turn out good lumber with their new plant, and make their novel enterprise pay. The small opening indicated, opens up a vista of great proportions as to the possibilities of trade in machinery and many other lines in the Orient, after the modernizing processes, including the present war, have got in their work on the Chinese wall of prejudice which has hitherto barred progress in the greatest country yet to be commercialized on modern scale.

* * *

Mr. John Hanbury, of Brandon, Man., is a visitor in British Columbia at the present time. Mr. Hanbury is head of the Hanbury Mfg. Co., who own mills and planing factories at Brandon, with branches through the Province of Manitoba. He has recently been at Elko, in Southeast Kootenay, where his company have established a custom planing mill, where the rough lumber output of many small mills on the Crow's Nest line will be worked up into the finished article to ship to the Northwest market. This new plant is now busy and with a monthly capacity of 3,000,000 feet expects to handle 20,000,000 feet in the season. Matched lumber, house mouldings, and surfaced lumber will be among the products.

* * *

A third railway project touching the wealthy Okanagan and Similkameen districts is on the verge of actual construction. This is the Midway and Vernon Railway, which will connect the Boundary mining district with the Okanagan, running from the Town of Midway, which is on the C. & W. railway, to Vernon, which connects by the S. & O. branch of the C.P.R. with the main line. This new line has been projected for years, but active operations were never begun. Its route is from Midway by the valley of Kettle River, and thence to the southern end of Okanagan Lake and up the east side of that body of water to the Town of Vernon. The C.P.R. have now under construction from Spence's Bridge on their main line a branch into Nicola Lake, west of Okanagan Lake and north of the Similkameen district. The Great Northern's branch from Midway in the Boundary district direct into the Similkameen is now under construction, so that matters are very busy in that small section of the province, hitherto very backward for want of railways. Mr. E. J. McFeely, who has just returned from a trip of inspection over a portion of the C.P.R.'s projected Nicola Lake line, reports everything humming in construction there. The McLennan, McFeely & Co., Limited, have a large contract for hardware supplies along the line, in fact, are supplying all the hardware required by the contractors.

* * *

The Record Foundry Co., of St. John, N.B., have definitely decided in favor of establishing their western branch at Vancouver, provided a site can be secured. Options have been taken on several favorable locations. Messrs. Peters and Milner are both in the province looking into the preliminaries of the proposition. They may buy a plant already erected in the city and adapt it to their business.

* * *

Southwestern Alberta and Southeastern British Columbia will one day ere long be active in the oil-producing field, if half the prospects now being looked into turn out half so well as they appear likely to. Mr. J. B. Ferguson, who is interested there, recently returned from an inspection of the work being done. His company are sinking a second well, in which oil prospects show very strongly. On the same location, Oil Creek, the Rocky Mountain Development Co. are pumping a well giving sixty barrels a day, and are operating a small refinery. Well No. 1 of Mr. Ferguson's company furnishes easily twenty barrels a day, but it is thought useless to pump till a refinery is erected conveniently to handle the output at the railway, which is twenty miles distant. When such a refinery is established, pipe lines will be put in and the oil taken to it, so that transportation for the finished product will be available.

LAST MINUTE PAINT MARKETS

Office of
HARDWARE AND METAL
Montreal, Aug 11, 1905.

Turpentine has suddenly become very strong, in the local market, and an advance will probably be noted in the new lists which will be out within two or three days.

* * *

July building permits issued in the City of Vancouver totalled $189,200, being $57,000 more than for the month of June. The most costly building for which a permit was taken out was the big wholesale warehouse to be erected for Messrs. Kelly & Burnett, the building to cost $35,000. The Blue Ribbon Tea Co. are to erect a $26,000 building, for which a permit was also taken out.

* * *

Three Tacoma capitalists are interested in a project to build and operate a furniture factory at Vancouver, provided a water-front site can be secured. They have an option on a suitable location in the east end of the city near the sugar refinery. A decision is likely to be made at once. An investment of $50,000 or more is to be made to commence, and enlargement will follow establishment and building up of the business. Messrs. J. Grantham, G. N. Chaffee and Thos. Burnett are the gentlemen interested.

* * *

Another manufactory, for making mining machinery, is to be located in Vancouver, Mr. J. P. Smith, of the Smith-Wilfley concentrator, having closed a contract for turning out the requisite parts of the well-known machine. The Smith-Wilfley is an improvement under patent on the Wilfley, a machine used in all concentrating plants, and largely in demand in this province. Mr. Smith has Canada as his territory for the manufacture of the machines.

* * *

Smelters continue to thrive in British Columbia. The Sullivan smelter at Marysville, near Cranbrook, British Columbia, turned out between 500 and 600 tons of lead bullion by the Huntington-Heberlein process, and the coming of railway facilities to Similkameen district revives the smelter project at Princeton. There, the coal of the Similkameen, hitherto undeveloped, will be most likely used.

Nova Scotia Trade News

Halifax, N.S., Aug. 8, 1905.

HARDWARE dealers report that trade is falling off. Business during the week was remarkably quiet, much more so than anticipated. Orders are coming in very slowly. Prices are unchanged.

During the week the executive of the Maritime Hardware Association held another meeting to consider the revision of the price list. As before stated in this correspondence, some dealers want certain goods listed, while others are opposed to making the change. It is on this point that the hitch comes. A proposition has been submitted to the St. John dealers, and until their reply is received no decision will be reached. It is expected that the executive will meet again during the latter part of the week.

The dealers are not discouraged by the present outlook. Collections continue fair, and the half year's business ended up much better than expected.

Since the first of the year two hardware firms have ceased to exist, and their business has been distributed among others. The local trade has been considerably affected by the disposal of a hardware stock at fire prices, but this will not have any effect on the distributing trade.

The recent advance in London of linseed oil has not been felt on this market.

The Carritte-Paterson Co.'s tar paper shops at Fairview were destroyed by fire during the week, causing a loss to the company of about $5,000. They had about $2,500 insurance. The building was a new brick one, only erected last year and the plant installed was of the most up-to-date kind.

Construction work on the concrete

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

TINSMITHS wanted; wages 20c. to 25c. per hour, according to ability; must be temperate; steady work to right men. Apply personally and at once to The Pedlar People, Oshawa Ont. (32)

BUSINESS CHANCES.

HARDWARE, tinsmithing and plumbing business for sale; first-class business; good town; rate on the dollar; possession at once. Apply Box 268, HARDWARE AND METAL, Toronto. (32)

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

TRAVELERS WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

HARDWARE travelers wanted for Maritime Provinces, Quebec, Ontario and Manitoba; must be able to invest from $500 to $1,000 each; old, reliable house; connection well established. Box 265, HARDWARE AND METAL. (32)

WANTED traveling salesman for enameled ware and tinware business; state age, experience, salary; applications confidential. Box 267. HARDWARE AND METAL, Toronto. (32)

GRANITEWARE REPAIRS.

TINSMITHS, attention—Graniteware repaired by new process; durable and good. Send one dollar for recipe. O. S. Wright, Hardware and Tinware, Vienna, Ontario. (33)

TO LET.

WAREHOUSE in Galgary, newly built; wired for electric light and with railroad siding facilities; basement, 44′ x 32′; ground floor, 44′ x 32½′; first floor, 73′ x 48′; with or without heat as tenant desires, also Elevator if required. Apply to Wm. Head, P.O. Box 104, Calgary, Alta. (33)

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

smoke stack of the new power house for Sydney is now under way, and good progress is being made. When the smokestack is finished this structure will stand 105 feet high, and will be the first of the kind erected in Nova Scotia. The frame work is composed of a thin fabric of steel rods, which are held in place by strong iron hoops. The huge chimney is set in a foundation 14 feet square, and is 3½ feet thick, having an inside diameter of five feet, and an outside diameter of 7½ feet. The walls will be double to within forty-five feet of the top of the stack, and it will be completed about the end of the month.

Business is brisk at Londonderry in all lines. The blast furnace is doing good work since the new manager, James Hartley, assumed charge. The output of the furnace has largely increased, and the iron is of a much better quality. The pipe foundry is also running off large orders. The quality is superior to that previously sent out.

The Furness liner, St. John City, which arrived from London during the week, landed 6,500 barrels of cement at this port.

New Brunswick Trade News

St. John, N.B., Aug. 8, 1905.

THE present may be termed "'tween seasons" for the hardwaremen. The trade in Summer goods has, of course, fallen off to a considerable extent and the demand for Fall goods has not yet set in. But as the Summer trade was, in the main, very satisfactory and as the prospects for the Fall business seem to be bright, the dealers have no reason to complain. One line of goods that sold well and which is now out of season is that of haying tools. The demand for haying implements was especially good, and it is understood that many dealers are left with very little stock of this kind on their hands. Of hardware goods generally it may be said that the demand is of the usual August variety. Prices are firm.

The lumber outlook is something which, though strictly speaking may be outside the realm of hardware, may not wholly inappropriately be referred to again. There is now no doubt that some, if indeed not all, of the local mills will have to close down early this Fall. The quantity of logs on hand is alarmingly small, and there are practically no more available unless there should be a very heavy freshet in the near future. One lumberman has stated that the mills are now sawing at a loss. It need not be stated how great the loss to many classes will be if the mills shut down before the customary time. The situation is causing a good deal of pretty serious thought to many people.

The Maritime Wholesale Hardware Association met recently in Digby, N.S. St. John was represented by a half-dozen prominent hardwaremen. It has not transpired that anything of much importance was done at the meeting. It is known that the question of prices was given some attention, but apparently nothing of particular moment was decided upon. St. John is well represented on the list of officers. Mr. J. A. McAvity, of Messrs. T. McAvity & Son, is the new president of the body, and Messrs. T. C. Lee, of Messrs. W. H. Thorne & Co., Limited; H. N. Coates, of Messrs. S. Hayward & Co., and John Keefie, of the St. John Iron Works Co., are members of the Executive Committee.

Some stir has been caused in the Maritime provincial labor world and among stove dealers of the same territory of late by the difficulty between the Sackville foundry people and their moulders. A little time ago the latter asked for a ten per cent. increase in wages. The companies—the Fawcett and Enterprise companies—declined to grant this increase. Then the foundries were shut down for repairs. The men regarded this as a lockout and went on strike. Negotiations were soon in progress and men of the Enterprise foundry resumed work on Monday last. The terms are not known—this being the agreement—and it is not known what the result of the trouble will be so far as the Fawcett people are concerned.

The Maritime stove dealers met a few days ago in Amherst. Their meeting was the regular quarterly gathering. So far as can be ascertained, nothing of unusual interest or importance was done.

Cement is now finding a ready sale. The demand is regarded as somewhat more active than usual. The price is in the neighborhood of $2.25. The demand for all builders' materials is strong.

THE WORLD'S IRON.

THE amount of iron ore still available is very great, doubtless many times, perhaps twenty-fold, as great as has been wont to use. Yet we see already that in the continent of Europe the fields long in service are beginning to be exhausted. Great Britain has practically consumed its store which a century ago seemed ample. Practically all the supply for its furnaces is now imported. The supply from the Mediterranean, that promised to be inexhaustible cannot endure for many decades to come. The same is the condition of the ore districts of Central Europe; at the rate of the increasing demands they are not likely to meet the demands of a hundred years. There remain extensive deposits of rich ores in the Scandinavian peninsula, and in fields in the confines of Belgium and France which have hardly begun to be drawn upon, yet it is evident that at anything like the present rate of increase in the consumption of metallic iron the European sources of supply are not likely to endure for a century.

The best placed field for the production of iron in North America or save that in Northern China, in the world, is in the central section of the Mississippi Valley, mainly between the great river and the Appalachian system of mountains and northwards beyond the great lakes to the headwaters of the streams flowing into Hudson Bay, the physical conditions on the whole being favorable for the cheap production of the metal and its ready transportation to the principal markets. It is a question, however, if the store will supply the demands of the future.—International Quarterly.

Pintsch Compressing Co., pintsch gas plant, brick, concrete and iron, in Grand Trunk Railway Yard, foot of John street, $10,000.

BUSINESS CHANGES

Ontario.

D. Collins, blacksmith, Cresswell, has advertised his business for sale.

The estate of H. Thayer, contractor, Toronto, is to be wound up.

H. Ellison, mason and barrel manufacturer, Niagara, was burned out.

The Queen City Plate Glass & Mirror Co., Limited, have suffered loss by fire.

R. Clinkscale, proprietor of planing mill, Peterboro, has assigned to H. Rush.

Medlar & Arnot, contractors, Toronto, have dissolved partnership. Peter Arnot continues in the business.

Quebec.

Boyer & Gosselin have been registered as contractors, Montreal.

E. Lc Guerrier has been registered as a carriage maker, Lachine.

E. Begin & Co., contractors, Levis, have dissolved partnership.

J. F. W. Thompson has been registered as a hardware merchant, Montreal.

A. Galarneau & Co. have been registered as hardware merchants, Montreal.

R. D. Clark & Son have been registered as plasterers and contractors, Montreal.

E. Boulanger and A. Lamarche have been appointed curators to J. R. Durand, tinsmith, Berthierville.

J. A. Gervais, hardware merchant, Montreal, has assigned to J. M. Marcotte & Co.; a meeting of creditors was held Aug. 10.

New Brunswick.

R. B. Taylor, carriage painter, Sackville, has assigned to A. W. Bennett.

RECORD CO. EXPANDING.

A. E. Peters, president of the Record Foundry & Machine Co., Moncton, N.B., is in Victoria, B.C., looking into the matter of establishing a branch foundry in British Columbia, Mr. W. E. Millner, of Sackville, N.B., accompanying him. Negotiations are under way for the purchase of the Albion Iron Works, which has a large stove manufacturing plant at Victoria.

The Record Foundry & Machine Co., represented by Mr. Peters, is one of the largest Canadian stove companies, having foundries and branches in all the large centres of population. The company is evidently impressed with the value of having factories at several widely separated points from east to west, so that orders from any place within the Dominion may be filled with the utmost dispatch.

TAYLOR-FORBES IN TORONTO.

The Taylor-Forbes Co., manufacturers of radiators in Guelph, have secured permission to erect a one-storey corrugated iron building for storage purposes in King street west, Toronto. Mr. Adam Taylor, the secretary-treasurer of the company, states that his company want to have the building ready by Exhibition time. Mr. Taylor will be given a permit for corrugated iron, provided the building is not used for manufacturing purposes.

Our Sheet Metal building materials work architectural wonders

"Metallic" sidings and clapboards have all the advantages of brick or stone, none of the disadvantages of wood and many points of superiority over other metal sidings which the dealer will not be slow to recognize.

"Metallic" sidings are very light, strong and rigid; never sag, warp or buckle. They can be had in galvanized or painted steel, simulating stone or brick most perfectly. They resist fire and last a life-time.

Prices low, quality unequalled.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto, Canada 313

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetroughs and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Aug. 11, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

CROP reports from all parts of the west continue very optimistic in tone and one result is seen in the confidence of the wholesale and retail trade in the prospects for Fall business. This confidence is evidenced by some heavy orders for Fall delivery.

* * *

On Friday of last week a Hardware and Metal representative met on the street, J. N. Warminton, of Montreal. Mr. Warminton was in Winnipeg attending the big Knights Templar meeting, but he combined business with pleasure on this trip. Gowan & Co., a firm with offices in the Merchants' Bank building, have been appointed by Mr. Warminton his western agents for the sale of "Trojan" box strapping.

* * *

Mr. C. C. Ballantyne, of Montreal, Canadian manager of the Sherwin Williams Co., and vice-president of the Canadian Manufacturers' Association, arrived in Winnipeg from the east on Sunday evening. In conversation with Hardware and Metal, Mr. Ballantyne said his visit portended nothing new in the Sherwin Williams Co.; it was a regular visit of inspection to the Winnipeg branch. Mr. Ballantyne has recently returned from England, and he spoke highly of the hospitality shown the Canadian Manufacturers by the business men of England.

* * *

E. F. Hutchings, president of the Great West Saddlery Co., returned to Winnipeg last week. He was a member of the Canadian manufacturers' party visiting England.

* * *

There are few price changes to record, the only item of interest being a decline in Anchor tarred building paper.

* * *

Screen Wire Cioth—Price is still quoted at $1.55 per 100 square feet. The season's trade is almost over.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, perroll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Lanterns—Selling in large quantities for Fall trade. Prices, as recently announced by the wholesalers, are as follows:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Business still continues very brisk at steady prices. We quote as below:

Barbed wire, 100 lb.		$2 85
Plain galvanized	6 to 8	3 39
"	9	2 50 2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20

Stephens'

Paint and Varnish Solvent

For removing paint or varnish from any desired surface.

It acts quickly and will not stain or raise the grain, leaving the wood in its original condition ready to be repainted or finished.

Absolutely reliable and a ready seller.

Write for information in detail and lowest prices.

G. F. STEPHENS & CO. LIMITED

WINNIPEG, CANADA

Oiled annealed wire.....14	3 30
.....15	3 45

Annealed wires (or oiled) 10c. less.

Horseshoes—The demand is light at at present, and prices are unchanged. We quote:

Horseshoes, iron, No. 0 to No 1.....	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger.....	4 55
Steel, No. 0 to No. 1.....	4 75
No. 2 and larger.....	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—As noted last week, the base price of wire nails has been reduced to $2.75 per cwt.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright.....85 and 10 p.c.	
Round " "	80 p.c.
Flat " brass.....75 and 10 p.c.	
Round " " .....70 and 10 p.c.	
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller.....60 and 5 p.c.	
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under.....55 and 5 p.c.	
" 7-16 and over.....	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts .....65 and 10 p.c.	
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots.....3c.	discount.
" " small lots.....2½c.	"
Hex " case lots..... 3c.	"
" " smaller lots.....2½c.	"

Rivets—Discounts continue as follows:

Rivets, iron.....60 and 10 p.c.	
Copper, No. 8.....	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch.....	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch.....	4.10
" ¾ inch.....	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz...	$3 15
No. 1	1 90
No. 2.....	1 60
Octagon extra.....	2 30
No. 1.....	1 60

Axes—We quote:

Axes, chopping.....	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—As noted above there has been a decline in building paper. Prices are now quoted as follows:

Anchor, plain	55c.
" tarred.....	65c
Pure fibre, plain	60c.
" " tarred.....	80c.

Ammunition, Etc.—The demand for arms, ammunition, etc., is increasing, local houses reporting some large orders. We quote:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol.....	30 p.c.
" military....	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol.....	5 p.c.
C.F. military.....10 p.c.	advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black.....	15 00
chilled, 12 gauge.....	16 00
soft, 10 gauge.....	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled.....	6 75
Powder, F.F., keg, Hamilton.....	4 75
F.F.G., Dupont's.....	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned.	70 and 10 p.c.
" " plain.....	75 and 2½ p.c.
" pieced.....	30 p.c.
Japanned ware .....37½ p.c.	
Enamelled ware, white.....	45 p.c.
" Famous.....	50 p.c.
" Imperial.....50 and 10 p.c.	

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis.....	11 25
Manila, 7-16 and larger, basis.....	15 25
Lathyarn.....	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is steady and fairly active. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel.....	3 50
Tool steel, Black Diamond, 100 lb.....	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb.....	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge.....	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge.....	4 00
18 and 20 gauge.....	4 00
22 and 24 gauge,.....	4 25
26 gauge.....	4 25
28 gauge.....	4 50
30 gauge or 10¾ oz.....	4 75
Queen's Head, 24 gauge.....	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Selling briskly at prices quoted last week:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge.....	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam...	$3 00	$4 20
28 " "V" crimp.....	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square ...	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge.....	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal,	20 x 28, box	9 50
" IX	"	11 50
" XXI	"	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24.....	3 25
Canada plate, 20 x 28.....	3 50
Canada plate, full polished.....	4 00

Sheet Zinc—The price of cask lots is $8.25 per 100 lbs.; price of broken lots is $8.75.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch.....	....
" ¼ "	2 45
Black iron pipe, ⅜ inch.....	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal.....	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light.....	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints, Oils and Turpentine—General business continue active. Turpentine is steady at the decline noted last issue. We quote:

White lead (pure).....	$6 00	6 25
Bladder putty, in bbls.....		0 02½
" " in kegs.....		0 02¾
Turpentine, pure in barrels.....		0 96
Less than barrel lots.....		1 01
Linseed oil, raw.....		0 62
Boiled		0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches.....	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6to 100 "	

MAPLE LEAF HARVEST TOOLS.

Before placing orders for harvest tools for the season of 1906, hardware merchants are requested to wait and see the samples of the tools manufactured by the Maple Leaf Harvest Tool Co., of Tillsonburg. Quality is guaranteed and prices will not be advanced.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

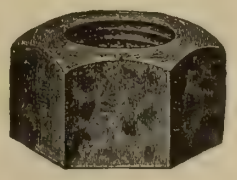
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

FOR SPRINGS,

made and backed up by a concern with fifty years experience, send your specifications to

The WALLACE BARNES CO., BRISTOL, Conn.

NEW CATALOG JUST ISSUED.

PAINT, OIL AND BRUSH TRADES

SUBSTITUTES FOR WHITE LEAD.

IN Germany there is no agreement as regards the satisfactory replacement of white lead by other pigments. Most users of paint admit that the lead pigment can be replaced with safety and even with advantage in certain cases, but assert that for outdoor work it is still indispensable. The only rivals of white lead at present are lithopone and zinc white, barytes being of little importance, and never being used alone. White lead has the advantages of being cheap, of having great body, and of standing weather well. Its disadvantages are poisonousness and liability to blacken in places where gas is burnt. Lithopone, a mixture of zinc silicate and sulphide, is practically level with white lead as regards price and covering power. Its great drawback is that it is not a pure white, but has a yellowish cast, especially in the second-rate brands. Zinc white gives a pure and permanent white, but it is said to be expensive and deficient in body; it is also charged with flaking off under exposure to the weather. For good indoor work, however, it often serves as a perfectly satisfactory substitute for white lead. A great deal of danger formerly due to the poisonousness of white lead has been removed by ceasing to sell it dry, and working it up with oil, etc., in the factory, where it is made, and before it is sold. House painters, etc., are therefore no longer exposed to dust arising from the pigement, while the large scale on which it is treated in a factory enables the manufacturers to set up plant for preserving the health of their hands which a small owner could not afford to supply.

ESSAYS ON LEAD POISONING.

THE Internationales Arbeitsamt, in Basel, Switzerland, has offered the following prizes for essays on means of combating lead poisoning:

1. A prize of 5,000 marks ($1,190) for the best essay upon the most practical method of eliminating the danger of lead poisoning during the process of handling lead ores.

2. A prize of 10,000 marks ($2,389) for the best essay upon the elimination of the danger of lead poisoning in lead-smelting works.

3. Two prizes, one of 2,500 marks ($595) and a second of 1,500 marks ($357), for the best essays upon the elimination of the danger of poisoning in chemical and electrical works where lead is in use.

4. Four prizes, one of 1,500 marks ($357), a second of 1,000 marks ($238), and two of 750 marks ($178.50) each, for the best essays upon the most practical method of avoiding lead poisoning in trades such as painting, enameling, etc.

5. Four prizes, one of 1,500 marks ($357), a second of 1,000 marks ($238), and two of 750 marks ($178.50) each, for the best essays upon the elimination of the danger of lead poisoning in factories where large quantities of lead are used, as, for instance, in type foundries, printing establishments, etc.

The essays must contain a systematic description of the source of lead poisoning, in which the mode of production is described and the dangers existing in each stage of the process, in transportation, etc., are mentioned. Other causes of lead poisoning are also to be given, as, for example, working too long at a certain process, uncleanliness, insufficient knowledge on the part of the workmen, bad or insufficient food, irrational mode of living, and unhealthy apartments.

COMBINATION GLAZIER'S TOOL.

The illustration herewith is a new glass cutter placed on the market by the Smith & Hemenway Co., 296 Broadway, New York City. It will prove an excellent tool for any glazier, as there are actually two tools combined in one, there being a glazier's point driver on the end of the handle as will be seen in the cut. They have been working on this tool for almost two years (so we are informed) in order to bring this tool up to the standard in quality, as well as usefulness, and they sell under a strict guarantee that it will cut at least 600 feet of glass, or as much as any single point diamond. The goods are sold at 75c. a dozen by the jobbing trade. The article is branded "Red Devil," as will be seen on the cut, this implies one of their highest grades of goods. Any persons desiring information regarding glaziers' tools or hardware specialties can have same or a catalogue from the above address if Hardware and Metal is mentioned.



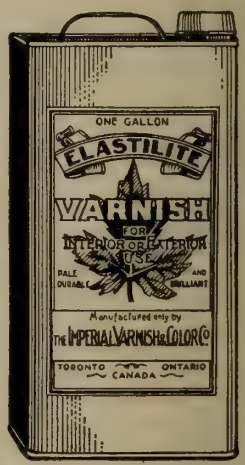
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Then he cannot make a mistake, as it is GOOD FOR ALL PURPOSES.



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has long been known as the best white lead the world produces. It is unequalled for

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and will cover more surface than any other white lead made. It is the only white lead used in

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HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Mon treal, August 11, 1905.

THE features of the week may be set down as great activity in white lead, and the easing of prices in linseed oil. There was an impression that the demand for lead, which existed prior to July, was mainly to protect against tariff changes, but continued pressure from all parts of the Dominion proves the contrary. Prices are slightly lower than the schedule passed on July 7th, but feeling is firm on account of the active demand.

Linseed oil, in response to easier markets in England, has been marked down two cents per gallon.

Turpentine, after a quiet week, has bounded up again, and our quotation of 88 cents, may be taken as the minimum with prospects of an advance of 2 cents within a few days.

Mixed paints are in fair demand for the season, but none of the pressure experienced during the past two months is evident. The increased price of white lead, and the general advance in zinc and turpentine, lead makers to feel that mixed paints must be advanced correspondingly, but it is doubtful whether effect will be given to this.

Turpentine—Our quotations of last week may be taken as still ruling the market, though it has already been advanced in some quarters. We quote prices as follows: Single barrels 88c. per gallon. For smaller quantities than barrels, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—There has been a slump during the week, but prices are now steady as follows Linseed oil, raw, one to four barrels, 49c.; five to nine barrels, 48c.; boiled, one to four barrels, 52c.; five to nine barrels, 51c. f.o.b. Montreal. Net 30 days.

Ground White Lead—Great activity is manifested in this line. Prices quoted are: Best brands Government standards, $5.35 to $5.50; No. 1, $5.10 to $5.25; No. 2, $4.75 to $5.00; No. 3, $4.50 to $4.75, all f.o.b. Montreal.

Dry White Lead—No change in prices is reported. The demand is brisk. Our quotations are as follows: Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—Is very firm at the figures quoted: Pure dry in casks, 7c.; in 100 lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb kegs, 6 1-2c.

White Zinc (ground in oil)—The demand is strong, and there is every prospect of an advance on the prices given: Pure 25-lb. irons 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—The large building operations of the Summer have created a brisk demand. No change in prices is reported. We quote: Pure linseed oil, $1.75 to $1.85; Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—The expected advance has not yet materialized, but the market is very firm. Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—There is great activity in this line, and prices remain steady at last week's quotations: Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—A feeling is abroad among paint manufacturers that the price of mixed paints will soon be advanced. Present quotations are: $1.20 to $1.40 per gallon.

Castor Oil—The market in castor oil is strong, the prices generally quoted being as follows: 8c. to 9c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—Though there is no change in prices this week, the market shows an upward tendency, and an early advance may be looked for.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, August 11, 1905.

WHITE lead has weakened a trifle and is quoted a shade lower than the prices listed a month ago. Red lead quotations are also lower than last week's list.

Turpentine is quoted higher by several firms, and the general tendency seems to be for another advance, prices in the south being very firm.

Linseed oil remains at the former prices, as while conditions are reported to be easier in England, the scarcity of supplies on the local market has not warranted a drop here.

Trade in mixed paints is holding up surprisingly well and there is every probability of the present season's business being the greatest on record. Prices of mixed paints have not advanced yet, but

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A genuine enamel, imparting a hard, lustrous, non-absorbent surface that always remains bright and attractive, and is the best from a sanitary standpoint. Adapted for woodwork, furniture and earthen and metal ware of all kinds. The tints and colors harmonize nicely with draperies and furnishings. In every color. Write for quantities and prices.

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FROM "LIFE"

Multum in Parvo
Much in Little

This clearly describes the "Elephant" Genuine and Decorators' Pure White Lead made by the Canada Paint Company. A **small** package containing a **great deal** of paint!

Undoubtedly the two most popular brands in Canada—The "Elephant" Genuine and the C. P. Co.'s Decorators' Pure—Each Iron bears the guarantee of the White Lead Association as to its purity, and the fact of these brands being made by the Canada Paint Company assures the purchaser of the best white lead procurable.

THE CANADA PAINT COMPANY LT'D

the probable increase may account for a part of the heavy buying.

White Lead—Ex Toronto, pure white $5.40; No. 1, $5.02 1-2; No. 2, $4.65; No. 3, $4.40; No. 4, $4.15 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases. 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current quotations at the end of this issue.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 54c.; boiled, 57c.; 5 to 9 barrels, raw, 53c.; boiled, 56c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrels, 87c.; 2 to 4 barrels, 86c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

WINDOW GLASS—MONTREAL.

Conditions in the glass markets have undergone no change during the past week. Shipments are now being received from Belgium, but as yet they are only small. Little hope is expressed that the manufacturers will catch up to orders this year. Prices are very steady, as follows: First break, 50 ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 fe et,$4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

TO FIGHT THE TURPENTINE TRUST.

THE Naval Stores Export Association, a combine of independent turpentine distillers in Mississippi, Louisiana and Alabama, recently organized with a capital stock of a half million dollars, for the purpose of fighting the Turpentine Trust, is prepared to build a large reservoir tank at Gulfport, from which the product from the distillers in Mississippi will be exported. Practically all of the independent distillers have been enrolled as members of the association, and headquarters for Mississippi established at Hattiesburg. The association will be incorporated under the laws of the State of Mississippi, and its affairs will be directed by Harry C. Neff and C. B. Townsend, the latter for eighteen years having been connected with the Standard Oil Co. Similar organizations have been perfected for Florida. Georgia, Arkansas and Texas, and the independent concerns expect to secure full control of the southern export trade.

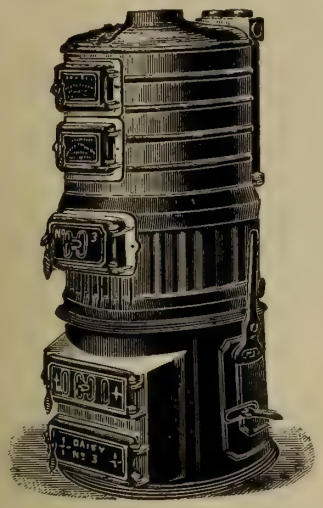
THE INDIAN LINSEED CROP.

The recent news with regard to the Indian linseed crop is more serious than might perhaps be supposed, says the Manchester Guardian. The market has been relying upon a good supply from India this year to make up for a certain large reduction in the Argentine shipments. According to all appearances these latter will be about half what they were in 1904, or perhaps a little more than half.

The Indian contribution, on the other hand, promised to be considerably in excess of the 1904 shipments, and up to end of May we had already received 320,779 quarters, as against 202,833 quarters a year ago. By this time usually about one-fourth to one-fifth of the annual quantity has already arrived, and the trade might therefore have expected a total for 1905 of about 1,500,000 quarters, against 1,024,889 quarters in 1904. The official report from India, however, estimates the 1905 crop as something under 40 per cent. of the normal, or 52,000 tons, which, if true, will allow of very meagre shipments only during the remainder of the present year.

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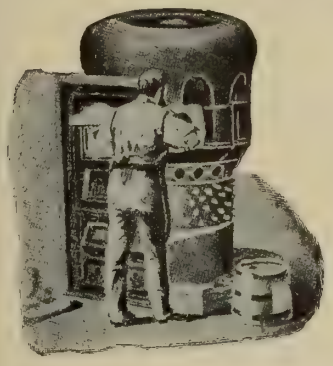
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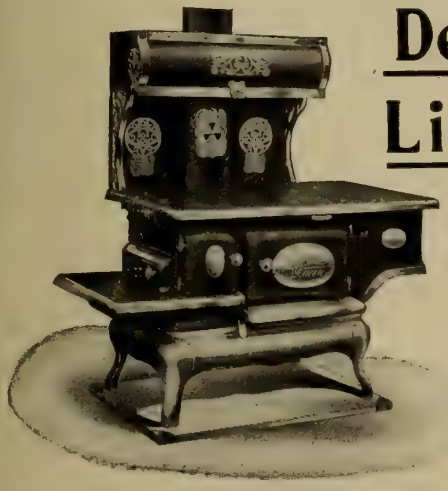
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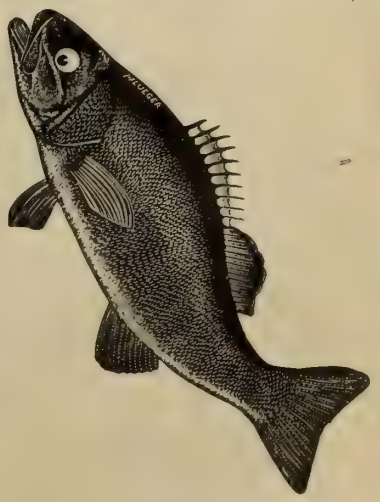
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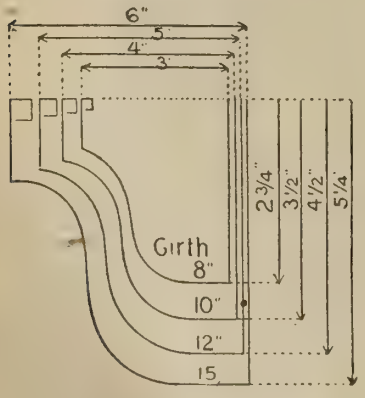
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We supply the above in Round or Half-Round; also **Conductor Pipe,** Plain or Corrugated. Ten-foot lengths. At lowest market prices.

A full stock of Tinsmith's Tools and Supplies.

E. T. WRIGHT & CO., Hamilton, Ont.

STOVES AND TINWARE

THE WORLD'S TIN SUPPLY.

DURING 1904 the production of tin ore in the United States amounted to 159 short tons, which contained from 10 to 70 per cent. of metallic tin and were obtained from deposits near Gaffney, South Carolina, Tinton, South Dakota, and Buck Creek, Alaska. Nearly all of this tin ore was shipped to England for smelting. Although about 10 per cent. of the tin produced in the world is consumed in the United States, there has been practically no production of the metal in this country until the last year or two.

During the last few years the production of tin in the world has not been equal to the demand, and the accumulated stocks of tin that have been held in various countries have become very much diminished since 1896. One of the chief reasons for this increasing demand for tin is the large growth of the canning industry and also of the use of tin boxes and cases in shipping sundry articles.

On account of the demand for tin and the high price it brings, a new industry was started a few years ago which is known as "detinning" tin scrap, and this has now become of considerable importance in the United States. Many hundred tons of metallic tin and chemical salts of tin, chiefly chlorides, are procured each year from the chemical or electrolytic treatment of new tin scrap, which is obtained from tin-can and fruit-can factories.

On account of the value of the metal tin, it is possible to work very low-grade ores if they occur in quantity, and usually little difficulty is experienced in cleaning and concentrating a tin ore so as to obtain nearly pure concentrate. Cassiterite, a tin oxide, is the usual tin ore. Although the American production has thus far been very small, it may be the beginning of what may become an important industry.

Dr. Joseph Hyde Pratt, of the United States Geological Survey, who has written a brief report on the production of tin in 1904 for the Survey's annual volume "Mineral Resources of the United States" states that the total production of tin in the world in 1904, exclusive of the production in China, was 92,243 long tons.

The product comes mainly from the Malay States, Banka and Billiton, Bolivia, England and Australia. A very small quantity is also produced in Austria, Germany, Japan, Mexico and America. There was a slight decrease, amounting to 1,650 long tons, in the estimated production of tin in 1904 as compared with 1903. The consumption of tin in 1904 is estimated at approximately 91,755 tons, which is 2,512 tons more than the actual production.

The tin imported into the United States for the fiscal year ending June 30, 1904, amounted to 40,832 short tons, valued $21,186,311. The greater part was produced in the Malay Peninsula.

MARITIME STOVE DEALERS.

The quarterly meeting of the Maritime Stove Dealers' Association was held at the Terrace Hotel, Amherst, last week. Several of the companies included in the membership of the association are much dissatisfied with their relations with employes and an organized fight against the unions may be instituted. At the present there seems little hope for an immediate settlement of the Sackville difficulty. The moulders have refused the offer of the foundries to give them a five per cent. yearly bonus. They are insisting upon compliance with their demand for a straight increase of ten per cent. in the wages given. This the employers refuse to give. Hence matters are at a standstill.

WHY GRATE BARS GIVE OUT.

The principal cause which contributes to the rapid burning out of the grate bars in a boiler is the action of the furnace heat, which will in time destroy any set of grates, but the want of a proper flow of air through the grates will cause over-heating, whether it occurs through too little air space in the grates themselves, or by these places becoming obstructed through any cause, thus preventing the cooling effect of the air on its passage to the fire. Another reason is found in the impurities of the coal, and especially in the chemical combinations of sulphur and iron, which impurities are found in more or less quantity in all coals. The Practical Engineer says any coal which forms an easily fused clinker will injuriously affect the grates.

BERLIN ALUMINUM WARE.

The latest addition to Berlin's manufacturing concerns is the Berlin Aluminum Works, and the favorable reception that has already been accorded to aluminum utensils augurs a bright future for this industry. The Berlin Aluminum Works are turning out a high-class article, and have every reason to be satisfied with the reception they have got from the trade. The general public have not been slow to appreciate the advantages of aluminum ware. It has many strong points in its favor, such as being odorless and tasteless, being light, clean, free from rust and poisonous substances. Experience has shown that aluminum does not corrode like some other metals, and is not affected by damp air or water. In view of these merits there is no doubt that aluminum ware will continue to grow in public favor.

A Kelsey warm air generator will be used to heat and ventilate the St. Mark's Episcopal church at Deseronto, the contract having been awarded to the James Smart Mfg. Co., Brockville.



SUCCESSFUL EVERYWHERE.

Critical users everywhere speak most highly of the excellent results given by the

Walker Pilot Steel Range

With its baking, its cooking and its broiling, they are more than pleased. They tell us it heats water quickly and is most economical in its fuel consumption.

It will pay you to handle it. With its assured satisfaction; its many new and practical features and its good profits, you will find it

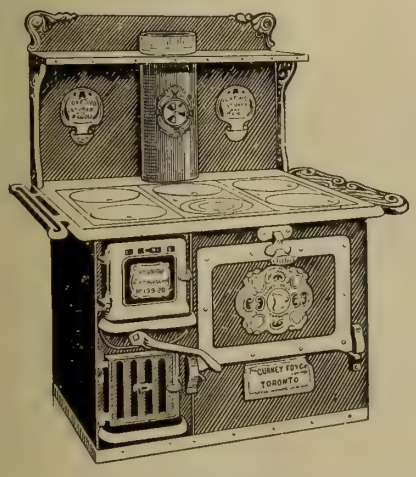
"THE EASY LINE TO SELL."

SEND FOR CATALOGUE.

The Walker Steel Range Company, *Limited*

Grimsby, Ont.

Have you ever observed that the dealer who supplies people with THE BEST in any line, figuring on ultimate aggregate profits rather than larger glittering gains of the moment seems, somehow, to sail onward to success in an unfailing trade wind?—and we were thinking of Ranges. To be specific—



THE

Oxford Chancellor Range

Printers' ink, in convincing, direct advertising, has done and is doing its work, people having been shown in detail WHY it is to their advantage to buy the Oxford Chancellor, and satisfaction, full and complete, has rewarded their confidence always.

For sixty years we have been devising and adopting all that was good and eliminating all that was bad in Range building. Don't you think it would pay you to handle a product held in such popular favor and resting on more than half a century of success?

WRITE FOR PARTICULARS

THE GURNEY FOUNDRY CO., LIMITED

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

The Gurney Standard Metal Co., Limited, Calgary, Alta.

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.

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RETURNED SEP 21 1905

To Owner Cut Book 40 Page 36

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Gauge Cock

We make :—
Steam Cocks
Gate Valves
Lubricators
Oil Cups
Iron Cooks
Etc. Etc.



Plain Lubricator

Do You Handle

Engineers' Goods

STEAM FITTINGS, ETC.?



J. M. T. Valves

Are made in heavy and extra heavy pattern, with Jenkins disc or copper metallic disc

Our Goods are made to give that lasting satisfaction so necessary and desirable for the service for which they are to be used.



J. M. T. Injector



Steam Whistle

We make :—
Steam and Vacuum Gauges
Revolution Counters
Injectors
Inspirators
Gong Bells
Air Cocks



Light Oil Cup

RETURNED AUG 14 1905

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To Owner Cut Book 40 Page 98

The JAMES MORRISON BRASS MFG. CO., LIMITED, Toronto

HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.

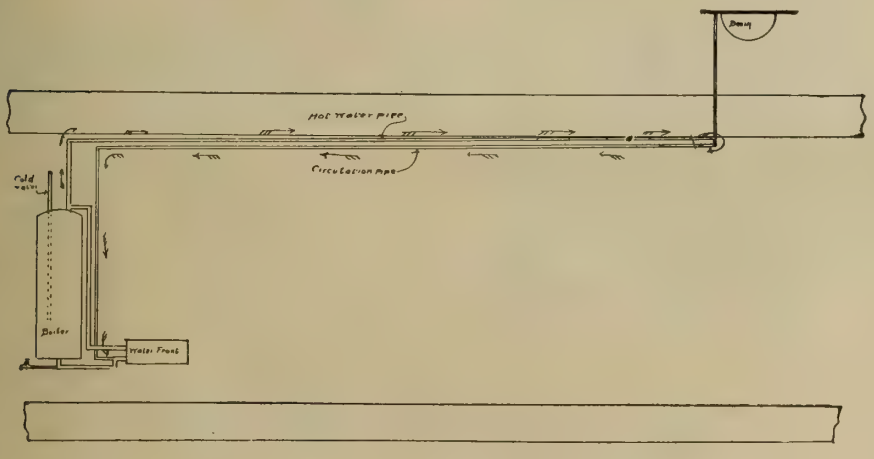
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Article XI—*Continued.*

INSTANTANEOUS HOT WATER AT A DISTANCE FROM BOILER.

OCCUPANTS of large buildings, such as apartment houses, etc., often suffer annoyance because of the length of time taken to get hot water through the hot water tap, due to the fact that the water in a long stretch of pipe, connecting the tap with the boiler, must be run off, and the pipe heated, before any hot water is available. We show in the illustration how this difficulty may be overcome.

It will be noted that the boiler is connected to the water front at top and bottom, instead of side and bottom, and that from the top of the upper connection is taken the "hot water pipe" to



the basin, and it will be obvious that with that pipe alone, and with the tap shut off, that the water within it would stand still.

If, however, a second pipe is connected to the hot water pipe at a point near its extreme end and run back to and connected to the lower pipe between the boiler and water front, as indicated, and both pipes are slightly graded upward toward the basin so that all contained air may escape through the tap when in use, a continuous circulation of hot water will take place, exactly as it would in the pipes supplying a radiator with the result that the moment the hot water tap is opened there will be an instantaneous supply of hot water.

NEW DEPARTURE IN METERS.

THE Sangamo Electric Co., of Springfield, Illinois, and Windsor, Ont., have lately placed on the Canadian market a new meter for use on direct current circuits, which marks a distinct and radical departure from the style of instrument hitherto in use, both in this country and the United States.

In principle, the meter is of the mercury contact type, widely and successfully used in Europe for many years, not to be confounded, however, with the mercury deposit meters, used years ago, and now entirely discarded. Owing to its peculiar and perfect design, and construction, spilling or oxidization of the mercury is impossible in the Sangamo meter.

Having no commutator and no brushes, the tendency to become slow on light load, due to friction and dirt at the commutator and brushes, has been eliminated entirely. The very slight thrust against the jewel in the upper bearing of the meter, not enough to cause appreciable friction, or to crack the fine flat jewel used, reduces jewel-friction, causing a meter to run slow on light loads, to a minimum. As the Sangamo meter has no permanent magnets, the change of strength of permanent magnets, caused sometimes by a heavy overload, or a short circuit weakening the magnets, is a trouble not to be anticipated or found in this meter.

An entirely new idea, perfected and adopted in the Sangamo meter, makes the adjustment for heavy and light load extremely simple, positive and satisfactory. The very slight thrust on the jewel, and the tendency of the mercury about the disc to damp out quick movement vertically, make the new Sangamo meter particularly desirable for street car work, where the racking and vibration would soon beat the jewel out of any ordinary meter.

On account of the extremely strong magnetic field produced by the shunt coils, and the small air-gaps in the magnetic circuit, where the disc passes, external magnetism has no effect on the meter, any such influence being further nullified by the iron return plate above the disc, and the iron back of the meter, which acts as an excellent shield.

In appearance the new D. C. meter is similar to the Gutman meter. The case, either aluminum or glass, is held on from the front, two long screws passing through the bosses on each side of the case to the iron base. These screws are sealed over, but can be readily removed without taking the meter down, in case it is necessary to inspect or readjust it.

The Sangamo-D.C. meter is the smallest D.C. meter ever made, being 9 inches high, 5 1-2 inches wide, and only projects 4 3-4 inches when installed. John Forman, 708-10 Craig street, Montreal, Canadian agent for the Sangamo Electric Co., reports great success with the new meter and invites enquiries.

ICE MAKING AND REFRIGERATION

AT this time of the year, when people in this country are suffering more or less from the heat, an account of an ice-making machine that is portable and that may be adapted to domestc use should be of interest. Ice gathered from rivers and bays is not always of the purest, and epidemics have been known to have their origin in an impure ice supply. The illustrations herewith given show a combined ice-making and refrigerating machine, manufactured by the Brunswick Refrigerating Co., New Brunswick, New Jersey. In this machine it is recommended to boil six or eight quarts of water for ten minutes, allowing it to cool under cover. The ice can connected with the machine is then filled and placed in the receptacle in the refrigerator box, and in ten hours there will be ten pounds of sterilized, hygenic ice.

The machine, consisting of a complete

refrigerating plant on a small scale, has a capacity equal to the melting or the use of 200 lbs. of ice per day. It works automatically, and the refrigerating apparatus is installed on the same base as the refrgerator.

PLUMBING GOSSIP.

Collingwood intends constructing tile sewers at an estimated cost of $58,000.

* * *

A water and sewerage system will be established at Banff, Alta., at a cost of $95,000.

* * *

Laurence Munro, architect, will report on the cost of installing modern plumbing in the court house at Hamilton.

* * *

A by-law for $15,000 for the extension of the water works and electric light systems has been carried at St. Mary's.

The Torontonians who will be present at the Winnipeg plumbers' convention include Messrs. K. J. Allison, Wm. Mansell, R. W. Harrison, representing the Master Plumbers' Association; W. J. Cluff, of R. J. Cluff & Co., and E. A. Rogers, of the James Robertson Co., Limited.

* * *

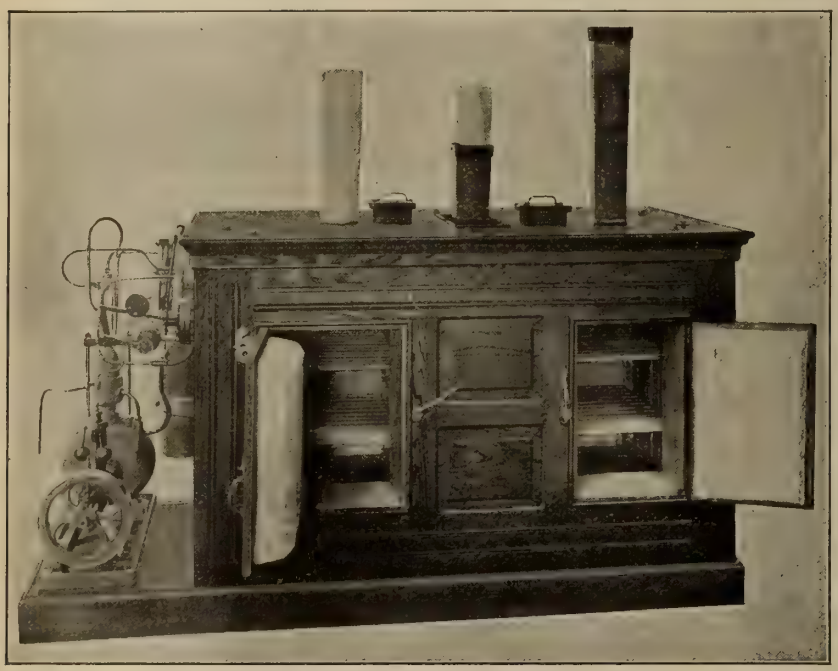
The Montreal delegates to the great master plumbers' convention in Winnipeg are Messrs. John Watson, J. A. Gordon and Walter Ryan. Mr. W. R. J. Hughes, provincial vice-president for Quebec, was unable, through press of business, to accompany the delegates.

* * *

Mr. Adam Taylor, of the Taylor-Forbes Co., Limited, Guelph, has been spending a couple of weeks in Toronto. He can be found at the Taylor-Forbes offices on Richmond street west, where he is always ready to show and tell of the fine qualities of Sovereign radiators

* * *

J. W. Hughes, 811 Craig street, Montreal, has taken the contract for heating and plumbing at the Boys' Home, Mountain street. He is also installing heating and plumbing in the following large private residences: G. A. McNichol, Westmount; E. F. Walters, Westmount; M. J. A. Prendergast and Mrs. Roberts, Preston street.



Ice Making and Refrigerating Machine.

Wm. W. Northcote, Victoria, B.C., is calling for tenders up to Sept. 18, for the supply of 1,000 feet of 12-inch and 12,000 feet of 4-inch cast-iron water pipe.

* * *

John Cockburn, a plumber, was instantly killed at Connybear's Gate, near Lethbridge, Alta., by coming in contact with an electric light wire during an electrical storm.

* * *

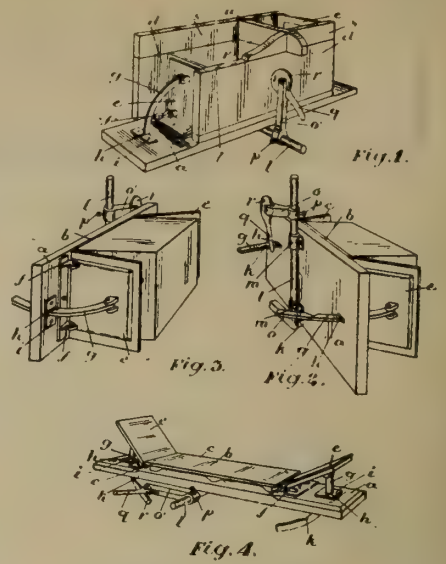
Toronto journeymen plumbers and steamfitters promise a good time and a good list of sports at their excursion and picnic to St. Catharines on Saturday, Aug. 19.

* * *

Over a dozen delegates and supply men left Toronto last Friday to attend the plumbers convention at Winnipeg, the body including representatives from Toronto and the eastern points.

MOULD FOR CEMENT BLOCKS.

Patent No. 787375, issued to Frank Gutteridge, of Seaforth, Canada. This invention relates to a portable mould for the manufacture of that class of building material known as cement blocks. Figure 1 is a perspective view of the mould-box, showing the side and end members in their enclosed position. Figure 2 is a perspective view showing the mould-box upset to deliver the moulded block, with one of the side members removed and both end members opened, so as to be moved out of contact with the moulded block. Figure 3 is a similar view to figure 2, but looking at

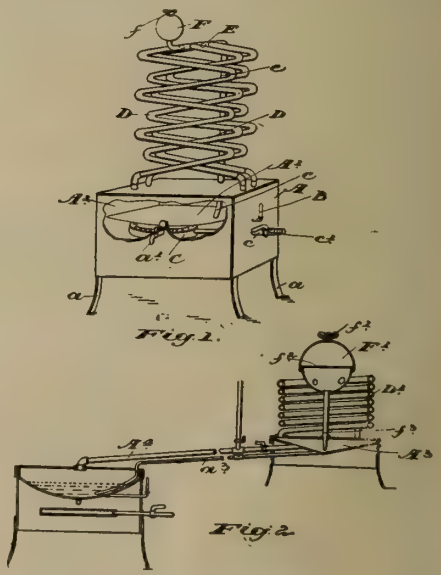


Mold for Cement Blocks.

it from the opposite side. Figure 4 is a perspective view, showing the bottom and end of members of the mould-box.

PORTABLE STEAM RADIATOR.

Patent No. 788705, issued to Helen Harriett Cook, Toronto. It relates to improvements in portable steam radiators and the object of the invention is to devise a radiator of this class whereby the heat may be applied directly underneath the radiator itself, or in close proximity thereto, so that all the units of heat may be utilized to the greatest extent and thus fuel economized. It consists essentially of a casing supported on suitable legs and provided with a hot water receptacle on the top,



Portable Steam Radiator.

and the gas heating means for such receptacle located beneath it, and a plurality of coils extending from the top of the casing to a condensing bulb and a pipe leading from the condensing bulb to the water receptacle, the parts being otherwise arranged and constructed in detail. A perspective view showing the approved individual radiator is given.

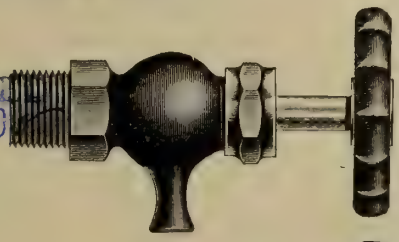
TRADE
PENBERTHY
MARK.

WORKMANSHIP UNEXCELLED



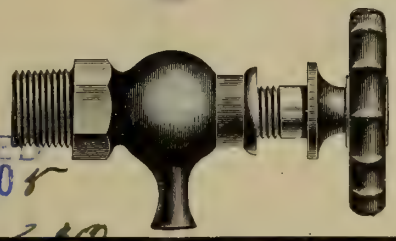
AUTOMATIC INJECTOR

GAGE COCKS



MADE IN ROUGH OR FINISHED BRASS

STUFFING BOX OR PLAIN IRON OR WOOD WHEEL



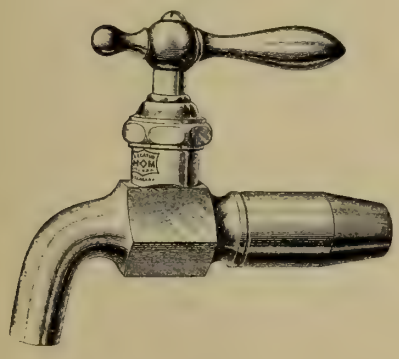
SPECIFY PENBERTHY.

RETURNED SEP 11 1905

To Owner
Page 4

MUELLER FULLER WORK

STANDARD GRADE BIBB



It is nearly impossible to close fuller bibbs without water hammer if the closing depends wholly upon the ball, because the ball seats too abruptly.

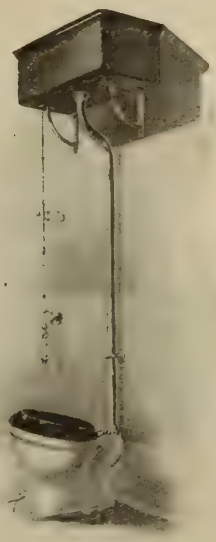
In front of the ball in Mueller Fuller Bibbs a conical flange partly closes the opening before the ball is seated. The force of final closing is thus reduced sufficiently to prevent water hammer.

Mueller Fuller Bibbs are made in plain and hose patterns and with tail pieces for all styles of pipe connection. The bibb illustrated is the plain pattern with lead pipe tail piece.

Each bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. New York, N.Y., U.S.A.



THE "BEST" ALONE PAYS

This fact is recognized by every far sighted person and is the reason why you should adopt the NATURO Closet in your trade. This is conceded by those competent to judge to be by far the best Closet that has ever been marketed. The reasons for this are numerous and can be easily explained—the main cause being that it is more healthy than any other. Every sale will net you a good profit and increase your good reputation. Write for our illustrated Book.

THE NATURO COMPANY

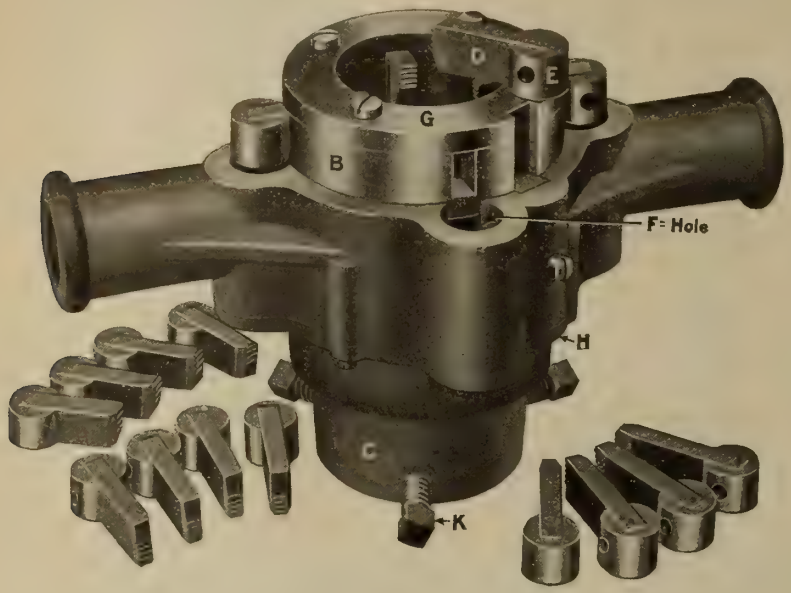
C. H. MUCKENHIRN, PRESIDENT

Salem, N.J.

THE "JARDINE" PIPE DIE.

THE accompanying illustrations are of the "Jardine" patent pipe die, originated and recently placed on the market by A. B. Jardine & Co., Hespeler, Ont. The new feature in this die is embodied in the manner of obtaining the taper on the pipe. The ordinary solid pipe die is made the correct size with the required taper, and is screwed right onto the pipe, the back of the die reducing the point of the thread to give the required taper. After the adjustable die is adjusted it cuts on the same principle as the solid die. The "Jardine" die is made like and cuts on the same principle as the bolt die. That is, the die is chamfered off on the advancing side for two or three teeth, and thus most of the cutting is done by these teeth, the following teeth simply sizing. The taper is obtained as shown in figures 1 and 2. The body, B, carries the cutters, D, and slides freely up and down in the stock, A, but is prevented from sliding around by the key and keyway shown. A leading screw is cut on the outside of the body, B, with the same pitch as the thread required to be cut on the pipe. As the stock and body, B, revolve, B is drawn into the barrel, C, by the thread on the inside. As B is drawn into the barrel it slides down the four slides, F, in the stock, A, which slides are bored at an angle to the axis of the stock which will give the standard taper for pipe thread. Then as B advances the cutters are pressed out against the walls of the slides, and thus the thread on the pipe is cut with the required taper.

The advantage claimed for the die is the ease with which a thread can be cut compared with ordinary dies, the first three or four threads doing all the work, and the consequent saving of time. To substantiate their claim of time saving, A. B. Jardine & Co. had a test made, which showed that the work that it took a competent steamfitter one hour and 23 minutes to perform with the best type of ordinary die could be done by one of their men with their die in 44 minutes. Besides which the steamfitter required assistance in cutting 2-inch pipe, which assistance was not needed with the "Jardine" die.



"Jardine" Pipe Die.

CO-OPERATIVE SUPPLY HOUSE.

Considerable talk has resulted from Hardware and Metal's announcement last week of the proposed co-operative plumbing supply house in Toronto backed by the Master Plumbers' Association. Advertisements for invoice clerks, etc., have appeared in the daily press and rumor has connected the name of a popular employe of one of the older supply houses with the position of manager of the new enterprise.

NEW FUEL FOR MONTREAL.

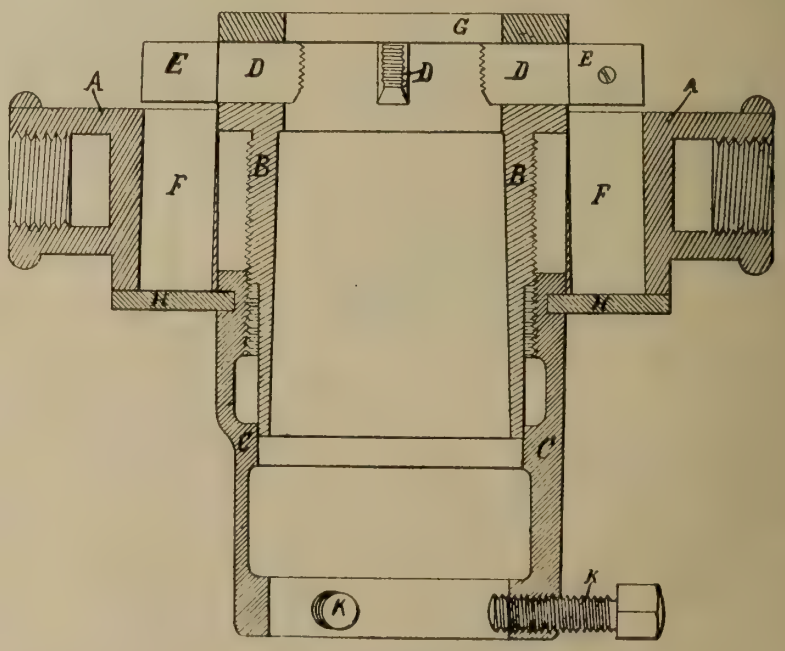
COKE briquette is the name of the latest addition to things that burn, and Montreal will be the first city in America to produce it, although several European cities have used it for some years past.

It will be made of granulated coke, mixed with smokeless building material, and made into cubes of about one and a quarter inches each way, under a pressure of about a ton per square inch. The resultant fuel is absolutely clean and dustless and of a high colorific value. It burns slowly and steadily, with a peculiar incandescent glow that makes it a delightful fuel for open grates.

An extensive plant for the manufacture of this article has been installed at the Montreal Light, Heat & Power Co.'s Hochelaga gas works, and it is expected that this will be turning out fifty tons of the new fuel daily before the end of August. Besides the small briquettes for household use, a size about two and a half inches square will be made for manufacturing and furnace purposes.

The special advantages claimed for the new fuel are: Absence of smoke and sulphur, no dust in handling, no deterioration, freedom from cinders, minimum percentage of ash and greater heating capacity than either anthracite or bituminous coal.

From the success which has attended the manufacture of these briquettes in European cities, it is expected that this will develop into a very important and thriving industry in the near future. The price per ton will be about the same as coke.



"Jardine" Pipe Die.

AMERICAN FIRM COMING.

Tunkenheimer Co., Cincinnatti, one of the largest manufacturers of engineers' specialties in America, have decided to invade the Canadian field. A branch office is to be established in Toronto, and the ground between Halifax and Vancouver is to be covered by a man well known to the Canadian trade.

The Waterloo Manufacturing Co. are at present installing a 50-horse-power suction producer plant, with a 50-h.p. gas engine. This gas engine, it is understood, is the only one of its kind in Ontario.

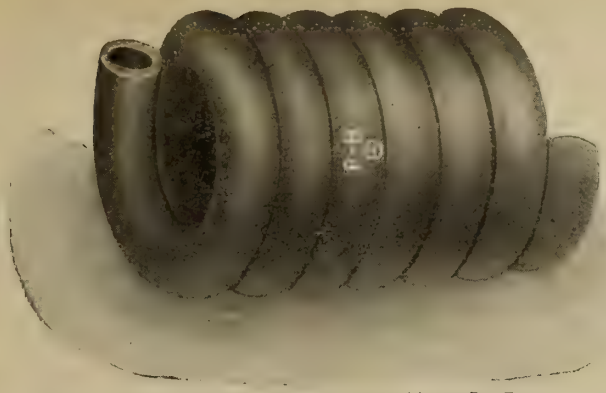
PIPE THAT IS PIPE

THIS IS OUR BRAND

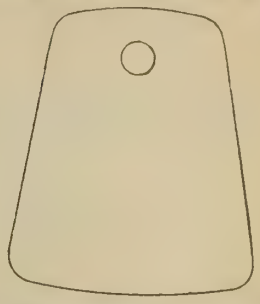
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

Fears.

Are you not afraid of your neighbor-merchant stealing a march on you in Sifter sales? If the people find that he has "something that lasts" they will most likely forsake your "something that doesn't last." Your neighbor-merchant has simply got a supply of

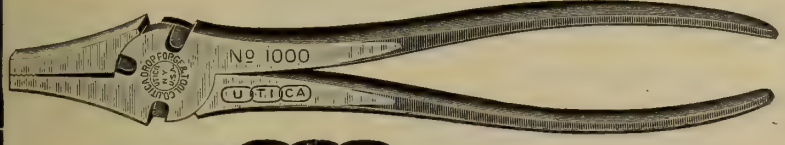
METALLIC ASH SIFTERS

the Sifters that put three day's work into one, last five times as long as wooden sifters, and take about one fourth the energy to operate. You have heard about OUR PATENT WIRE BALE for use with same? Shall we send you prices?

C. M. CUTTS & CO., Sole Makers, Toronto Junction, Ont.

No. 1000 GIANT BUTTON'S PLIER

The 10-inch size is one-third heavier than any other make.



ASK YOUR DEALER FOR UTICA TOOLS. EVERY ONE GUARANTEED.

THIS MARK UTICA on a tool is a sign of QUALITY

THE GREEN BOOK contains a compete line of Nippers and Pliers. Write for it. TRADE MARK

UTICA DROP FORGE CO.

Canadian Office, 215 Coristine Bldg., MONTREAL. Factory, UTICA, N.Y. 296 Broadway, NEW YORK, U.S.A.

YOU, US AND THE OTHER FELLOW

No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

The Manufacturers List Co., - - - Toronto.

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FOR

Agricultural Machinery, Mechanical and Electrical Machinery.

Mattresses, Chairs, Couches, Etc.,

Door and Gate Springs, Springs for Spring Hinges and Bicycle Seats,

J. A. HENDERSON, - MONTREAL

Board of Trade Building

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

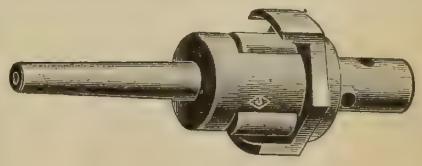
Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

SEND FOR CATALOGUE TO

American Shearer Mfg. Co., Nashua, N.H., USA

Wiebusch & Hilger, Limited special New Yor representatives, 9-15 Murray Street.



JARDINE'S

Self-Feeding Boiler

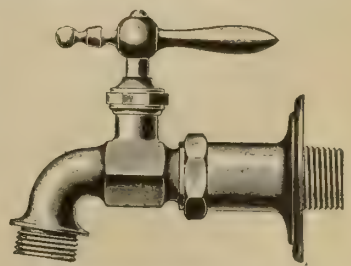
Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.

HESPELER - - - ONTARIO

GUARANTEED FOR 5 YEARS



Positively NON-HAMMERING on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, CLEVELAND, OHIO, U.S.A.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 11, 1905.

CARPENTERS and bricklayers are now working in large numbers on the jobs where the strike occurred, and the effect on the plumbers is no longer felt.

The general tone of business is excellent, and enough orders are now booked to preclude all possibility of a slump this season. September will probably develop large shipments by water to those who wish to take advantage of cheap freight before the close of navigation.

There has been no change in the price of lead pipe, but the continued activity in pig lead keeps it very firm.

The supply houses here are all enthusiastic over their Summer's business, and are confident that the market will continue strong.

Range Boilers—Prices are unchanged, and business continues active. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Jobbers are still expecting an advance in this line, due to the activity in pig lead. Our prices are as follows: Discount 30 to 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—Last week's conditions still hold good. Our prices are: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—The new discounts, published last week, continue to rule. The market is firm, and large orders, being received, give a good outlook for Fall business. Our quotations are as follows: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent. 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—No remarkable developments have materialized during the week. The market is steady, at the following prices: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
August 11, 1905.

SO great has been the demand for supplies that the jobbing houses are experiencing considerable difficulty in securing some classes of supplies, closet bowls being one of the scarce lines. The rush of buisness keeps up and the supply houses say that they are loaded up with business despite the supposed stoppage of buying by the master plumbers, who are proposing to establish a supply house of their own.

Solder has taken a jump upward on account of the high prices ruling for lead and tin, but the quotations on lead pipe are still unchanged.

Lead Pipe—Prices are very firm, but have not advanced. We quote as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Demand is very keen, but supplies are plentiful We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Volume of business is reported large, the general activity causing heavy buying and keeping prices firm. We quote as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Good sales are being made, but no fluctuation in price has occurred. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Heavy buying in large quantities is the feature of the trade. Prices are firm. Our quotations are as follows: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Prices have advanced in sympathy with the metal markets. We quote: Bar solder, half and half, guaranteed. 19 1-4c.; wiping solder at 17 1-2c., and refined 17 3-4c.

Enameled Ware—There is a very strong demand for Canadian ware. Prices remain the same as last week. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50. special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet. 2 1-2 inch rim, 1st quality. $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch. flat rim, 1st quality, $2.45; special, $2.

A SEASONABLE ARTICLE.

An article that should meet with an especially large sale throughout the Fall and Winter is the Twentieth Century White Flame Heat and Light Burner, being placed on the market by the Twentieth Century Manufacturing Co., of New York. This article, which is illustrated herewith, is composed of three separable parts, and in packing are nested compactly in a pasteboard box, the whole package weighing 18 ounces. This burner can be used to good advantage by the hardware dealer for window display, as it not only furnishes light, but at the same time it attracts attention, sells itself and prevents the frosting of the window. The Twentieth Century Co. furnishes with each order a large assortment of attractively printed showcards, electrotypes for local advertising and circular matter. In cold climates the "White Flame" keeps the house comfortable in Spring and Fall, delaying "furnace time," and in dead of Winter, there are frequently bath rooms and other places about the house, that would be better for extra heat, particularly when one can have it with no cost beyond that for the usual illumination. The "White Flame" attaches to any chandelier, wall bracket or portable stand.



A Summer Dollar

Do you know what this is we are advertising?

It is something that will make a few dollars for you in the quiet summer season.

COW-EASE

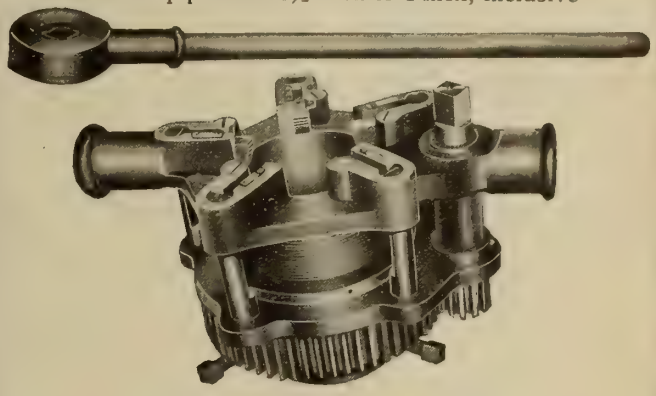
made expressly to give rest and ease from flies and vermin to cattle and horses. Farmers must have this. It sells easily for **$1.00,** and yields a profit for you. Write us for particulars at once.

A. RAMSAY & SON COMPANY,

Est. 1842 MONTREAL Sole Agents

The "Toledo" Adjustable Threading Device

A new principle in hand-power pipe-threading.
Threads pipe from 2½ inch to 4 inch, inclusive



No. 2.

This tool weighs but 60 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.

Ask your jobber about them; if he don't know write us for Catalogue and Discounts.

THE TOLEDO PIPE THREADING MACHINE CO,

Toledo, O., U.S.A.

FERROSTEEL REGISTERS

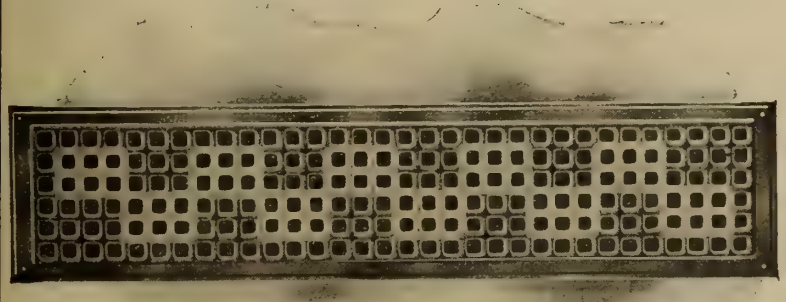
WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR { **ALL CAST** Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



Wrought Steel One-Piece Screens

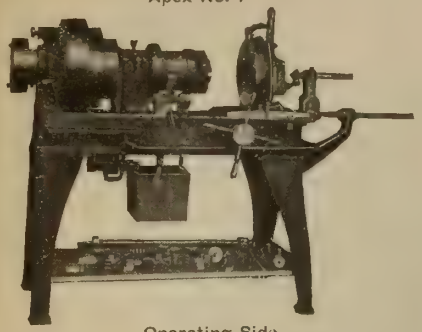
For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

Capacity of machine from ¼ to 2 inches inclusive. The Pipe Guides for steadying pipe in cutting off are on back of the head and are operated by means of a lever. The Cutting Off Tools are two in number, cutting from two sides of the pipe at the same time. This machine is especially adapted for making nipples.

Catalogue on Request

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Extra Standard

GLOBE VALVES

are of the best quality. They give the best of service and are moderate in price.

Every valve is TESTED, and PACKED, and GUARANTEED.

WRITE FOR CATALOGUE

The KERR ENGINE CO., Limited

MANUFACTURERS

WALKERVILLE, ONT., CANADA

PROGRESS IN STEEL WORKS.

ONE of the latest ideas, which is about to be carried out on a very large scale with regard to steel rail mills, is that the rolls shall be driven by motors whose powers will be developed by gas-engines driven by the gas from the blast furnaces. The power thus obtained will be delivered as current to motors at the rolls, to which they will be connected by gear, and will supplant the present steam-engines now in use for driving these rail mills. The improvement in plate-mills for rolling steel plates is as great as that which has taken place in the steel-rail mill. Five and thirty years ago a plate-mill making 100 tons of plates per week was considered to be doing fair work. To-day a mill making a similar class of steel plates, but of much larger area, is turning out easily about eighteen times that quantity, and in America the enormous make of 450 tons has been rolled in twelve hours. These large quantities are again due to improvements brought about by mechanical appliances, for handling large ingots or blooms weighing as many tons with greater ease than was formerly the case when the weight of the ingots was only hundredweights handled by manual labor. Krupp was considered to have done marvellous work in showing an ingot weighing about a couple of tons at the Exhibition in 1851, though it must be remembered that this was made from crucible steel. To-day ingots can be made of almost any weight, and their size is practically governed by the power of the appliances used for moving them. At the St. Louis Exhibition a model was shown of a cylinder weighing 150 tons which had been cast in nickel steel for a 10,000-ton forging-press. Ingots of 60 tons' weight for armor-plates are not infrequent. In plate-mills the improvements in rolling-engines, the adoption of universal rolling trains, enormous hot slab shears, cranes of all descriptions for handling, charging, and drawing material from heating furnaces, cooling and straightening roller tables, cold shears capable of cutting plates up to 2½ inches thick, cooling-floors fitted with castor rollers by which these heavy plates are easily moved, have all contributed to the great outputs of steel rolling-mills, and have enabled steel plates to be produced at prices not dreamt of in former years. This, in its turn, has had a beneficial effect on ship-building, so that vessels are to-day being built of this splendid material at a lower cost than perhaps at any previous period in the history of the trade. The reduced price of plates has again reacted on the cost of vessels. While referring to the improvements in making steel plates and rails, one must not omit to mention the great strides made of late years by hydraulic forging. The forging-press has been much improved upon. Hydraulic presses of 5,000 and even 10,000 tons are not uncommon, and for working large masses the hydraulic forging press seems to have almost replaced the steam-hammer. Another matter that should be mentioned is the progress made in electric smelting. Although this may not be applied largely to ordinary steel-making, there is little doubt that it has a large field open before it for the production of valuable iron alloys.

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing British and American Manufacturers. Correspondence invited from firms wishing to be represented in Canada.

BRONZE POWDER AND LIQUID

is used by every steam-fitter. Ask your supply house for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE

768 Craig Street, MONTREAL — 29 Melinda Street, TORONTO

North West Machinery & Iron Co.

LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

SAVED—LOST.

One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

Bolton, Fane & Co.

98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL

TELEPHONE, MAIN 3893

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. *Head Office: 98 King St. W., TORONTO*



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

The Best South Wales Produces
in
TERNE PLATES

"DEAN"

The original brand with the coating that lasts.

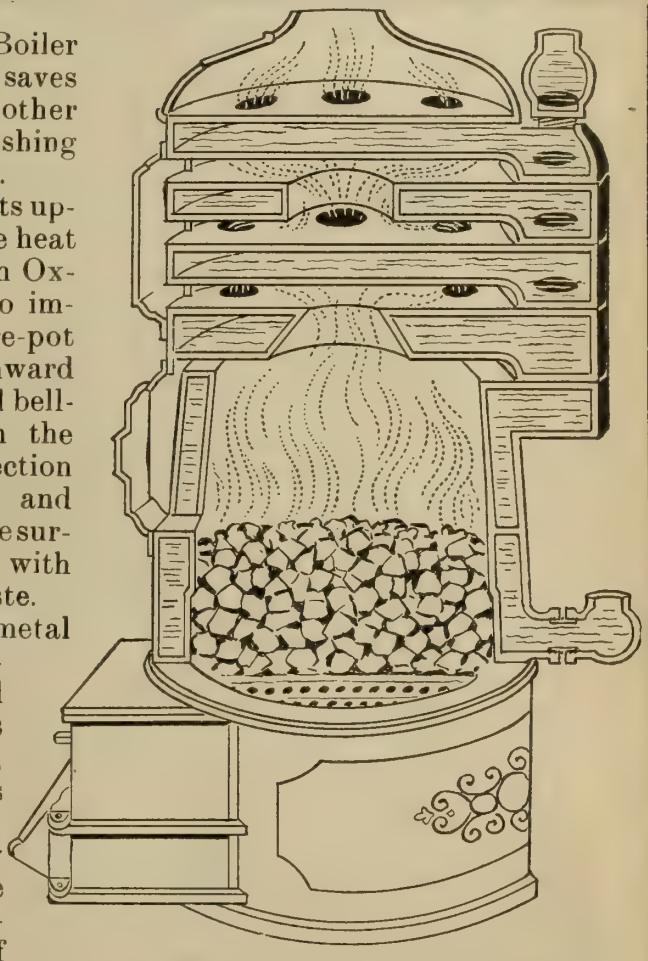
in
POLISHED CANADA PLATES

"FRONTIER"

Black, color and fine polish.

STEEL
that seams without breaking.

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied



The Oxford Boiler ("B" Series) saves the heat that in other boilers goes rushing up the chimney.

Throughout its upward course, the heat generated in an Oxford is forced to impinge upon fire-pot walls sloping inward over the fire and bell-shaped flues in the large lower section which absorb and transmit it to the surrounding water with a minimum waste.

Metal to metal joints at all connections—Steel Push Nipples avoid packing, rubber gaskets and lea' s.

Our hollow triangular Grate bar makes clearing the fire of ashes easy and assures complete combustion. Dealers who are determined to instal for their customers an absolutely perfect household heater should investigate the

OXFORD BOILER ("B" SERIES)

SEND FOR PARTICULARS.

The Gurney Foundry Co., Limited
TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

THE IRON PILLAR AT DELHI.

THOSE who think that we of modern times are the only ones who know how to produce iron forgings will receive a rude shock when they learn that, on the plains of Delhi, the ancient capital of India, stands an immense iron pillar, whose date is so far distant as to be simply a matter of conjecture. It records its own history in a deeply-cut Sanskrit inscription which is said by students to have been executed in the third or fourth century after Christ.

This pillar, unlike the Colossus of Rhodes and the statues of Buddah, which were of hollow pieces of brass or copper riveted together, is a solid shaft of wrought iron.

Several attempts have been made to obtain samples of this iron for analysis, but it is religiously guarded by the natives, who hold it in superstitious awe, so that no complete analysis of the material has been made. This work of an ancient civilization seems the more wonderful when we consider that it is only within recent years that any modern nation has been able to create anything like so massive a pillar of wrought iron.

KEEP A LIST OF LEAKS.

DID you ever seriously try to make a list of the holes through which possibly little bits of profit were constantly dribbling away? Overbuying is a leak. An extra five off for taking a quantity is a saving, but if the quantity lasts you a period of four times as long as the time it takes to get a fresh supply from your market, you have lost the profit on a part of your capital unnecessarily tied up. And if that loss of profit exceeds your saving, it is not necessary to have additional proof that overbuying may be a leak.

Stowing away goods likely to sell on sight, where they cannot be seen, is a hole through which leak profits that might have been made had the goods been properly displayed.

Failing to care for goods, so that they get shop-worn, and must, therefore, be sold at reduced prices, is another leak. Holding of seasonable goods until they become utterly out of style, rather than getting rid of them by taking a small loss, is still another leak.

Letting windows go unwashed and unchanged is a decided leak. Not only are you thus losing profit on sales that might be directly caused by particular displays in the windows, but you are also failing to improve an opportunity right at hand in the form of those windows to give passers-by most convincing reasons for coming into your store.

Letting your bills go unpaid until too late to secure discounts that may be offered for cash, is another leak. Very few cash discounts are so small but that they afford a profit over and above the interest that would have to be paid were it necessary to borrow money with which to pay the bills.—The Drummer.

HIGH SPEED STEEL KNOWN TO ANCIENTS.

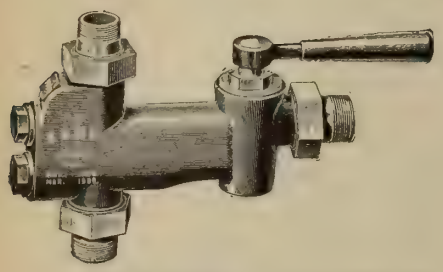
IN a paper recently read before the Iron and Steel Institute, Mr. J. M. Gledhill stated that the famous Damascus steel was in reality nothing but a form of our modern high speed tool steel, for it contained all the important properties of the latter. Marvelous cutting powers have been attributed to it and recent analyses of the material show that it contained certain percentages of tungsten, nickel and manganese. This shows that a latent high speed steel was in existence centuries ago. All that was found necessary in order to bring out its inherent qualities was to "burn" it, a process which was long thought to destroy its usefulness, but which is now known to produce its greatest adaptability to the work in hand and render it capable of effecting a great revolution in machine shop practice.

NEW ROLLING MILLS FOR QUEBEC.

Rumors are afloat in Montreal, that an American firm is considering the establishment of rolling mills, in the province, probably in Quebec City. Color is given to these reports by the fact that several prominent metal men in Montreal were interviewed last week by gentlemen representing large American interests, and existing conditions in Canada were thoroughly canvassed.

NEW COTTON WASTE FIRM.

Rumors are afloat in Montreal concerning the establishment of a new plant at Lachine to manufacture cotton waste. It is said that the demand for this article is particularly brisk, and the profit on it is good. The new firm will start in a small way at first, but they are confident that the business will grow and prosper. Nothing more definite can be learned about the venture as yet.



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED

HEAD OFFICE AND WORKS: TORONTO, ONT.

District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.

Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR

GILBERTSON'S

COMET

Brand Galvanized Sheets

Of high quality, but LOW in price—for a guaranteed sheet.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

TRADE MARK

This design a guarantee of quality

FIBRE WRAPPING PAPER

STRONG, TOUGH AND STIFF.

WILL CARRY ALL KINDS OF PACKAGES SAFELY TO DESTINATION.

WRITE US FOR SAMPLES AND PRICES.

CANADA PAPER CO.

TORONTO LIMITED MONTREAL

STANLEY RULE & LEVEL CO.,

NEW BRITAIN, CONN., U.S.A.

IMPROVED CARPENTERS' TOOLS

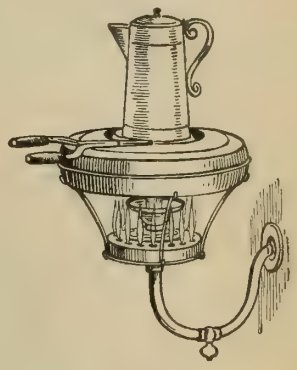
SOLD BY ALL HARDWARE DEALERS.

HEAT and LIGHT

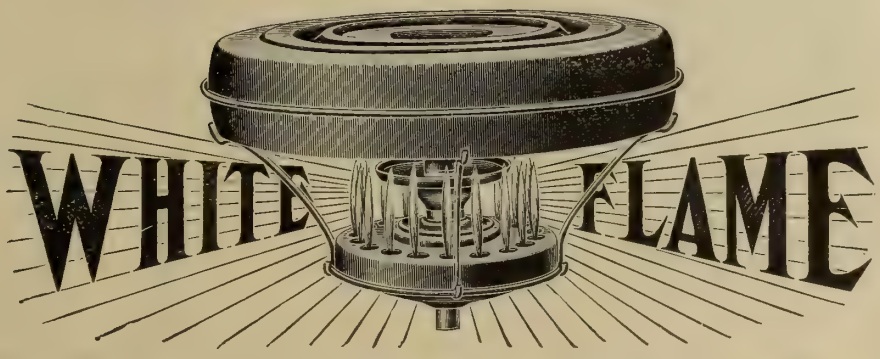
At cost of Light only.

SPECIAL TO WHOLESALERS

This being a seasonable article causes heavy demand all in a short space of time and necessitates advance orders to insure delivery when wanted, and especially being N E W, there are no old stocks on hand to draw from.

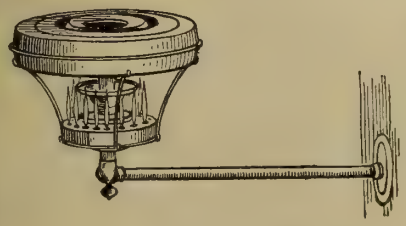


20th Century



A Combination Gas Burner

Attaches to any chandelier, wall bracket or portable stand



GIVES GREAT **HEAT** AND BRIGHT **LIGHT** AT COST OF LIGHT ONLY

NO SMOKE, NO ODOR, NO DIRT
HYGIENIC AND ECONOMICAL

Retails at $1.25. The discounts to both jobbers and retailers show excellent profits in handling.

Show cards, circulars, envelope stuffers furnished the trade

Must not be confused with any other heater

The 20th Century White Flame
HEAT & LIGHT IN ONE

The only one giving both HEAT and LIGHT

20th Century Mfg Co

19 Warren Street, New York

Manufacturers of the
FAMOUS BICYCLE and AUTOMOBILE HEADLIGHTS

A NEW LEAD KEG.

A PATENT keg for packing pure or graded leads has been introduced in the United States, being made of steel in sizes to contain 12½, 25, 50, or 100 lbs. The 100 lb. size is straight in shape, the others being similar to that illustrated herewith. The lid is forced into the keg by a power press or lever, and for additional security the tabs which appear standing up by the junctions of the handle are then bent over. The package is thus prepared for shipping, and is said to be quite air-tight and to keep the lead free from "caking" during transit. Other advantages claimed for this keg by its makers, the American Can Co., of New York, are that it is not collapsible; can be closed tightly again after it has been opened, thus preserving the remainder of its contents when only a part is used at a time; needs no coopering, and can be rapidly filled; is non-inflammable, thus reducing fire risks; and can be employed as a paint-pot after the lead has all been used.



Steel Lead Keg.

FAKE PROPOSITIONS.

THIS is one of the seasons of the year when the trade, particularly retail merchants, are being bothered with fake advertising propositions.

Society, church, and other organizations are holding their annual picnics, games and excursions, and they are getting out programmes in which advertisements are inserted.

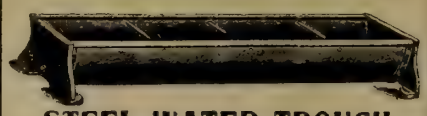
The getting of these advertisements is a species of blackmail and some of the methods adopted by representatives of these organizations are disgraceful. The worst form is where an experienced advertising agent publishes these on his own account. He goes to the association some time before their annual picnic is held and offers to supply them with programmes free of cost. He then secures a letter from the president or some leading member of the association, gets a list of firms, wholesale, retail and manufacturing, who do any business directly or indirectly with the individual members of the society. He approaches these firms with a story that he has been sent by an individual member of the organization who is a customer of the firm. If a formal application of this sort does not bring the advertisement, then stronger pressure is brought to bear. Sometimes a firm or individual will say that they do not advertise because they cannot afford to go in all the programmes being issued, and if they went in one it would offend the others; or they give some other good reason for refusing. Then comes the worst form of the fake. The firm or man solicited for an advertisement is then told that the "boys" feel they should have some assistance from him towards the expenses of their games or concert or whatever the affair may be, and a contribution of from $50 to $500 in cash has been secured in this way. Not one cent of this money ever goes to the society as a whole. Usually the fake solicitor puts it in his pocket. Sometimes he shares the plunder with some official of the society. The "boys" or members of the society know absolutely nothing of the arrangement, or the lines on which the programmes have been made up.

Now and then these fakirs are caught. Some years ago two men raised nearly $10,000 in aid of the Montreal Fire Brigade. Everybody contributed, feeling that they were giving something to the brigade. Two or three citizens—if we mistake not, Sir George Drummond, Montreal, and John Labatt, brewer, of London, among them—when they found the thing was a fraud, felt it their duty to expose it, and the fakirs were prosecuted and sent to the penitentiary.

Many leading business men are now familiar with the way this advertising fake is worked and they positively refuse to contribute to it, either advertising or cash. It is to be hoped that any of our readers who are not familiar with the way in which they are imposed upon will in future refuse to be blackmailed.

Whenever you have a few minutes of spare time use it in dusting the stoves you are displaying. Your trouble will be repaid.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. TWEED, Ontario Limited

GET THE HABIT

of dropping us a card a few days before you start for Montreal or Toronto on a business trip telling us where you are going to stay. We want to print it in the "Buyers in Town" department before you arrive.

$2 FOR THIS SMALL SUM THE $2

MANUFACTURER and SUPPLY MERCHANT

may keep posted on new openings for trade.

The CANADIAN CONTRACT RECORD

reports weekly all projected building and other construction works throughout Canada as well as new business enterprises.

Send your name and address with $2 for a year's subscription to

Canadian Contract Record

Toronto, Montreal, Winnipeg, and Vancouver

$2 $2



THE BANNER COLD BLAST LANTERN

ALWAYS LEADS GREAT LIGHT WIND PROOF.

Note Improvements for Season 1905.

We make twelve different styles of Lanterns in Tin, Antique Copper and Solid Brass.

For Sale by all Prominent Jobbers Throughout the Dominion.

ONTARIO LANTERN & LAMP CO. LIMITED

PALMETTO PACKING

We have been appointed Canadian Sales Agents for the above packing which is so well and favorably known, and respectfully solicit orders for same.



RETURNED
SEP 15 1905
St. Montreal
Cut Book 40
page 37

BECAUSE

It will not wear or score rods.
Has great durability.
It is self-lubricating.
Does not get hard in service.
Does not deteriorate with age.

The Reasons are

That only the best materials are used.
It is entirely free from grit and acid.
Lubricant is forced into each strand before braiding.
It is braided several times and it holds lubricant until worn out.

EVERY HARDWARE AND SUPPLY DEALER SHOULD HANDLE IT.

SAMPLES AND CIRCULARS FURNISHED ON REQUEST.

"PALMETTO TWIST" "THE HANDY HIGH-GRADE PACKING."

The Canadian Fairbanks Co., Ltd.

Montreal Toronto Vancouver Winnipeg

UNITED FULLER WORK

INSTALLED BY LEADING PLUMBERS EVERYWHERE

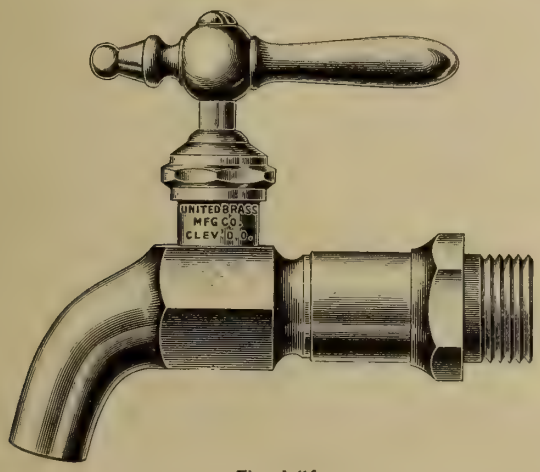


Fig. A-114

We Manufacture a Complete Line of High Grade

STOPS and STOP and WASTE COCKS, COMPRESSION WORK, FULLER WORK, SOLDERING NIPPLES, UNIONS, VALVES, ETC.

WRITE FOR CATALOGUE AND DISCOUNTS.

United Brass Manufacturing Co.

CLEVELAND, OHIO, U.S.A.



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

LET US KNOW

if your shelves are ***empty.*** We can fill them with a class of goods that will cause them to be ***empty*** once more within a short time.

QUICK SALES MEAN A LARGE PROFIT

IF you have not heard anything of these three brands of building paper ***let us know*** and we will supply you with some thing that would be a downright shame to miss.

Black Diamond **(Registered)**

Get our Quotations on Manilla Brown Fibre and Grey Wrapping Papers

Joliette and Cyclone **(Registered)**

ALL MANUFACTURED BY

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Aug. 11, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$35 00 $36 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50
I Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
X	6 75

X Coke Plates—Bright.

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. } " 14x60, " } " 14x65, " }	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M," Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"B C" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

16 x 21 x 60	3 33
18 x 24 x 52	3 33
18 x 24 x 60	3 56

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.		Gordon Crown.	
16 to 20 gauge	3 40	....	....
22 to 24 gauge	3 50	3 50	
26 "	3 75	3 75	
28 "	4 00	4 15	

Comet Bell.	Queen's Head
16 to 20 gauge 3 40	....
22 to 24 gauge 3 45	3 65
26 " 3 70	3 90
28 " 3 95	4 15

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 00	16 55

Bars.

Cut lengths, round, ⅛ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	....	21 00
Plain, 14 oz	....	22 00
inned copper sheet	....	24 00
lanished	....	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	....	0 22
" 35 to 45 " "	....	0 21
" 50-lb. and above "	....	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 00
Part casks	....	7 25

LEAD.

Imported Pig, per 100 lb	....	4 00
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06½
Sheets, 3 to 6 lb. "	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality		Special
4 and 4½ ft.	13 in. rolled rim	$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00

Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "	....	7 50
" 127 E, "	1st "	....	5 70
" 127 E, "	2nd "	....	4 80
" 128 E, "	1st "	....	5 60
" 128 E, "	2nd "	....	4 70
" 129 E, "	1st "	....	5 40
" 129 E, "	2nd "	....	4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings— Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c.
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net	1 75
No. 4 " "	"	1 75
No .7 Fuller's	"	2 10
No. 4½, "	"	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
" " " iron " " 60 "
Square head brass cocks, discount 55 per cent
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

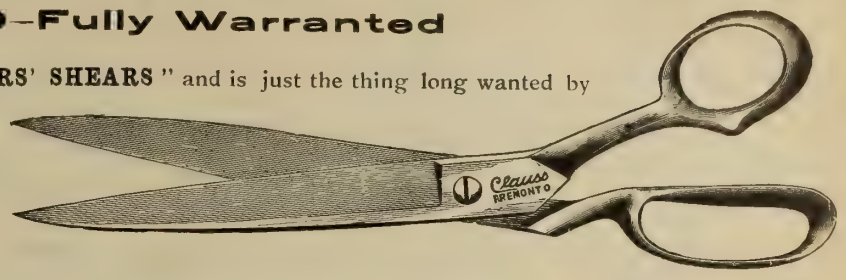
Clauss Dressmakers' Shears

CLAUSS BRAND—Fully Warranted

This shear is made after the pattern "**TAILORS' SHEARS**" and is just the thing long wanted by the dressmakers.

Manufactured by Our Secret Process.

Ask for Discounts.



Clauss Shear Co., 169 Spadina Avenue, Toronto

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17¾

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	..	5 50
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	....	$5 25
Genuine, 100 lb. kegs, "	....	5 50
No. 1, 560 lb. casks, per cwt	....	5 00
No. 1, 100 lb. kegs, per cwt	....	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07½
No. 1	....	0 06½
No. 2	....	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.2 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		

GLUE.

Common		0 08½
French medal	0 14	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09¾
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net 4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63¾ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's 5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.

Farm.

American, each 1 35 3 00

House.

American, per lb. 0 35 0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb. 0 07½ 0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt	per ton	45 00
Heavy Straw Sheathing	per ton	35 00
Dry Sheathing, per roll, 400 sq. ft.		0 40
Tar " "	400 "	0 50
Dry Fibre "	400 "	0 40
Tarred Fibre "	400 "	0 50
O. K. & I. X. L. "	400 "	0 70
Resin-sized "	400 "	0 45
Oiled Sheathing "	600 "	1 00
Oiled " "	400 "	0 70
Root Coating, in barrels, per gal.		0 17
Roof " small packages "		0 25
Refined Tar, per barrel		5 00
Coal Tar "		4 00
Coal Tar, less than barrels, per gal.		0 15
Roofing Pitch, per 100 lb.		0 80 0 90
Slater's felt, per roll		0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American, per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 .. ...per gross 7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump, per cwt.	0 60	0 85
Red	0 05	0 06
Crayon, per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz. 2 00 5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation, per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse, per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Christmas Dinner

without Plum Pudding is no more complete than a Hardware Store without a stock of Paterson's Building Papers and Wire Edged Ready Roofing.

You'll increase your profits and avoid arguments by handling our goods because we make the material your customers want.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 f
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65	2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	....	9 00
Rope, ½ "	"	....	12 00
Rope, ⅝ to ¾-inch	"	....	14 00
Leather, 1-inch	per doz.	....	4 00
Leather, 1¼ "	"	....	5 20
Web	"	....	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		2¼	2 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in (100 ft.)	....	3 75
" " 1½ x 3-16 in (100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz	4 40	
" " 2, "	4 85	
Barrel, Underhill	5 00	

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb.		0 06½
" 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.

Screw hook and hinge—		
6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned c 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	....	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun, 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50	2 50
Bronze, Berlin	per doz.	2 75	3 25
Bronze, Genuine	"	6 00	9 00
Shutter, porcelain, F. & L. screw	per gross	1 30	2 00
White door knobs	per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut		$ 8 50 to	$11 00
Star, 9 -in.	"	6 00 to	6 50
Daisy, 8 -in.	"	5 25 to	5 75
Philadelphia, 7½-in.	"	6 00 to	7 50
Woodyatt, 10½ in., ball bearing		13 25 to	18 00
Grass Boxes		1 75 to	2 00
King Edw'd 12-in., 14-in. cut		9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel		0	10 00
9-in.		5 50	6 25
8-in.		4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 50 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen	10 00

Davidson oilers, discount 40 per cent.

Zinc and tin, discount 50, 50 and 10 per cent.			
Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

PLANES.

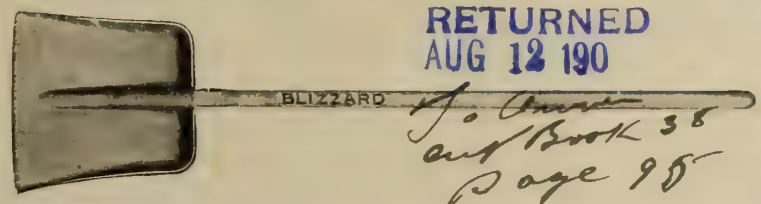
Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

RETURNED
AUG 12 190

THE BLIZZARD

Solid, Strong, Steel Shovel for Stable, Store or Furnace

Crowning at point for Cutting Ice.



RETURNED
AUG 12 190

Two Sizes: No. 1, 14 in. wide; No. 2, 9¾ in. wide

Factories: NEWMARKET, ONT.

Branches: WINNIPEG, OTTAWA, MONTREAL.

The best and strongest STEEL SHOVEL of its kind ever offered to the trade. Write for quotations.

THE OFFICE SPECIALTY MFG. CO., Limited

Everything in Business Furniture and Card Systems In Stock.

97-105 Wellington St. West, (near York) TORONTO

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Finners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅛ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished...per set		0 75
" No. 50, nickle-plated, "		0 80
Common, plain.....		4 50
" plated		5 50

SAND AND EMERY PAPER.

S. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000		7 50
"Eureka" tinned steel, hooks "		8 00

SAWS.

Hand, Disston's, discount 12½ per cent		
S. & D., discount 40 per cent.		
Crosscut, Disston's....per foot	035	0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.		
Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.		
" mill and ice, drag, discount 30 per cent		
" cross-cut, discount 35 per cent.		
" hand saws, butcher, disc't 40 per cent		
" compass, pruning and back, discount 45 per cent.		
" buck, New Century.....$6	25	
" " No. 1 Maple Leaf.....	5	25
" " Happy Medium.....	4	25
" " Watch Spring.....	4	25
" common frame.....	4	00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....		0 85
" 18 x 30.....		1 00
" 18 x 36.....		1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½pe cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton.....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	...	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers..	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" " steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated whit 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c. "
15 "	55c. "
16 "	70c. "

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
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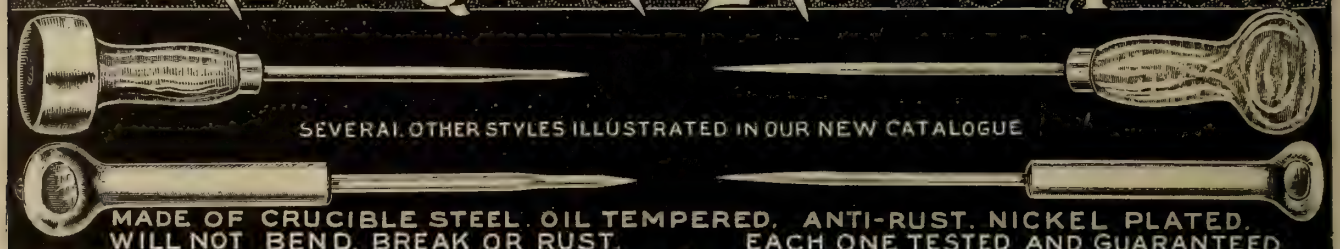
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WILLIAM STREET, - TORONTO

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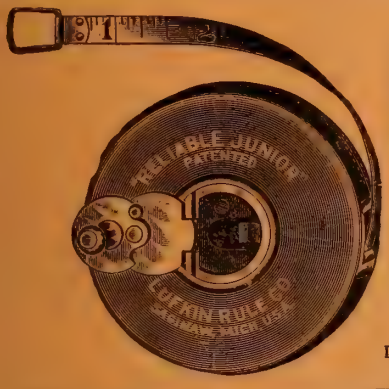
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In a crowded stable this method of fastening confines the animal more and obviates all danger of being stepped upon when lying down.

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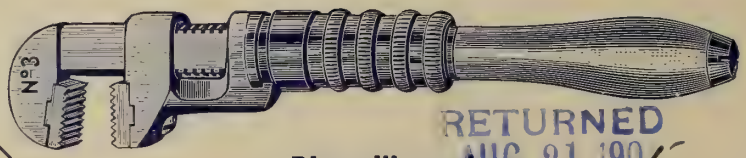
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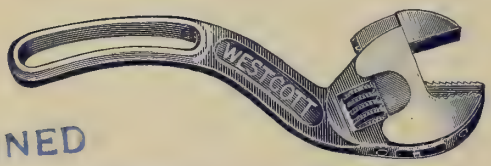
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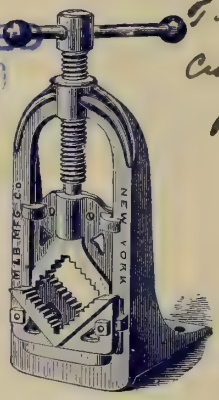


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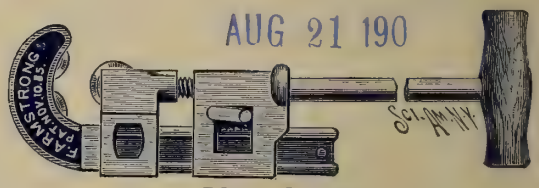
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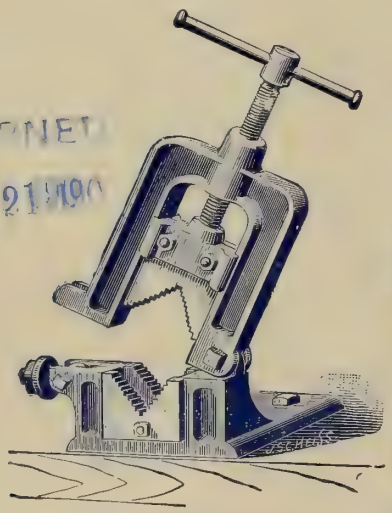
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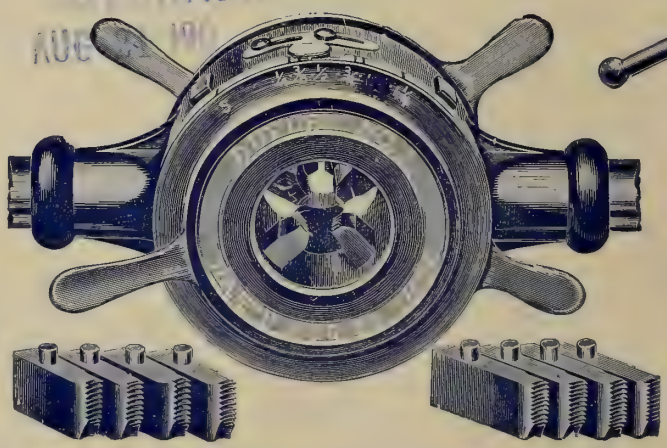
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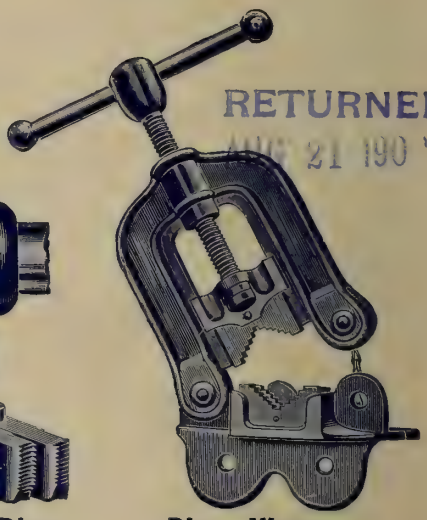
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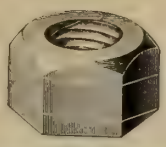
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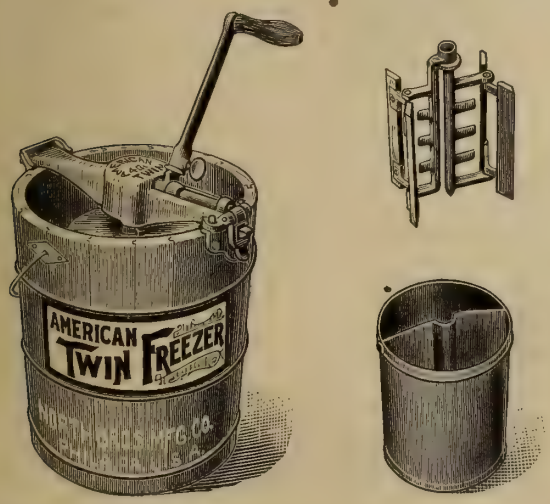
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(2 in 1) TWIN FREEZERS

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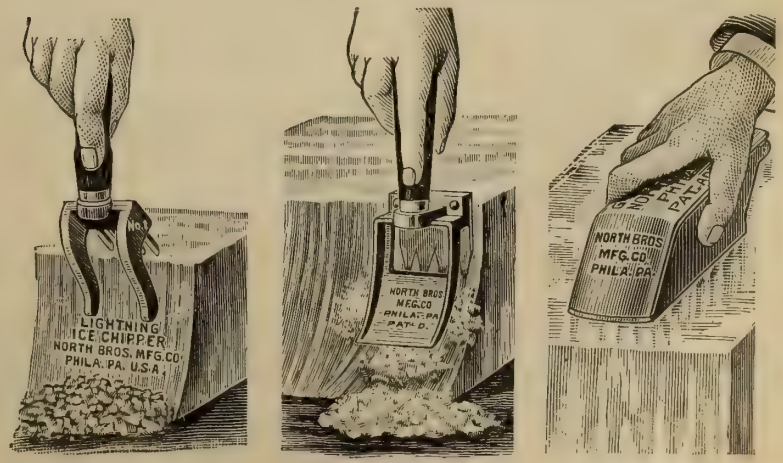
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THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoop, Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



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ICE CHIPPERS ICE SHAVE

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4 SIZES



No.	Diam. of Steel Body.	Height.	Weight.
2	9½ inches	27 inches	90 lbs.
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5	15¾ "	37¼ "	210 "

A POWERFUL HEATER.

BURNS A MINIMUM AMOUNT OF FUEL.

Lined throughout with Fire Bricks. The body is made of cold rolled steel and the base and top are cast iron.

Has nickel-plated tea-pot stand and is very neat and compact in appearance.

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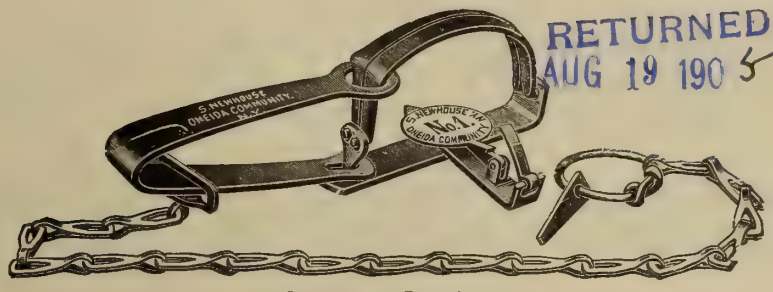
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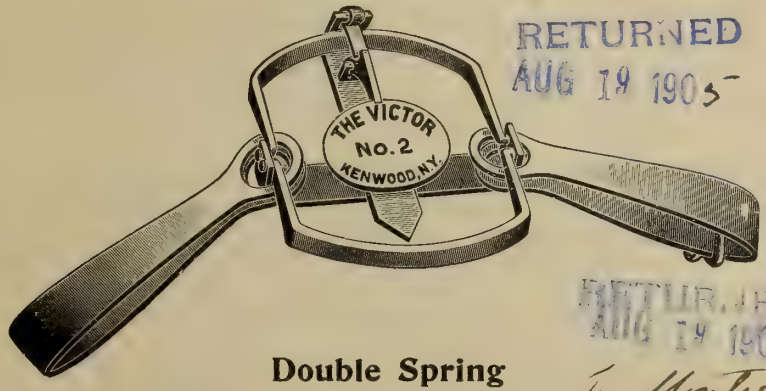
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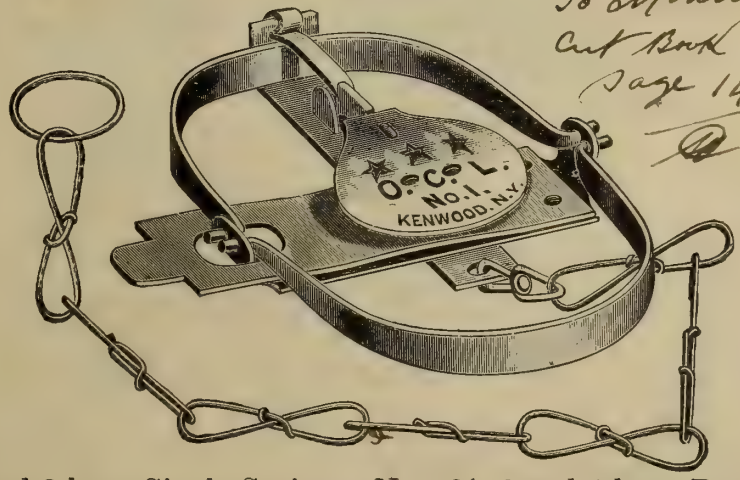
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To Montreal
Cut Book 37
Page 14



Nos. 0, 1 and 2 have Single Spring. Nos. 2½, 3 and 4 have Double Spring.

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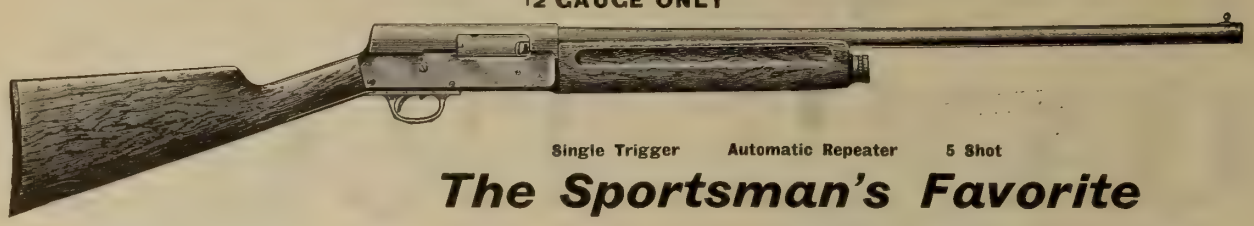
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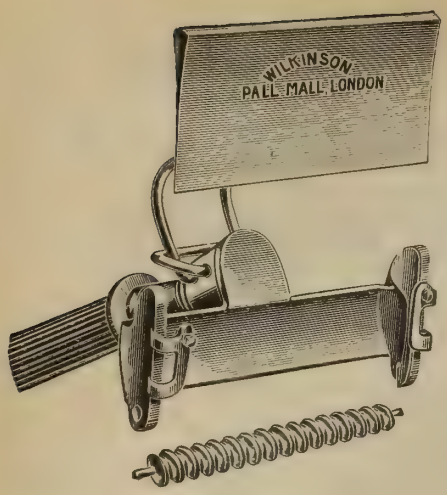
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With this invention a Roller is used instead of the **Old-Fashioned Fence or Comb,** so as to give a **smooth, rolling action** over the face instead of a **Drag** or **Scrape.**

Blade and Roller removed for cleaning.
Note the patent anti-friction roller.

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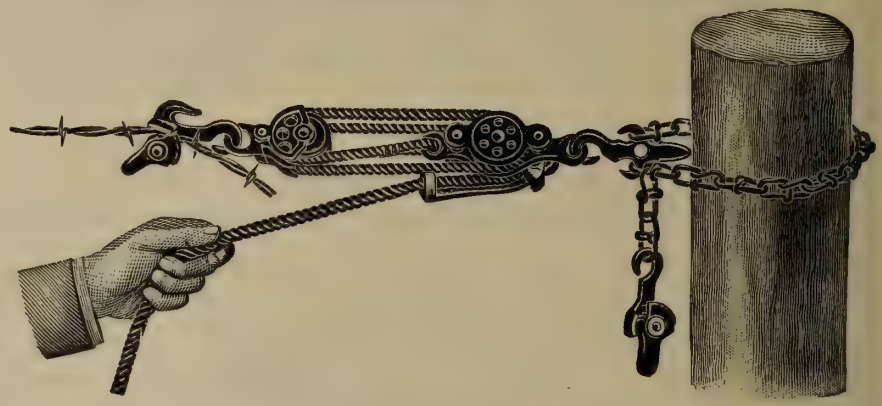
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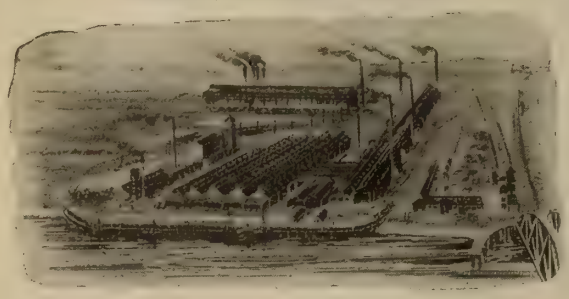
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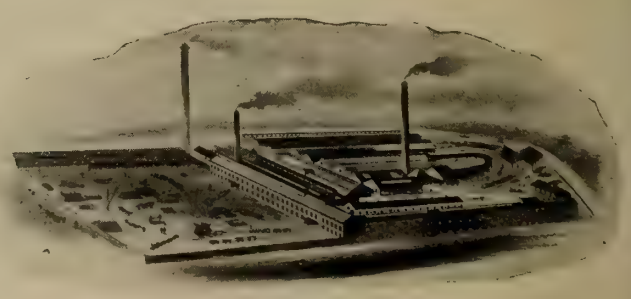
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Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



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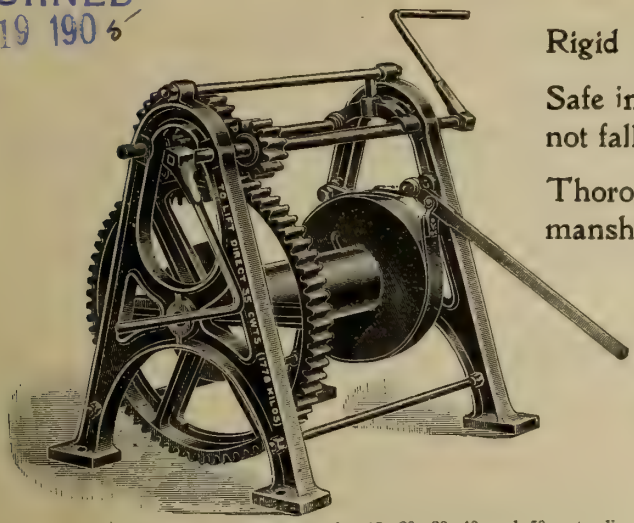
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Agent: F. Hankin, Montreal

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IMPROVED HOISTING CRABS



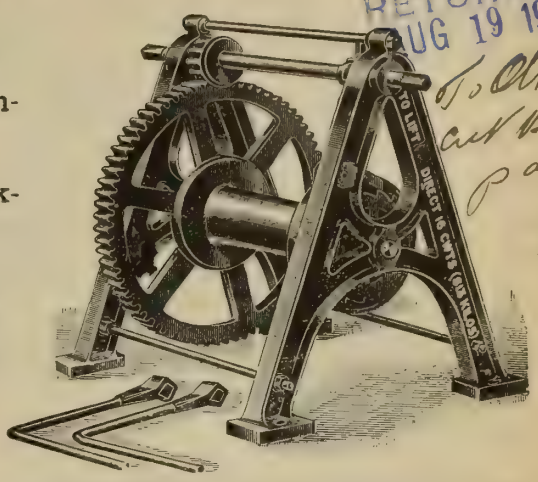
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Rigid in Construction.

Safe in use—the load cannot fall.

Thorough English workmanship.

Barrel, Brake and Ratchet wheels in one piece.



Single Purchase. Two sizes, capacity 8 and 12 cwts direct from barrel.

By the use of 2 and 3 sheave blocks the capacity of these winches can be increased about five times.

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31197.—E.P.N.S. CAKE BASKET

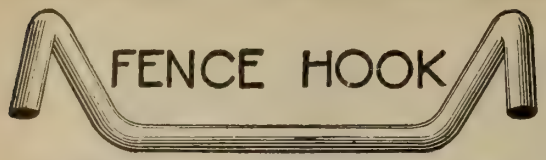
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Special designs for all purposes supplied free

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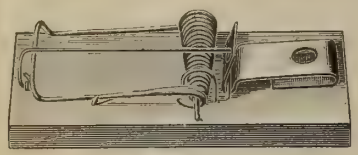
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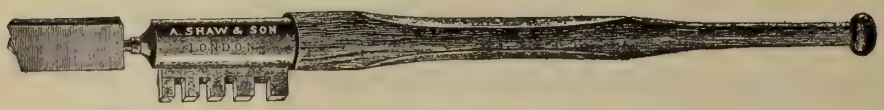
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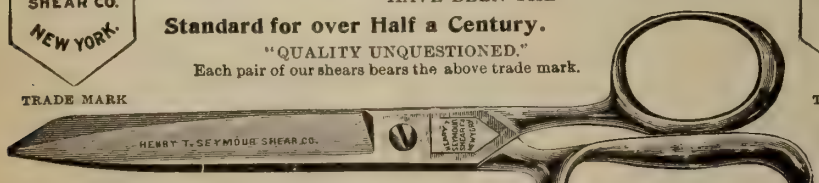
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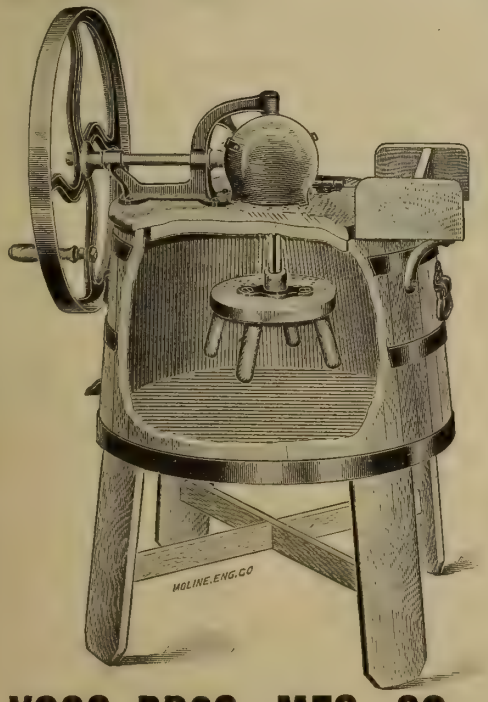
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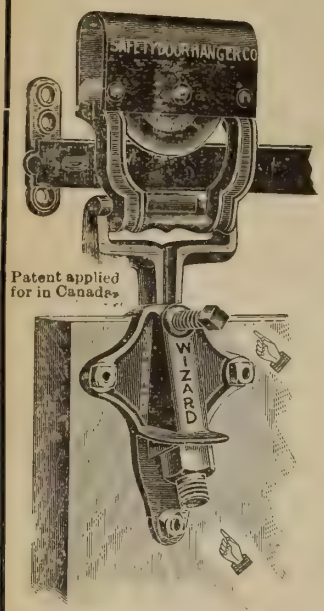
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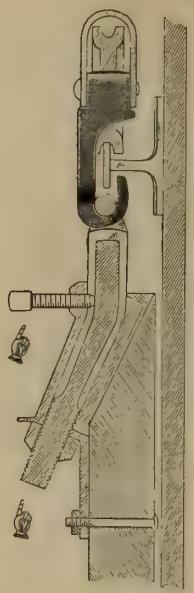
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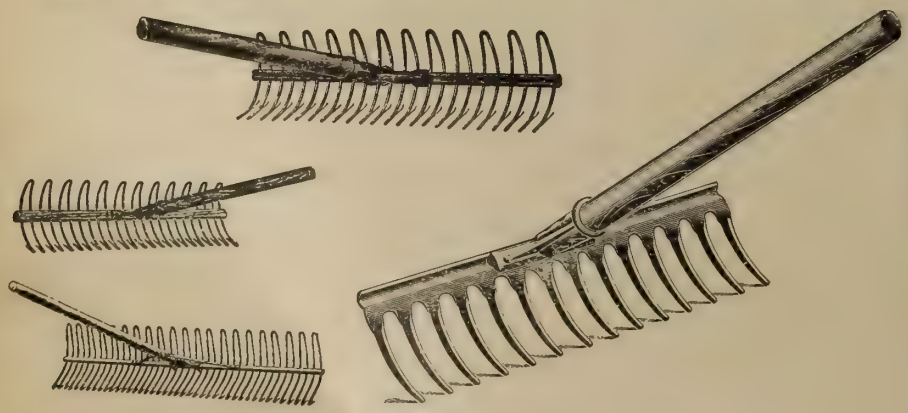
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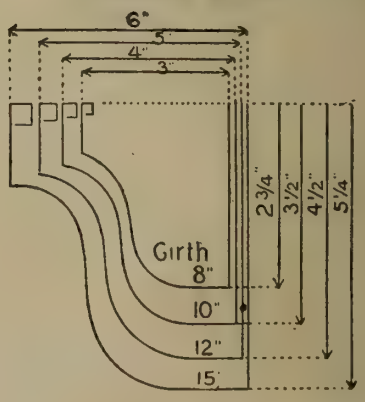


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Master Plumbers' and Steamfitters' Convention

NATIONAL ASSOCIATION AT WINNIPEG, AUGUST 8, 9 AND 10.

WHEN one year ago at the convention held in Toronto it was unanimously decided to hold the tenth convention of this association in the City of Winnipeg, there were a few who thought it a rash step to select a place of meeting in the west so far removed from the centres where the association has its largest membership. The result has shown, however, that these fears were groundless; the tenth convention was, in the opinion of several association veterans who have been in the association work almost from the first, the most successful ever held in Canada, and a decided impetus was given to the work of organization in Manitoba which it would not otherwise have received. Ottawa is to be the next place of meeting, but it would not be surprising if Vancouver or Victoria is chosen for the twelfth convention in 1907. Reports from British Columbia were very encouraging and many delegates seemed favorable to the idea of holding a convention in that Province in two years' time. Certain it is that the holding of the 1905 convention in Winnipeg has been a great assistance to those interested in the thorough organization of Manitoba and the results will be seen before the next annual meeting.

The delegates from the east arrived in Winnipeg on Monday night August 7, traveling in a body by way of Chicago. They were met at the station by the Winnipeg entertainment committee and escorted to the Queen's Hotel, which was the headquarters of the association during the stay of the delegates in the city. The entertainment committee appointed by the Winnipeg Association consisted of the following gentlemen: A. J. Hammond, T. A. Irwin, Chas. Plaxton, G. H. Kirkham, Fred. Litster, Thos. Stewart, C. Heinrichs and F. B. Mueller. Unfortunately, G. H. Kirkham, the capable and enthusiastic secretary of the Winnipeg Association, was taken ill with typhoid fever on the Sunday before the arrival of the delegates and consequently the local association were without his services during the progress of the convention.

OPENING MEETING.

The opening meeting of the convention was held in Eureka Hall on Tuesday morning. General regret was expressed by the delegates at the unavoidable absence of President Ross, of Toronto, who because of severe illness reluctantly obeyed his doctor's stringent instructions that he must stay at home. President Ross was very much missed by the association and many of the members took occasion to refer to his well-known enthusiasm for association work and to the faithful service which he had given the association during his year of office. Other familiar faces at previous conventions were missed and their absence regretted. W. H. Meredith, of Toronto, one of the stalwarts in association work, was not present at the convention, and Past President Jos. Thibeault, of Montreal, was also among the absentees. The Montreal delegation explained that Mr. Thibeault had "married a wife and, therefore, he could not come."

In the absence of President Ross, the chair was taken by Vice-President Hammond, who discharged the duties of president so satisfactorily that at a later stage of the proceedings it was unanimously decided to elect him to the position for the ensuing year. Robert W. Harrison, of Toronto, was appointed to assist Mr. Hammond as vice-president, and R. L. Beattie, the vice-president of the Winnipeg Association, acted as sergeant at arms.

Delegates Present.

The following officers were present at the meetings: Vice-President A. J. Hammond, Winnipeg; Treasurer F. C. Johnson, Ottawa; Secretary J. A. Gordon, Montreal; Vice-President for Ontario H. Mahoney, Guelph; Vice-President for British Columbia J. J. Coughlin, Victoria; Vice-President for Manitoba J. Mold, Winnipeg.

Province of Quebec delegates — W. David, J. Watson, W. Ryan, G. C. Denman and J. Ballantyne, of Montreal.

Province of Ontario delegates — Wm. Mansell, R. W. Harrison and K. J. Allison, of Toronto; Hugh S. Wallace and Stephen Mellon, Hamilton; J. Marshall, J. W. Barnes and A. C. Waltz, Port Arthur; Alex. Cameron and E. D. Higginbottom, Fort William.

N. W. T. representative—E. J. Young, of Calgary.

Manitoba representatives—J. Morrison, D. Stockwell, Thos. Stewart, R. L. Beattie, W. Stevenson, R. H. Lear, A. J. Kearnaghan, C. E. Gate and T. A. Irvine.

Opening Remarks.

In opening the first session of the convention, Vice-President Hammond expressed his gratification at the attendance at the convention from the Provinces of British Columbia, Manitoba, Ontario, Quebec and the Territories. This attendance was sufficient proof of the interest taken in the association in all parts of Canada. There was much to be done and he hoped the convention would settle down to serious business.

At this stage of the proceedings it was announced that Mayor Sharpe was in attendance in the anteroom to welcome the delegates to the city. The popular mayor was accorded a gratifying reception as he made his way to the platform. He said it was frequently his duty and pleasure to welcome conventions to Winnipeg, but, perhaps, the plumbers' convention was composed of men who perform more important duties to the public than any others meeting here this year. He was glad to welcome the visitors from the east and west; the local plumbers, like the poor, were always with us, and he would say nothing of them except that the organization had been of great assistance to him in his efforts to promote sanitary improvements in Winnipeg. The preachers and temperance men were doing a valuable work in keeping the town morally clean, but the plumbers were the guardians of the city's health.

Visiting members of the craft would be interested in the material progress of Winnipeg. In two years' time the assessment had increased $24,000,000 and the building permits issued are in excess of $10,000,000 per year. Plumbers would appreciate what such progress must mean for the Winnipeg members of their craft.

The basis of Winnipeg's prosperity lay in the wheat fields of the west, and he hoped the eastern visitors would not return to their homes without seeing the ripening crop. Last week the municipal convention had met in Winnipeg and before the delegates returned they spent a day in the wheat section.

In humorous vein the mayor concluded his remarks by tendering the delegates the freedom of the city during the time the convention was in progress.

Vice-President Hammond.

Mayor Sharpe was heartily applauded as he retired, and Mr. Hammond then proceeded with the business of the convention. He expressed his regret at the absence of President Ross and paid a high tribute to the good work which he had done for the association in all parts of Canada. He had known Mr. Ross for years and had in fact been brought up in the business under him. Consequently he knew his sterling worth and ability and regretted his absence all the more. Secretary Kirkham of the local association was also absent because of illness, and he would be much missed by his fellow members.

C. E. Gate, of the local association, then welcomed the visiting delegates on behalf of the local association. "It affords me particular pleasure," said he, "to welcome the visiting delegates and supply men to this city. For twelve months we have looked forward to this convention and now that you are here the city is yours and you are welcome to all that is in it. I am sure that you will find much in Winnipeg to admire and enjoy. A quarter of a century ago, when one or two of you visited Winnipeg before, this city was only a mud hole. There were no plumbers and no sanitary conveniences; we were satisfied with a bath every Queen's Birthday. At the present time the majority of Winnipeg houses have up-to-date plumbing installed. Mayor Sharpe is making plumbing compulsory in every house and he is doing grand work; he is one of our best contractors and he may yet be a plumber."

In concluding his remarks, Mr. Gate regretted that the stay of the delegates was too short to allow them to follow Mayor Sharpe's suggestion of an excursion through the western wheat fields.

On behalf of the visiting delegates, Robert W. Harrison, of Toronto, re-

sponded to this address of welcome. He was very glad that Winnipeg was the convention city. The proposal a year ago to meet in Winnipeg had been enthusiastically received because the association members in the east had heard so much of Manitoba's capital city and the marvellous progress which it was making. But in spite of all he had heard of Winnipeg, he must confess to some surprise at the thriving city which he had found upon his arrival here. He reminded the delegates that the Winnipeg Association were handicapped by the illness of Secretary Kirkham and of President Ross. He hoped that all would unite to make their work easy.



President A. J. Hammond, Winnipeg.

Stephen Mellon, Hamilton; Harry Mahoney, Guelph, and J. Watson, of Montreal, were then appointed to act as credential committee and the convention adjourned to meet on Wednesday morning.

SECOND SESSION.

Tuesday afternoon was spent in pursuit of pleasure, the delegates being driven around the city in carriages. In the evening the visiting plumbers made merry at the Queen's Hotel where they were entertained by the visiting and city supply men, who distributed various souvenirs of the occasion.

The second business session was held on Wednesday morning, Vice-President Hammond presiding. The credential committee reported that the delegates whose names were given above were accredited delegates to the convention.

The following committee on resolutions was then appointed: Wm. Mansell, Alex. Cameron, R. L. Beattie, Walter Ryan, J. J. Coughlin.

On behalf of President Ross, Wm. Mansell expressed to the convention that officer's regrets at his inability to attend. About three weeks ago he was suddenly taken ill, and his doctor advised him to take six months' rest. Mr. Ross rebelled against this advice because of his anxiety to attend the convention and he consulted two specialists, who told him it might cost him his life to go to Winnipeg just now. Since Mr. Ross could not be present himself, it devolved upon Mr. Mansell to read the

President's Report.

To the National Association of Master Plumbers,, Steam, Gas and Hot Water Fitters of Canada:—

In presenting a report for the year that has gone since you elected me to fill the position of presiding officer of this national association, I but follow in the footsteps of my predecessors when I place before you a resume of the year's work, and this I will do in as concise a form as the nature of my report will allow.

At the outset, allow me to call your attention to my election to the position you entrusted to my care; you will remember that when the National Convention was in session last year, I was some thousands of miles away, and it was not for some time afterwards that I was made aware of the fact that you did me the honor of electing me as your president. While I can assure you that I fully appreciate your confidence and esteem, I could have wished that another had been your choice. When a man who takes an active interest in the conduct of his own business is absent as long as I was from mine, it naturally follows that on a return to duties one finds that it takes some time to take up the thread again; add to this the duties the position of president of the association involves, and you can readily see it would take some time before one could grasp the situation. However, as you have done me the honor to repose in me your confidence, I assumed the duties and have done the best I could.

In looking over the report of the last convention, I found that you had conferred upon me a further honor of electing me your representative to the National Association of Master Plumbers of the United States to be held in the city of St. Louis in September last, with instructions to the incoming executive to provide ways and means for carrying this into effect; and just here I may say that, following the usual custom, I requested the gentlemen who composed the sub-executive of the Ontario Provincial Association, together with Mr. Harry Mahoney, of Guelph, the National vice-president for Ontario to act as the National sub-executive. This committee was called together when the matter of representation at St. Louis was discussed, and it was decided to place the matter before the board of the Toronto Association with a request that that association consider the appointment of additional delegates to accompany the delegate you had already elected. This matter was taken up by the board of that association with the result that they recommended to their association that three delegates be appointed. This recommendation was adopted and the following gentlemen were selected, viz.: Mr. Fred. Armstrong, chairman of the board; Mr. R. W. Harrison, member of the board; and Mr. W. H. Meredith, secretary of the Toronto and Ontario Associations and a past president of the National Association. In accordance with the resolution passed at the last annual session, these gentlemen accompanied me as accredited delegates of this association.

Delegates to St. Louis.

The party left Toronto on Friday evening, September 2, arriving in St. Louis on the following afternoon, and, as previously arranged, registered at the Hotel Hamilton, the headquarters for the delegates. After looking over the ground, your delegates decided to get in touch with the board of directors of their National Association and talk over the situation with them and if possible have the board present our case in their report to the convention. An interview was readily accorded us and we were extended a hearty welcome. A general discussion took place just as to what was best to be done to bring the question before the convention, and we were finally asked to put our case in a concrete form and they would make it part of their report.

I can assure you that this was no easy task for your representatives to perform, realizing as they did that we were appearing before the older and stronger body, and it was quite natural to suppose that we would ask for more than we could give. However, after due con-

sideration, we drafted the following and laid it before them:

"That all members of the National Association of Master Plumbers of the United States who are invited from the city of Toronto to figure on work within said city shall first communicate with the secretary of the Toronto Association, it being thoroughly understood in doing so they shall not in any way invalidate their opportunity of securing the work for which they are tendering."

Just on the face of it, these resolutions would appear to deal with the city of Toronto only. The explanation of this is that one of the conditions was that we had to assure them that we were in a position to speak with authority. This we had from the Toronto Association, but, according to the resolution passed last year by this association, we were asked to report back to this convention the result of our mission and that our delegates would attend the convention in a fraternal capacity. However, it was understood that so soon as our National Association was in a position to discuss the question as was the Toronto Association, then they were prepared to take the matter up in the broader sense.

It was expected that our National Association would have met and discussed this question before their National met again, but, unfortunately, such was not to be, as their convention this year was held at the usual time, early in June, and this not only debarred us from reporting to this body, but also prevented us from taking the matter up of sending delegates to their convention in the city of Atlanta, Georgia, which was held June 6, 7, and 8.

We are pleased to report to you that the board of directors not only made our request a part of their report, but they also made a recommendation that "our friends from the sister association of Canada be made delegates with full powers save voting. This recommendation was unanimously concurred in by the convention and your delegates were then given an opportunity to address the convention, numbering some six hundred or more, from all over the Union, also a large number of visiting master plumbers and ladies who accompanied the delagates. The reception accorded us was of the heartiest nature, and I believe that a bond of union was created that will eventually cement the two associations together in a more friendly way.



Ontario Vice-Pres. R. W. Harrison, Toronto.

THE AMERICAN CONVENTION.

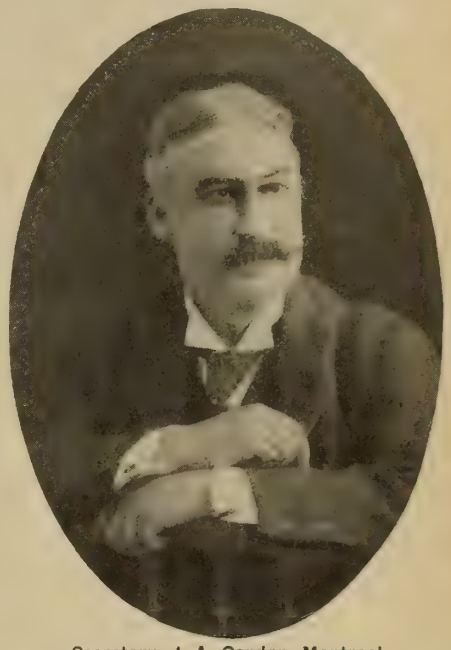
While we are on this subject, I will here include the action by the sub-executive in regard to the convention of the United States National for this year. When I found that the convention of this association would not meet until after the meeting of their association convention, I laid the matter before the members of the sub-executive, who took the matter up with the delegates of the Ontario provincial association, who were in annual session in the city of Guelph on April 21st and 22nd, with the result that that association took the matter up on behalf of this association and elected Mr. Fred Armstrong, of Toronto, and Mr. W. J. Walsh, of Hamilton, the president of the Ontario association, to attend on behalf of this national association. A further request was made to the Toronto association to elect one or more representative to accompany the two selected by the Provincial, and this was subsequently taken up by Toronto and W. H. Meredith was appointed.

These gentlemen attended the convention in the city of Atlanta, Ga., and were accorded a very warm reception, and again clothed with full power of delegates save in voting. An opportunity was accorded them not only to appear before the board, but also before the convention. Unfortunately they were unable to convey the opinion of this association, but did suggest that our association would favorably consider any proposition that the larger body might have to offer that would tend to a closer union of the two bodies. An initial move was made with this in view and a motion was passed that the incoming executive of their association take the matter into their consideration, with a view of having a committee of two appointed from each association to discuss matters of mutual interest, more especially just at present with the apprentice question prominently to the front. There is a strong probability that such a committee will be appointed in the near future, and it would be well for this convention to discuss the best disposition of such a communication when received.

It was also thought advisable to get in touch with the Master Steam Fitters of the United States, who operate as an entirely separate body. With this end in view the sub-executive, in conjunction with the Ontario association, appointed John McKinley, of Ottawa, and B. Noble, of London, to attend the convention of that association to be held in Atlantic City, N.J., on June 13, 14 and 15. In this case a request was also made of the Toronto association to consider the appointment of further delegates. This was taken up by that association with the result that R. W. Harrison was appointed. When the time for holding the convention of that association arrived it was found by Mr. McKinley that it would not be convenient for him to attend, and Messrs. Noble and Harrison were the only ones in attendance. These gentlemen were the recipients of a very warm reception, and were accorded all the privileges of delegates except voting. Their work was necessarily more of a missionary nature and they were successful in having the question referred to the incoming executive, who have promised to give the matter their early attention. Representatives would have been sent from these associations to this convention but for the great distance and the time the convention is held.

Progress in Canada.

As to our own association, I may say that the year has been one of marked success. In the Province of Ontario special efforts were put forth along organization lines, and a great increase made to our membership. This association issued a monthly directory containing the names of their membership, also the names of the manufacturers in accord. This has been found a source of strength to that association.



Secretary, J. A. Gordon, Montreal.

Since our last convention British Columbia has organized a Provincial association. I am not in possession of sufficient facts to place the information before you, but trust that we will be favored with representatives from that Province who will give full information. There has been also a strong association organized in the city of Calgary, and, altogether, this year has been one of encouragement and promise.

I very much regret that ill health during the year prevented my keeping in close touch with the various associations, and for the same reason I find at the last moment that I will be unable to meet you in the city of Winnipeg. This is a sore disappointment to me, for I was looking forward with a pleasurable interest to meeting my confreres in Winnipeg. However, my absence is no indication of a lack of interest on my behalf, or of weakness of the association. I cannot allow the opportunity to pass without thanking the secretary of the Toronto and Ontario associations for the assistance he has given me during the year. While his time is fully occupied, he was ever ready to do what he could, and through him I have been kept in touch with the associations.

In the matter of the publication of the annual reports, this was left in the hands of the incoming executive to take up. This was done, and Mr. Meredith was asked to take the matter up, which was subsequently done. A copy of the

report was mailed to each known address of the craft throughout the Dominion, and a very substantial balance was added to the treasury of this association.

I could prolong this report, but I fear I will weary you should I take up any more of your time, and I will close with expressing the hope that the convention will be both a pleasant and profitable one, and that the prosperity enjoyed by our fair Dominion will be enjoyed by the membership of this association. This, I may say, gentlemen, is almost entirely in our own hands. What we want is to exercise common judgment and establish and maintain a spirit of confidence one in the other.

We look back with considerable pride and satisfaction to the good accomplished by our association since its inception. We have brought our craft to a higher plane and have established a higher standard of work; the men of our craft are filling the positions they are capable of occupying and are commanding greater respect than they ever did.

In conclusion, allow me to say that while I am not with you in the body, my thoughts will be of you, and I again express the hope that the tenth annual convention will be known as the most harmonious and successful convention ever held.

All of which is respectfully submitted.

Very truly,

ROBERT ROSS,
President.

Toronto, August 3rd, 1905.

Vice-President's Report.

The next report read was that of Vice-President Hammond, of Winnipeg. The report was as follows:

To the President and Members, etc.:

My position as national vice-president extending all over Canada has been reviewed by me at a distance. I can assure you it was pleasing to me to read some of the good work done, especially by our Canadian delegation to the St. Louis convention. I am sure the experience our friends across the line must have had must have been quite visible to our delegates, so that we can expect some good recommendations at our tenth annual convention that will help our younger organization by the experience of the older. This interchange of lists is a good thing in itself, and is a move in the right direction, if we take the interest we should by sending new lists every month. The aims and objects of the two associations are one and the same, therefore the closer we keep in touch with one another the result must be a better understanding, also beneficial to our organization.

We still find in the last year Ontario far ahead of Provincial associations in organization, and it has spread itself from one end of Ontario to the other, and it should be very encouraging to the members to know it has been the most successful year in the history of their associations, with so large an increase in membership as is shown by the report of the secretary. I am sorry that Winnipeg has not the cities around her in Manitoba to have local associations the same as Ontario, for I believe with one to outdo the other close together has much to do for strong organizations.

I am glad to report that British Columbia has her Provincial association, which is very encouraging when we find that only a year ago we did not even have a delegate from the Far West, but we will no doubt find them with us in 1906. Now that British Columbia has fallen in line, why not Quebec, Nova Scotia, Manitoba, with their older associations, help build up the national association as we should better than we knew. In closing I might say that the work of the local association has been very trying. I have done my best for all association matters, and shall try to do so in future for the benefit of the trade in general.

A. J. HAMMOND.

Secretary's Report.

Secretary J. A. Gordon, of Montreal, then submitted his report, which was as follows:

To the President and Members of the National Association of Master Plumbers:

Gentlemen,—When I had the honor to be elected secretary of the national association at the convention in Toronto, I felt that I had a very responsible and onerous position to fill, but I must say that the prompt and courteous replies which I have received to most of my correspondence has made my position more a pleasure than a duty.

I am still of the opinion that the secretary should be appointed from the same city as the president, which would save considerable delay in corresponding with and replying to questions from local associations, but real efficiency can only be obtained by the appointment of a permanent secretary.

As no record of the correspondence of former years appears to have been kept in a form which would be at all serviceable to the new officer, it was impossible for me to continue the work so ably carried on by my predecessors, but I have at least answered to the best of my ability every communication received, and trust that my efforts to spur on the local associations have not been without some result.

JOHN A. GORDON.

Nova Scotia Vice-President.

The report of James Farquhar, vice-president for Nova Scotia, was read by Secretary Gordon. The report was as follows:

As Provincial vice-president of Nova Scotia I regret I am unable to report any great work accomplished. I fully intended during the year to visit a number of our towns and try and interest our brother plumbers, but up to the present I have been unable to do so. Business this year has not been up to the average, due, it is claimed, to the very severe Winter, which completely paralyzed our lumbering, fishing and mining industries, which are the backbone of our Province. In conclusion, let us hope that next year will greatly improve all conditions.

JAMES FARQUHAR.

Quebec Vice-President.

The following report of the Quebec vice-president was submitted to the convention:

In presenting to you the tenth annual report of the Province of Quebec, would say business generally is very good, and prospects for the future are bright.

The past year has been an eventful one for the Master Plumbers' Association, of Montreal, beginning with a strike of the plumbers and steam fitters, which lasted four months from May 1 to September 1, the master plumbers holding out for the open shop, with the result that all shops are open in the city of Montreal.

Early in the year an association called the Master Plumbers' Club was formed, most of the members being members of the Master Plumbers' Association, and the work of same is carried on in a similar way to associations in other cities details of which may be had from our delegates if of interest to the convention. Our association has had several meetings with the wholesale trade, and in the near future we are looking forward to a satisfactory arrangement with them as to prices, etc.

The Quebec City Association, I understand, will be reorganized at an early date, also an association is to be formed at St. Hyacinthe. The thanks of the association are due to Messrs. Mansell and Meredith, of Toronto, for their good advice given to us when here last April, and I take the opportunity of extending thanks to them on behalf of the Montreal association. Before the close of this year we expect to amalgamate the two organizations now in Montreal.

I regret that the force of circumstances will not allow me to be with you in convention this year. Kindly convey greetings and best wishes to the members.

W. R. J. HUGHES.

Ontario Vice-President.

Vice-President Mahoney being too modest to read the report for the Province of Ontario it was presented to the association by R. W. Harrison, of Toronto. The report, which was very encouraging, was as follows:

As Provincial Vice-president for Ontario, I beg leave to submit my report. Having been re-elected vice-president for Ontario, I felt that I must try and do the work allotted to me to the best of my ability. Ontario to-day has one of the strongest associations on the continent, and is without doubt the backbone of the National. Our membership the past year has increased wonderfully, nearly all the cities and towns having local branches, and now the villages are awakening to the necessity of an association. The organization committee are to be commended for the good work they have performed during the past year. The past president, Mr. Mansell, was, and is to-day, a tower of strength to the order, and to his untiring energy and executive ability we owe much.

The secretary, W. H. Meredith, needs no introduction; his motto is honesty, integrity and unity; these combined can never fail.

Our president, W. J. Walsh, of Hamil-

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ton, will show to the members that he can and will fill the president's chair with credit to himself and that the association will grow under his guiding hand.

My successor will have an easy office to fill, and will find, as I have, that all the work is so arranged that the vice-president has practically nothing to do.

We held our annual convention in Guelph on April 21 last, and had one hundred delegates present, all appearing to enjoy themselves. The keen interest shown while in convention predicts for Ontario a bright future in the plumbing trade.

HARRY MAHONEY.

Manitoba Vice-President.

The following report of the state of the work in Manitoba was presented by the Manitoba vice-president :

In acknowledging the honor conferred upon me at the last annual meeting in appointing me your Provincial vice-president for Manitoba, I regret that the year's work has not led to more satisfactory results as far as the association is concerned.

In my travels to the western portion of the Province and the Northwest Territories, I found the same busy times existing there that we are experiencing here, and where a year ago the trade was not represented in many of the towns I visited. I found on a later visit that from 3 to 6 shops were opened up and doing business at these towns, and the need of an association among these shops was very evident to me, but I was unable to persuade those interested to take steps and organize. It is very hard for a Provincial vice-president to give the attention to the extensive work that is required, as the amount provided for this purpose does not go very far in this western country, where the towns are so scattered, and it will be necessary, if the association desires to extend its work, to increase the appropriation so that whoever may be appointed to the position will be able to give some attention to the outlying districts, where the organization will be beneficial to the trade and the association.

An association has been formed at Calgary, of which W. Head, of that city, has the honor of being the first president. Mr. Head communicated with me as to organization, but at that time I was away from home and was unable to attend to it, but when I returned home I learned that Mr. Head had been east and was fully advised by the secretary of the National Association, and I decided that, as I did not know on what lines the advice had been given, it would be better to let the matter stand, and I took no further action.

With the remaining members of the local trade I am glad to welcome our eastern friends to Winnipeg, the most progressive city in Canada. Many of you are visiting Winnipeg for the first time, and will see for yourselves that we have in the west a city which is all it is represented to be, and should you have time to take a trip further west I have no doubt that you will admit that we are right when we claim to have in Winnipeg the natural capital of Canada, both by her position and the vast country on every side she is called upon to serve.

Again thanking you for the honor conferred, I would urge upon the association the necessity of making ample provision for the extension of the organization work in the west, and make it possible for sufficient time being allowed for a person to stay and complete organization work in any town where it would be considered necessary and beneficial to that trade and the association.

J. W. MOULD.

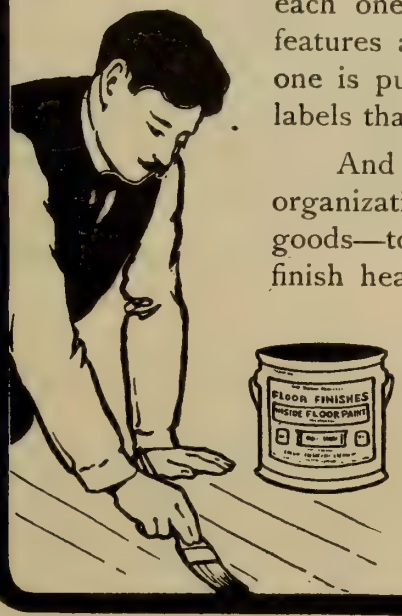
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Northwest Territories.

The following report of the state of organization in the Territories was submitted by E. J. Young, of Calgary :

I beg leave to report that after several years of discussion in Calgary we formed an association of master plumbers, with five members, about one year ago. Since then we have added two new members. Our association is now working harmoniously to the benefit of all concerned. The city of Edmonton have affiliated with the Calgary association during the past year, and are, we believe, working very harmoniously.

E. J. YOUNG.

On motion of Wm. Mansell, of Toronto, and G. C. Denman, of Montreal, all the above reports were referred to the resolutions committee for their con-

Select Committee.

The following members were then appointed to the select committee : K. J. Allison, Toronto; J. Watson, Montreal; G. C. Denman, Montreal; Thos. Stewart, Winnipeg; Stephen Mellon, Hamilton.

R. W. Harrison, Toronto, then gave formal notice that at the next annual convention he will move that Provinces having their own local associations be given the power to elect their own vice-president. Of course for Provinces not yet organized the National Association would retain the right to appoint vice-presidents. This notice of motion precipitated a long discussion by R. W. Harrison, the mover, Toronto; Harry Mahoney, Guelph; Hugh Wallace, Hamilton; C. E. Gate, Winnipeg; J. Watson, Montreal, and F. G. Johnson, Ottawa. Most of the speakers seemed to favor the principle of the motion.

The convention then adjourned.

THIRD SESSION.

At the Wednesday afternoon session the recommendations of the resolutions committee respecting the president's report were submitted, and considered clause by clause. As finally adopted by the convention, this report was as follows :

1. That this association send two delegates to wait on the National Association of Master Plumbers and the

National Association of Steam Fitters of the United States, which bodies meet in the same town at about the same time with instructions to take up the matter of American firms figuring on Canadian work, and vice versa, the idea being to prevent this occurring without notice being previously given to the secretary of the association in the vicinity where work is to be done. Any Province desiring to send additional delegates to accompany the National representation may do so at their own expense. These delegates are to act in accordance with instructions given by the incoming executive.

2. That we consider it advisable that supply houses from the United States doing business in the Dominion of Canada shall first ascertain from the secretary of local associations the names of those who are recognized members of their local associations.

3. That the dates of the next Canadian convention be arranged to take place about one month after the American convention, so as to avoid the loss of time that has occurred the past year.

4. That in order to comply with the move made by the American association in appointing two of a committee to meet two of the Canadian committee, to discuss matters of mutual interest, we appoint the same two delegates that are to attend the American convention to constitute the Canadian committee, and to have power to act.

5. That the National association at the present meeting consider the advisability of making some arrangement with the local and Provincial associations in respect to issuing a Dominion directory containing the names of the members of the National association, also a list of the manufacturers and jobbers in accord. We recommend that these lists be prepared and issued by the sub-executive.

6. In the matter of publishing the annual report we recommend that this be left in the hands of the incoming executive, as was done last year, also that the necessary number required for circulation among our French members be printed in the French language.

Bulk Contractors.

R. W. Harrison, Toronto, submitted an important resolution to the effect that the association place itself on record as opposed to submitting tenders to bulk contractors. Speaking to his resolution Mr. Harrison said that the evil to which he referred exists in all parts of Canada. There are many men calling themselves bulk contractors who have no money. They sub-let their contracts and live on the sub-contractors. They are mere "grafters" trading on the capital of the sub-contractors, and it is time the evil was checked. This was one of the burning questions at the conventions in St. Louis and Atlantic City.

Secretary Gordon remarked that in Montreal this question is under discussion by the local association.

C. E. Gate, Winnipeg, said that the bulk contractor is one of the greatest evils in Winnipeg. "The bulk contractor has more gall here than in Toronto," he remarked. "They actually dare to ask us to tender to them for ten per cent. less than to the propcietors. I well remember when the first master plumbers' association was formed in this city 25 years ago, and it was for the purpose of dealing with this very evil. Most of you will bear me out in saying that our greatest losses are from the bulk contractors, who are worth nothing and have no property."

R. W. Harrison added to his previous remarks that in every town the plumbers would have the support of the architects in opposing the bulk contractors. He hoped that members would refuse to submit tenders to any but architects and owners.

The resolution carried.

The following gentlemen were appointed to the nominating committee to nominate officers for the ensuing year: E. D. Higginbottom, Fort William; H. Mahoney, Guelph; F. G. Johnson, Ottawa; C. E. Gate, Winnipeg, and J. Watson, Montreal.

There was a keen contest for the honor of having the next convention—Ottawa, Victoria, Guelph and Fort William being named. The vote was by ballot, and Ottawa was found to be the choice.

CONCLUDING SESSION.

Thursday morning saw the final business session, and it was almost 2 p.m. before the meeting was closed.

Election of Officers.

The nominating committee then presented their report and the election of officers was proceeded with. The result of the election was as follows:

President—A. J. Hammond, Winnipeg.

Vice-President—F. G. Johnson, Ottawa.

Secretary—Jno. A. Gordon, Montreal.

Treasurer—Harry Mahoney, Guelph.

Nova Scotia Vice-President — William Wooten, Halifax.

New Brunswick Vice-President — D. Shea.

Quebec Vice-President—J. A. Marier, Montreal.

Ontario Vice-President—R. Harrison, Toronto.

Manitoba Vice-President—Fred Litster, Winnipeg.

Alberta and Saskatchewan Vice-President—E. J. Young, Calgary.

British Columbia Vice-President — J. J. Coughlin, Victoria.

Chairmen of standing committees:

Committee on Legislation—Hugh Wallace, Hamilton.

Apprenticeship Committee—J. Watson, Montreal.

Sanitary Committee—C. Grover, Winnipeg.

Essay Committee—C. E. Gate, Winnipeg.

The president and vice-president were appointed delegates to the Unites States conventions.

A resolution was passed expressing the regret of the association at the unavoidable absence of Mr. Ross, and expressing the hope that he may soon be restored to health. This resolution, moved by William Mansell, Toronto, and seconded by H. Mahoney, Guelph, was carried unanimously.

Votes of thanks were passed to the retiring officers, the Winnipeg association, and to the trade press. On behalf of the trade press, F. R. Munro responded for Hardware and Metal, and W. Wood for the Plumbers' Trade Journal of New York.

The convention was then brought to a close by singing "Auld Lang Syne."

(*Continued in next issue.*)



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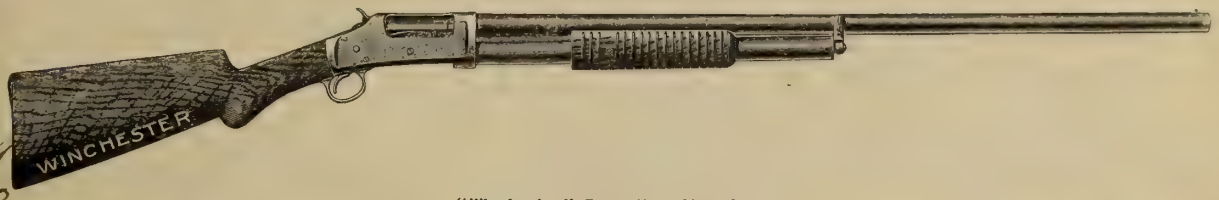
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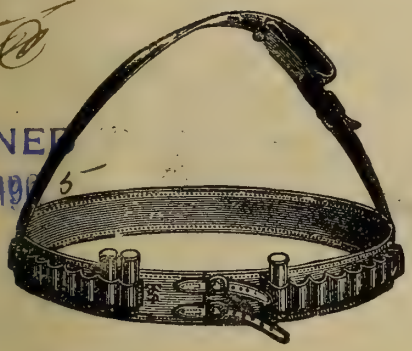
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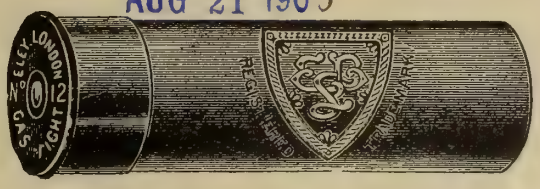


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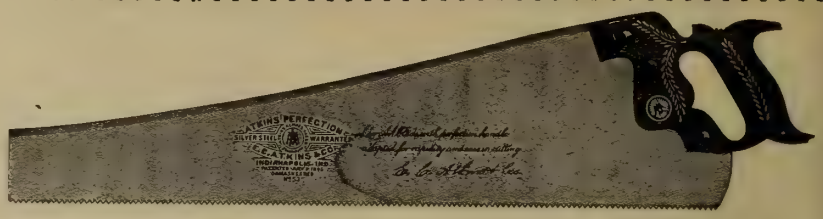
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BUILDING AND CONSTRUCTION

NEW BUILDING MATERIAL.

THE sole inventor of a process of crystallizing a product of stone, gravel, clay and cement, visited Toronto, Toronto Junction and Mimico last week, and procured samples of shale rock, sand and other materials, with which he returned to Buffalo, where the company of which he is managing director is putting up a plant. They propose to establish a Canadian plant, where all the necessary machinery, moulds, chemicals, tints, etc., may be manufactured and shipped to local plants to be erected throughout Canada. Both the buildings of the parent plant and the local factory will be constructed of their own material. The United States company erect a number of dwelling houses of different design and construction in the neighborhood of their plants, and these are sold to their employes on easy terms. The material possesses the advantages of being cheap, durable and handsome, and its manufacture in Canada should tend to lower the cost of workingmen's homes.

NOVELTY IN LAYING CONCRETE.

A RATHER novel method of laying concrete has recently been adopted by J. F. Lyman, of Modesto, Cal., in the construction of a concrete wall, according to the Stone Trades Journal. Between the framing forming the outer and inner faces of the wall collapsible hollow cylinders somewhat less in diameter than the thickness of the wall were placed vertically at intervals, the cylinders having previously been perforated with several holes. The object of this was to drain the water from the fresh concrete as the latter was placed round the cylinders. The concrete having been filled in round the cylinders, it was allowed to set during the night, and the water which had collected in the cylinders was then pumped out and the cylinders were withdrawn, the space which they occupied being filled with concrete. It is stated that the hollow cylinders contained from 2 in. to 6 in. of clear water at the end of from ten to twelve hours, the water having drained from the concrete. The object in providing this extra drainage was to procure a more uniform set throughout the mass of the concrete. It is also stated that concrete laid by this method is usually free from cracks and very uniform in strength.

HARDWARE FIRM BUILDING.

The Trees, Spriggs Co., importers and manufacturers of saddlery, hardware, leather goods, fur robes and coats, Winnipeg, have started work on a five-storey brick warehouse on Ross street. The building will be 45 feet wide by 110 feet deep, and the estimated cost is between $30,000 and $40,000.

The business of the firm has grown to such proportions, although it has only been established five years, that the new building was an absolute necessity. Work on the building will be rushed, as the firm expects to be settled in its new quarters by Sept. 1.

PEDLAR PEOPLE ENLARGING.

The Pedlar People, Oshawa, have of late been adding considerably to their already extensive plant, with the result that their manufactory now occupies a complete block of territory. The latest machinery is being installed in the new additions, conspicuous among which is a special scale-removing machine, to be used in connection with metal lath.

TORONTO'S BUILDING BOOM.

The building statistics for the first seven months of this year in Toronto, as compared with the same period last year, show as follows :

	1904.	1905.
Value ... ...$	3,470,433	$5,651,624
Value for July	844,550	1,157,298

BUILDING NOTES.

The St. John Globe is to build a five-storey office building.

Frost & Wood are to erect a large warehouse at Edmonton.

The Bank of Commerce will erect a bank building at Pincher Creek.

A $50,000 elevator is to be built by T. Bullock & Son, Crystal City, Man.

A. M. McKenzie, Hamilton, has secured a permit for a $2,000 residence.

Mr. Sam'l Bennett has the contract of building the new school house at Wroxeter.

R. Fuller has secured a permit to erect a $1,675 house on Hawarden avenue, Brantford.

Samuel Champion, Vancouver, is to build a row of stores on Westminster avenue in that city.

Loo Gee Wing, a wealthy Vancouver Chinaman, has contracted for a large hotel and theatre building.

The Canada Steel Goods Co. has taken out a permit to erect a $5,000 cement and frame factory in Hamilton.

A. E. Blow, Fort Frances, has been awarded the contract for building the new Presbyterian Church manse, to cost $1,350.

Concrete building blocks are being manufactured at Fort Frances, and a building is being erected of them for H. Williams.

H. J. Franklin, stationer, Vancouver, has secured a permit for an $8,000 brick and stone building, part of which will be occupied by his own business.

Elm Creek, Man., reports a building boom. Among the new structures are a brick school, $12,000; Anglican Church, $1,500; and several new dwellings, a total of $35,000.

Mr. C. E. Benell, of Brandon, has secured the work of erecting a 50,000 bushel elevator at Griswold, and is preparing the plans at his office. The elevator is for the Griswold Milling Co.

Amongst those building residences at Sudbury are Messrs. S. E. Wright, James McCool, S. Muirhead, J. A.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manag
Ask for quotations for Septic Tanks.

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses Cheese Factories, Cellar, Stable Floors, etc.

Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
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Don't Forget the Name.
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO.
TORONTO, ONT. LIMITED.

...FULL STOCK...
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOS, N QUE.

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

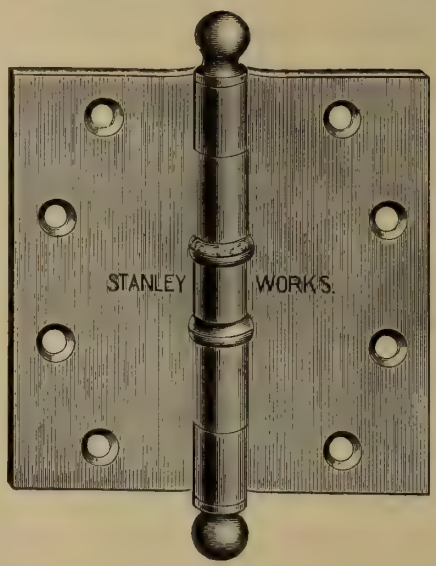
Stanley's Ball-Bearing Hinges

FOR ALL THEIR IMPORTANT WORK. DEALERS SHOULD HAVE THEM IN STOCK.



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE



MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.

Darkness Defeated

If there is one thing more than another that people cannot perpetually endure it is darkness. If offices are dark employees complain. If houses are dark people move out. Yet there is no reason why one hour's darkness should be endured—in the daytime.

MAXIMUM LIGHT GLASS

stands as the vanquisher of darkness. How well it has performed this mission may be gleaned by the world-wide use of the glass and the endorsation of it by thousands of architects, builders, etc. **MAXIMUM LIGHT GLASS** has stood the crucial tests, where other systems have failed. It is the only daylight increasing system worth your consideration. Get Sample and Booklet at once.

Sole Canadian Agents:

THE HOBBS MANUFACTURING CO., Limited, LONDON, ONT.

Class Importers and Manufacturers.

Mulligan, G. A. Burroughs, C. A. Campbell, Thomas Hennessey, A. B. Gordon, S. J. Koloney, F. Turpin, and Louis Gravelle.

The C. N. R. has let the contract for a $40,000 station at Port Arthur. Five new stations are also to be built between Rainy River and Port Arthur. It is said one of these new stations will be built at LaValle and the other four east of Atikokan.

The Edmonton papers have advertisements calling for tenders for the erection and completion of a brick and stone station building to be erected at Edmonton for the Canadian Northern Railway Co. Also tenders for a ten stall engine house at Edmonton and frame station building at Fort Saskatchewan.

Building permits issued in Winnipeg up to the first week in August aggregate $8,125,000. This is considerably in excess of the amount at the same time last year. It was not until October, in 1904, that the permits passed the $8,000,000 mark although the C.P.R. terminals and other unusual works were included.

Messrs. Finley & Spence, Montreal, have drafted plans for the new eight-storey office building to be erected by the Federal Life Assurance Co., in Hamilton. The building will cost a quarter of a million dollars, and will be constructed of Indiana limestone or Kentucky bluestone. The framework will be of steel and protected by terra cotta, the interior walls being of terra cotta also, thus rendering the whole building fireproof.

TORONTO BUILDING PERMITS.

R. F. Davey, store and dwelling, Queen street, $3,100.

D. Chalmers, brick and stone dwelling, Avenue road, $7,000.

J. C. Walsh, stone and brick dwelling, Beaty avenue, $4,000.

Miss Lizzie Rix, brick dwelling, 184 Arthur street, $2,000.

Mrs. T. Swanton, roughcast dwelling, 58 Lewis street, $1,800.

J. Turner, one pair roughcast dwellings, Leslie street, $2,000.

D. Campbell, brick and stone dwelling. Rusholme road, $5,000.

J. F. Peterkin, brick and stone dwelling, Dowling avenue, $6,000.

George Phillips, brick detached dwelling, 42 Robert street, $3,000.

J. H. Eyes, stable, corner Avenue road and Heath street. $2,600.

Consumers' Gas Co., one-storey retort house, Eastern avenue, $50,000.

G. Brown, one pair roughcast dwellings, Cummings street, $2,200.

Hugh Gunn, brick and stone residence, Roxborough street west, $4,000.

Frederick Orford, four pair roughcast dwellings, Pape avenue, $12 000.

Waters & Elliott, three attached brick dwellings, Victor avenue, $6,000.

S. Horton, one pair brick and stone dwellings, Wright avenue, $3,500.

A. C. Beardmore, alterations to dwelling, 75 St. George street, $3,000.

Wm. E. Weale, stone and brick dwelling, 440 St. Clarens avenue, $2,000.

H. Hanks & Sons, brick dwelling, corner Hepbourne and Havelock streets, $2,000.

J. J. Walsh, five pair semi-detached stone and brick dwellings, Kendall avenue, $28,000.

Trustees Grace Hospital, two-storey brick laundry, corner College and Huron streets, $6,000.

THE BARREL

The Barrel of ***THE HAMILTON RIFLE*** is constructed with the utmost care under patents exclusively owned by ***The Hamilton Rifle Co.*** and by a process that brings the metal used to the highest degree of hardness. The rifling is done by a system which ensures an absolute uniformity in every barrel, thus completing a rifle which for accuracy, durability, strength and lightness is not excelled by any product now on the market. Your Canadian jobber will tell you about ***Model No. 23, Model No. 15*** and ***Model No. 19,*** or you can write us direct.

THE HAMILTON RIFLE CO.

Dept. 71 PLYMOUTH, Mich.

Before placing orders for **CHAINS** and **ANCHORS, WIRE RODS, TUBES, ETC.** **ETC**, communicate with :

Rd. JOHNSON, CLAPHAM & MORRIS, LTD.

MANCHESTER, ENGLAND

who will quote delivered any point as may be required.

A PERMANENT and Handsome Roof.



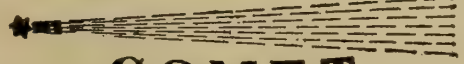
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Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR

GILBERTSON'S



COMET

Brand Galvanized Sheets

Cost less than some other brands but will do your work equally well—Every sheet guaranteed.

Makers : W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

YOU, US AND THE OTHER FELLOW

No Sentiment in Business

There can be Trade without much BUSINESS about it.

Our classified article list of Industrial Products is a book of information. It tells you where articles are manufactured, what the articles are made of, and the uses they are put to. THE CITY MAN KNOWS all about it, DO YOU? Cloth bound, 400 pages, price $2.00. Ask us the price of our Canadian Industrial Blue Book for the next 30 days.

The Manufacturers List Co., - - - Toronto.

When Your Customer Says :

"I want you to put in for me a heating plant that will be first-class in every respect," this reply will meet all the demands of the situation :

"Then I will use the

PEASE

ECONOMY"

From your standpoint the installing of a Heating Apparatus presents two desirable opportunities—first, to add to your profits and, second, to please your customer and thus gain a permanent hold on his trade. How much easier to accomplish this when you use a Heater that is time-tested and sure—one that the great majority of our people know to be the best !

We can supply your every need in Heating Apparatus and we invite your inquiries.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE Canadian Fairbanks Co., Limited, Montreal, have been awarded the contract for the power transmission appliances, including Fairbanks' wood split pulleys and universal giant hangers for the new factory of the Gananoque Bolt and Nut Works.

The new chair factory in Listowel, Ont., is now running.

The E. & N. Railway may be extended north from Nanaimo to Cumberland, N.B.

The new tannery in New Westminster is now completed, and practically all the machinery installed.

John Hanbury, who owns sash and door factories at Brandon, Man., has just commenced the erection of a sawmill at Elko, B.C.

The town of Whitby has voted a bonus to D. L. Holden, windmill and power pump manufacturer, Michigan, and he is now preparing to establish his plant in Whitby.

The town of Port Hope is considering the proposition of installing a municipal lighting plant for street lighting purposes. Electricity will be generated by water power.

The large lumber and shingle mill of Small & Bucklin, New Westminster, B. C., is going up quickly. It is claimed that this will contain one of the finest planing and saw-mill equipments on the Pacific coast.

In consequence of enquiries received from the United States by the Goold, Shapely & Muir Co., Brantford, Ont., for their new continuous concrete mixer, a company has been formed in Buffalo with a capital of $75,000, to make the mixer on the American side.

W. N. Danley, owner of the Shawville (Que.) Mrble Works, thinks that there is sufficient excellent granite and marble in the district of Shawville to warrant an important quarrying industry being established there. All that is necessary is the capital.

The double tracking of the I. C. R. necessitates the building of a new bridge over the Sackville River at Bedford, N.B., and construction is now well under way. The construction is being done by F. A. Rounan & Co., St. John, and the steel part by the Dominion Bridge Works.

The Allis-Chalmers-Bullock, Co., Limited, Montreal, have been awarded the contract for the electrical and hydraulic machinery for the city of Nelson power plant on the Kootenay River, B.C. The amount of the tender for the electrical machinery was $29,985, and $13,600 for the hydraulic.

The new plant of the Dominion Iron & Steel Co., Wabana, Belle Isle, Nfld., has been completel. The output at Wabana for the month of July was the largest in the history of those mines, 75,000 tons of ore being mined and shipped for the month. This amount can now be doubled.

The Canada Foundry Co., Limited, has recently closed a contract with the Western Fuel Co., of Nanaimo, for two seventy-two inch diameter by eighteen feet long a hundred and fifty horsepower horizontal tubular boilers, working pressure a hundred and twenty-five pounds per square inch.

The town of Galt has at last agreed to permit the Grand Valley Railway Co. to lay rails on the streets of the town and thus to connect with the G.H. &. P. Railway. Up to the present time the Grand Valley have been running their cars to the corporation limits, and connecting with the G. H. & P. by 'bus.

Alexander Maclean, Canadian trade agent in Japan, writes to the Government that there will probably be a falling off of imports into Japan during the second half of the year. The foreign trade returns for the first half year show that the exports amounted to $71,369,999 and the imports were just twice as much. Such an enormous excess of imports over exports during a half year is unprecedented. The purchase of war supplies is largely responsible for this condition of affairs.

Companies Incorporated.

The Windsor & Cobalt Mining Co., Limited, have been incorporated with a share capital of $150,000.

The Wallaceburg Brass & Iron Mfg. Co., Limited, has been incorporated with a share capital of $40,000.

The Power & Gas Machine Co., Limited, of Galt, have been incorporated with a share capital of $100,000, purpose manufacturing gas, steam and air engines and incidental machinery, etc.

The D. M. Stewart Manufacturing Co., of Canada, Limited, has been incorporated with a capital of $40,000, for the purpose of manufacturing gas burners, electrical insulators, etc. The directors are C. S. Steward, Chattanooga, Tenn.; W. H. Frazier, S. L. Ezell, A. J. Thomson and S. Johnson, all of Toronto.

The Coleman & Bucke Consolidated Cobalt-Silver Mining Co., Limited, Ottawa, have been incorporated with a share capital of $1,000,000, for the purpose of exploiting cobalt deposits in the Temiskaming mining division. It will carry on, in all its branches, the operations of a mining, milling, reduction and development company. The directors are W. H. Powell, J. McIsaac, Jr. J. Heney, F. R. Latchford, and A. A. Antoine, of Ottawa.

Radiation and Decoration.

UNDER the above caption the American Radiator Co., of Chicago and Brantford, have issued one of the handsomest books on decorative art in radiation that has ever been seen in the office of Hardware and Metal. The centrepiece is a colored reproduction of the handsome and complete exhibit made by the company at the St. Louis Exposition, but in addition to this the fifty odd pages include a large number of handsome engravings in colors of radiators enclosed under windows or cosy corners. The reading matter is also especially interesting. Another valuable book sent out by the company describes and illustrates the Vento cast iron hot blast heater. The books will be appreciated by every steamfitter and heating contractor. Hardware and Metal shrould be mentioned by any who send for copies.

Fan Motors.

Munderloh & Co., dealers in electrical supplies, Montreal, are presenting their customers with a neat little booklet describing the comforts of alternating current fan motors. The feature is the fine half-tones, illustrating electric fans in business offices, music rooms, club dining rooms and bowling alleys. The booklet will be sent on application.

Boiler and Heater Cleaners.

Catalogue No. 6 issued by the Freeport Plumbing & Heating Co., Freeport, Ill., describes Dehn's patent automatic feed water back, a device to overcome the accumulation of lime, magnesia and incrusting minerals in water fronts, heaters, furnaces, boilers, etc. The booklet is a small 40 page affair, but its worth cannot be judged by its size, as it's well worth sending for. Do not forget to mention Hardware and Metal.

"Our New Home."

Canadian Fairbanks Co., Limited, draw attention to their recent move into larger quarters, by a large card hanger showing the new building and touching upon the wonderful development of "Canada's Leading Machinery and Supply House" in short paragraph form. If you haven't one of the cards send for a sample and mention this paper.

Small Springs.

A most artistic booklet, giving valuable data on small springs, was issued on July 15 by the Wallace Barnes Co., of Bristol, Conn. The cover, embossed in blue, on a light brown ground, is a feature. The booklet contains thirty-six pages of reading matter, is beautifully printed in two colors, and is copiously illustrated by half-tone cuts of the goods manufactured by the firm. The Wallace Barnes Co. have been in business since 1857. Everyone interested in small springs, wire and cold-rolled steel, should have one of these catalogues, which will be sent to any address on mentioning Hardware and Metal.



No. 17. OSHAWA, ONT. AUGUST 19, 1905

LATH

MR. HARDWAREMAN, if you could spend a few hours at any of our branches:—Montreal, Toronto, Ottawa or Winnipeg, and see for yourself waggon after waggon back up for 5 bundles, 10, 15, 20, 25 and more bundles, of Perfect Metal Lath, you would then realize that "Pedlar Talks" are not in vain.

SALES

If you can recall our previous "Pedlar Talks" you will readily notice that we have never referred to any so-called fire-proof lath manufactured by anybody. Why?

Because we don't have to "knock" anybody's goods to sell our own. An instant **comparison** sells **Pedlar's Perfect Expanded Steel Lath** at sight.

OPPORTUNITY

We have sold more lath in the last 8 months than has been previously sold in Canada in 8 years. We make our lath to **sell** not to look at.

Hundreds of middlemen have realized handsome profits by handling our product. Ask yourself why **you** have not shared these profits and then write us.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

PAINT, OIL AND BRUSH TRADES

THE PREPARATION OF SURFACES.

IN preparing a panel of wood or cardboard for the reception of a painting in oil colors, it is desirable to make the ground agree with the layer which forms the painting in respect to expansion by heat and moisture, otherwise cracks are sure to occur in time. The panel may be painted with boiled linseed oil, which penetrates to a certain depth and is hardened by oxidation to a thin, tough coating, identical with the hardened oil in which the pigments are imbedded. A painting on such a ground may be exposed to great variations of temperature without danger of cracking. The preparation takes time, as the oil must become quite hard before the painting is begun. It is advisable to oil both sides of the panel and the edges, to prevent danger of warping from dampness. The best way to oil panels in quantity is to place them on edge, separated by small blocks af wood, in a tin vessel which is then filled with well-boiled oil, heated gradually from beneath to 110 deg. or at most 120 deg. C. (230 deg. to 248 deg. F.) and allowed to cool. The pores of wood and cardboard are filled with air, and both contain large quantities of water, the moisture in thoroughly air-dried wood amounting to 20 per cent. by weight.

During the heating the air is first driven out, and then the water, which at 120 deg. C. may be assumed to be entirely expelled, and during the slow cooling the external air pressure forces the oil so deeply even into hardwood that panels a quarter or a third of an inch thick are saturated throughout. The panels are taken out and allowed to drain, and the excess of oil is removed with a cloth or brush. They are then kept standing on edge, without touching each other, for several months, in order to harden the oil in the interior as well as on the surface.

Paintings on panels thus prepared are not only uninjured by variations in temperature and humidity, but they may be cleaned by washing and are not attacked by insects, which often ruin unprepared panels.

Metallic grounds are little used by artists, although very small paintings are sometimes executed on plates of copper. Such plates, though strong, durable, and proof against dampness, are peculiarly liable to produce cracks in the paintings executed on them, because they expand or contract so greatly and so quickly with every change of temperature. This defect, however, can be remedied to a great extent by giving the metal a tough, elastic coating, for which purpose linseed oil is again employed. The plate is roughened with a fine file, slightly polished with pumice stone, washed, dried, and immediately painted very thinly with hot oil, which penetrates into all the irregularities and, when hardened, adheres firmly, the adhesion being increased by chemical action of the acids in the oil upon the copper, which thereby assumes a greenish tint. Three coats of oil are given, each of which is allowed to become quite hard before the next is applied.

The painting, therefore, rests on a tough, elastic coating of hardened oil, which protects it from the effect of expansion of the metal.

Sheet-metal signs and the lettered and decorated tin boxes in which smallwares are sold soon become defaced when exposed to changes of temperature, particularly if the colors have been mixed with quick driers, as is generally the case. The process above described is too costly to be applied to most of these articles. A simpler method consists in giving the metal one coat of thoroughly boiled oil, or better drying oil, and grinding the colors in the latter without any special drier. The plates do not dry very rapidly, but this simple process is not only cheaper, but more effective in securing permanence than the use of colors ground in soft resin varnishes, as practised by some manufacturers.

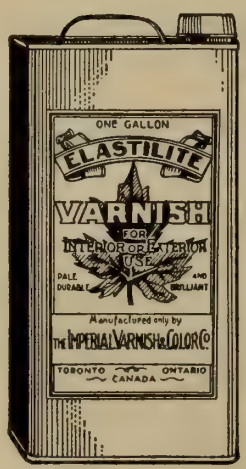
Plaster and stucco are painted in both oil and distemper. The colors sink into the porous wall, and one spot may have to be repainted several times to produce the desired effect. This inconvenience is easily avoided by giving a preliminary coat of size for distemper, or of hot boiled oil for oil painting.

The finished painting should receive a coat of varnish or paraffin. When paraffin is used, however, the wall should be neither sized nor oiled before painting, and the colors should be mixed with a minimum quantity of thin size. When dry they are covered with melted paraffin, hot enough to sink well into the wall before solidifying, a condition which is made known by the instantaneous disappearance of the gloss. Additional coats of paraffin are then applied until a permanent gloss is produced, and the surface is finally polished with a woolen cloth. Such mural paintings are very permanent, as the chemically-inert paraffin protects both the wall and the colors.—Scientific American.

GOOD SUGGESTIONS.

To remove paint, varnish or resin stains from white or colored cotton and woolen goods, use oil of turpentine or benzine, followed by soap-suds. For silk, benzine, ether, soap; hard rubbing is to be avoided.

Cutting the putty from old sashes with a knife and hammer is very apt to damage the woodwork. Instead, give the putty three coats of ordinary paraffin oil, allowing a half hour between coats. The petroleum will penetrate into the pores of the putty and dissolve the hardened linseed oil, making the putty plastic in a short time and in two or three hours it can be readily removed.



Easy to put on
Hard to wear off

This applies to

Elastilite Varnish

the old favorite of many years' standing, for all classes of work.

Good profit for the dealer

The Imperial Varnish & Color Company, Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.
VANCOUVER, B.C., care Durand Merchandise Company.

Bath Tub Enamel

or Liquid Porcelain

This forms a hard, polished, non-absorbent surface, effectually resisting hot and cold water, and preventing unclean and unhealthful accumulation of grease, soap, sediment, etc. It is an economical Enamel and satisfactory in every respect. Put up in patent cans with extra slip covers—just the goods for your store. Write for prices and quantities.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.



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Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.
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Iron Roof Cresting

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DENNIS WIRE AND IRON CO.

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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

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Get your GLUES from

The GROVE CHEMICAL CO., Limited

Appley Bridge. Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter

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OBERLAHNSTEIN, a/M RHINE, GERMANY

ESTABLISHED 1862

MANUFACTURERS OF

TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc.

SPECIALTY

YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.



WITHOUT A DOUBT

ISLAND CITY brand of ready mixed paints for houses and floors is without an equal. **Fall is approaching and with it the FALL rush.**

Easy to put on.
Dries in eight hours

and when dry gives the house or floor an **elegant appearance.**

P. D. DODS & CO., Toronto, Winnipeg, Vancouver, Montreal.

Brandram's B. B. Genuine White Lead

BRANDRAM BROS & CO
BRANDRAM'S B. B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

has long been known as the best white lead the world produces. It is unequalled for

WHITENESS, FINENESS and BODY

and will cover more surface than any other white lead made. It is the only white lead used in

"ANCHOR"

or

"ENGLISH"

LIQUID PAINTS

making them the leaders on the market.

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 18, 1905.

THE past week has been characterized by quietness in the general paint and oil market. As is usual in Mid-Summer, there is not the same snap to business as in the Spring and Fall, but there is every indication that trade will open up briskly, and the wise and farseeing hardwareman will order liberally for the coming year, in the matter of paints.

The market for paris green collapsed entirely, and much more could have been sold. The merchants who will carry over a stock for 1906 are few and far between.

Varnish is in pretty fair demand, and trade generally may be said to be quiet, but healthy.

Turpentine— As predicted in last week's Hardware and Metal, the price of turpentine has been advanced on the local market, and the demand is strong at the following quotations: Single barrels, 89c. per gallon. Two barrels or over, 88c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—No further drop has occurred, and the prices given last week, are still quoted, as follows: Raw, one to four barrels, 49c.; five to nine barrels, 48c.; boiled, one to four barrels, 52c.; five to nine barrels, 51c. f.o.b. Montreal. Net 30 days.

Ground White Lead—Trade is quiet, at present, but prices are firm. We quote: Best brands Government standards, $5.35 to $5.50: No. 1, $5.10 to $5.25; No. 2, $4.75 to $5.00; No. 3, $4.50 to $4.75, all f.o.b. Montreal.

Dry White Lead—There is little change in market conditions since our last report. Our prices are: Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc— The market is very firm at last week's figures: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)—Great activity is still manifest, but there has been no change in prices. We quote: Pure 25-lb. irons 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—The demand is normal, and prices are unchanged. Our quotations are as follows: Pure linseed oil, $1.75 to $1.85; Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—The market remains steady at the old prices. Our quotations are as follows: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—A fair demand has been experienced, during the week. Our prices are as follows: Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—No advance has occurred as yet, but the trade outlook is excellent. Prices are from $1.20 to $1.40 per gallon.

Castor Oil—No change has transpired, and business continues very strong. Our quotations: 8c. to 9c. in wholesale lots, and 1-2c. additional for small lots.

Litharge—Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—As Fall approaches, orders are getting larger every day, many dealers taking advantage of the low prices current. An advance may occur at any moment.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
August 18, 1905.

A FALLING off in general business is reported, sales of paints, etc., being much smaller than during the past few weeks, although still very satisfactory considering the time of the year.

Advanced prices on turpentine have materialized as predicted last week, the rise being in sympathy with the strong tone of the southern market.

Linseed oil has dropped 3 cents, the weakness in Montreal and in Great Britain forcing local dealers to meet the lower prices. The probabilities are that prices will continue at about the present figure for the present month.

Manufacturers are having difficulty in supplying the heavy demand for white lead and orders are considerably behind. Paris green is off the market with stocks in hand very light.

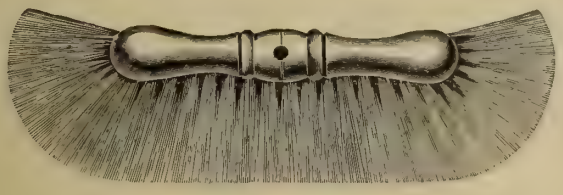
White Lead—Ex Toronto, pure white $5.40; No. 1, $5.02 1-2; No. 2, $4.65; No. 3, $4.40; No. 4, $4.15 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560

HARDWAREMEN!

Skedden Brushes

SELL EVERY TIME



Are you equipped for the demand? Get the goods stamped "Skedden"—the stamp of excellence.
Catalogue on request.

The Skedden Brush Co., Limited, Hamilton, Ont.

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IMPERIAL FRENCH GREEN

is preferred by skilled painters because of its fineness of texture, covering capacity and great durability. Acknowledged to be more permanent than Nature's Greens.

Insist on it once and you will always use it.



Be sure this label is on the can and take no other. See sample cards.

JOHN LUCAS & CO., MFRS.,
PHILADELPHIA, NEW YORK, CHICAGO.

MACARTHUR, CORNEILLE & CO., MONTREAL

Warnock Tools

BEST IN THE WORLD



The Jas. Warnock Co., Limited. Galt, Ont.

STOVE PIPE ENAMELS

Brilliant Black
In Stone Bottles, packed in Barrels
SMALL SIZE LARGE SIZE

Stove Pipe Enamel
In Lever-Lid Tins
NO. 1 SIZE NO. 2 SIZE
No. 3 SIZE NO. 4 SIZE

Crystal Black
In Lever-Lid Tins, Brush Attached
PER BOX OF 3 DOZEN

Stove Pipe Varnish in Bulk

LIQUID ALUMINUM PAINT FOR STOVE PIPES
EVERY SIZE

See Page 50 of Catalogue

EARLY ORDERS WE RESPECTFULLY SOLICIT

THE CANADA PAINT COMPANY LTD

lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 89c.; 2 to 4 barrels, 88c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases. 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current quotations at the end of this issue.

WINDOW GLASS—MONTREAL.

Shipments of window glass from Europe are still disappointingly small. Little relief has been experienced in the Canadian markets, as a result, and conditions are about the same as in our last report. We quote: First break, 50 ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

GLUE WORKS PERFUMERY.

In the suburbs of an English town there is a glue factory that at times emits an odor strange and far from sweet. A tramway line runs past the building, and one day recently, when the place was indulging in a wild outburst, a car passed, in one of the seats of which sat an Irish laborer and a middle-aged lady. The Irishman's features expressed unutterable things, and the lady sniffed diligently at a bottle of smelling salts. The car came to a stop, the glue rioted worse than ever, and the son of Erin could stand it no longer. "Excuse me, mum," he said, humbly, as he doffed his hat, "but might I ask ye to put the stopper in that there bottle?"

WHITE LEAD INVENTION.

H. C. WEBSTER and R. Crawford, of Glasgow, have patented an invention relating to the Dutch process for making white lead. In this process, as described by the inventors, upon a layer of spent tan bark, earthenware pots are arranged, and have put in them suitable quantities of dilute acetic acid, the lead to be acted upon being placed upon, or both within and upon the pots. A number of the pots are larger than the others, and support boards upon which another layer of bark is placed, another series of pots being placed thereon. In a similar way several tiers or heights (sometimes called heats) are formed one above the other, and forms a stack. The handling of pots involves a considerable loss from breakages and otherwise, and the object of this invention is to avoid such losses, and at the same time to obtain better results, from a stack of given size. The invention consists in substituting lead pots or vessels for some or all of the earthenware pots. The lead pots may be shaped like the earthenware pots heretofore used, or any other suitable form of lead vessel may be substituted, such, for example, as trays with or without compartments, the vessels requiring to have raised sides to retain the quantities of dilute acetic acid for acting on the lead. As with the pots hitherto in use, lead in any suitable form is to be arranged upon, or upon and within the lead pots or vessels, and the white lead forming action takes place, not only upon such superimposed lead, but also upon the lead of the pots or vessels themselves. The thickness of the lead forming the pots may be varied, but a thickness of about one-eighth of an inch has been found convenient in practice.

ALBERTA OIL FIELDS.

Oil that refines 99.5 per cent. pure from the seepage has been found in profusion at the Big Seepage Springs oil sections in Alberta, near the boundary line. The oil is said to be 65 per cent. pure as it comes from the wells, being of a non-sulphurous kind and giving off no smoke. The deepest well sunk, so far, is operated by the Rocky Mountain Development Co., being down 1,020 feet. The oil ledge is 20 miles wide, the centre of the industry being the Town of Oil City.

Exhibition Notice

We want to see you all at Toronto Exhibition. If you have your stove business at heart a second invitation will be unnecessary.

You Will Find Us in the Stove Building

PERFECT IDEA RANGE

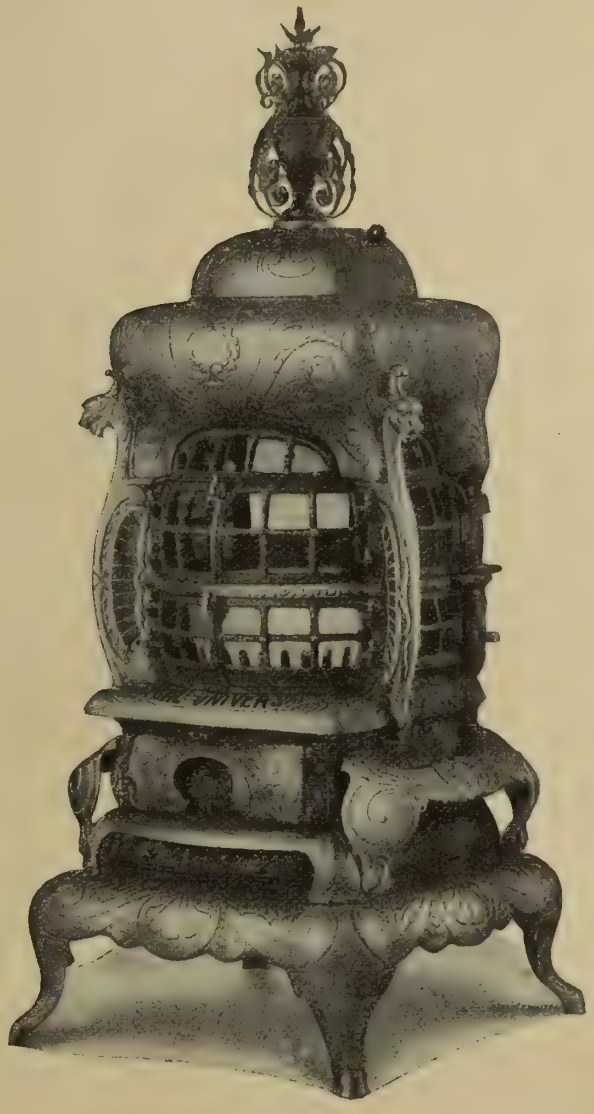
The newest and most up-to-date range on the market.

Gas Attachment

Fitted with Gas attachment, making this range a perfect worker with Gas or Coal.

Loose Nickels, a great convenience.

HEATERS FURNACES



GRAND IDEA BASE BURNER

It will pay you to inspect our latest in base burners.

Every stove is a Double Heater.
Large Circulating Air Flues.
Large Tea Kettle Attachment.
Loose Fire Pot, Easily Rotated.
Large Bailed Ash Pan.
Fire Pot Removable through Front Doors.
Duplex Grates with Shaking Ring.
Automatic Magazine Cover.

WOOD COOKS BOX STOVES

You will know us by the quality of our goods and the smile we wear.

GUELPH FOUNDRY CO., LIMITED

Guelph, - Canada

STOVES AND TINWARE

DISPLAYING SAMPLE STOVES.

IT has been my experience that there is nothing sold in a hardware store, that is so dependent upon the manner in which it is displayed as stoves, says George M. Evanson in the Hardware Trade. There is no middle ground in their appearance—they are either attractive or totally unattractive. A stove that comes to you from a factory needs a great deal of attention before it is presentable. It will not do to give the stove a coat of blacking and then rub it over with a broom. If any of you are so treating your stoves I want to suggest that you try the following plan:

Remove from the stove all loose parts, lay them out on a box, table or bench. With a wire or steel brush go over all parts of the stove to remove any loose sand or dirt that has attached itself to the stove. Now apply a rather thick coat of good blacking, and before it dries rub the stove with a piece of burlap, after the coat dries (and it won't take long if you use a gasoline blacking) apply a second coat and treat in the same way. when this last coat is dry polish the stove with a good bristle polishing brush. For a good pair of these brushes you must pay about $1.25 each. There is no economy in buying a cheap polishing brush. I have a pair of genuine bristle brushes that I have used for ten years, and they are good to-day, so get good brushes if you want a good shine.

Now when your stove is ready for the finishing coat apply this coat to only a part of the stove at a time, and before it dries begin to rub, first with a cloth to smooth out the polish, and cover any spots that your brush has missed and then with your good brush. If you have never seen a stove blacked in this way, you will have a genuine surprise. If this is the only stove on your sample floor which has been so treated it will stand out among its fellow stoves as a planet does among the stars. Proprietors of stores do not usually blacken the stoves, but they do sell them, and they should see to it that every stove that is brought on to the sample floor is thoroughly and carefully blacked and that it shines at every point of its surface. It takes lots of elbow grease, but the stove will be twice as easily sold. The fire box linings and top of ovens should be painted a bright wagon-red, color brightens up the interior of the stove or range and makes it an attractive part of the stove for the customer to inspect.

Use Paint and Whitewash.

If you are preparing a self-feed base burner for the sample floor, whitewash all the interior parts of the stove (that can be seen by a purchaser) first, then apply three coats of good blacking and you will be well satisfied with the results of your extra labor.

I do not like the patent trucks, sold by manufacturers, for placing stoves upon, to admit of their being freely moved about on the sample floor. They add nothing to the appearance of the stove and can be supplemented with a truck made of matched flooring cleated upon the back of this platform, mounted upon frictionless casters. Use Norway pine, and instead of painting it give a coat of liquid filler after dry, sandpaper, and then apply two coats of the best floor varnish you can get your hands on. Use care in lifting a stove onto this truck and the finish will last for years. When you dust the stove wipe the surface of the platform with a damp cloth. It will add greatly to the attractiveness of the stove, and will help every salesman who shows the stove to a customer.

If one has the room, a nicer way to show a base burner is to set aside a certain number of square feet of floor space and on the floor place a bright-colored rug, a stove board next, and then set up your stove just as you would if you were putting it up in a residence.

Put a railing around the stove; make the railing of $\frac{7}{8}$-inch gas pipe, floor plates, elbows and tees. Give a coat of gold or aluminum radiator bronze. Have coal hod filled with proper size of coal, also pokers and shakers laying beside the stove or hung in their proper places.

Show the Parts.

If your base burner is of the kind that permits the fire box to be lifted out through the front mica doors, or of the grate being removed through the lower front mica doors, or the magazine is so long that it can be removed by turning a turn button, have all bolts and buttons loose enough so that they can be removed in an instant. Complete the trim by placing a couple of comfortable chairs within the railing. Now invite the lady and gentleman that calls to step within the railing and occupy the chairs. Then show them the stove and show it all to them. The rug will give the lady an idea of how pretty the nickel base of the stove is against the carpeting, and she will at once admit that the stove is going to dress up the room.

The stove you have within the railing may not be the style or size they want, but they will be interested in seeing how the stove is made and you will make a favorable impression, and once you have done that you ought to make the sale. You will wonder "why that railing!" It gives an exclusive effect to the place where the stove is and adds as much to the appearance of the stove as a frame does to a picture.

COOKING AND HEATING WITH ALCOHOL.

CHEAP alcohol in Germany is causing it to be used in a great many ways, it is said, with the very best results and at a very low cost. The United States consul at Berlin in a long article says: "Similarly attractive and interesting is the large display of alcohol heating stoves, which for warming corridors, sleeping rooms and certain other locations, are highly esteemed. They are made of japanned iron plate in decorative forms, with concave copper reflectors, are readily portable, and furnish a clean, odorless and convenient heating apparatus. Cooking stoves of all sizes, forms and capacities, form the complete range, with baking and roasting ovens, broilers, etc., to the simple tea and coffee lamp were displayed this year in endless variety. Another important advantage of alcohol, which applies specially to its use in motor carriages and in engines for operating creameries and small manufacturing plants in premises adjacent to dwellings, is its absolute cleanliness and freedom from the mephitic odors which render hydrocarbon engines so offensive to many people."

FURNACE TRADE THREATENED

In all our large cities the price of real estate is going so high that investors are finding it necessary to erect large apartment houses instead of individual dwellings, in order to make a fair interest on their capital. This tendency, which is more manifest in the large cities of the United States than in Canada, is bound to have an injurious effect on the stove and furnace trade.

One of the attractive features of the flat system is the plan of a central heating plant, so that the occupants of the various apartments are spared the trouble and expense connected with the management of stoves and hot air furnaces. The flat houses naturally find a central steam or hot water heating plant the most economical.

Store dealers in the larger cities find that this system is making serious inroads into the sales of stoves and hot-air furnaces, for each apartment in every flat house means one less possible customer for the dealer.

Under these circumstances the progressive dealer will endeavor to build up a steam or hot water heating trade, to counterbalance the decrease in his stove and furnace sales.

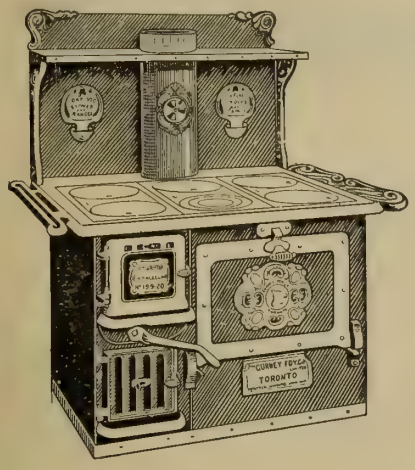
But the disappearance of stoves and furnaces is only a vague prophecy as yet. Even though city business falls off the merchant will find that he can build up an extensive country trade by hustling after it. The prosperity of the outlying districts is such that many fine brick houses are now to be seen on well-kept farms. To heat these buildings with antiquated box stoves would be ridiculous, and the hustling stovedealer will, for years to come, be able to keep up his business by equipping such modern farm houses with up-to-date heating plants.

GUELPH FOUNDRY REORGANIZING.

The shareholders of the Guelph foundry have decided that for the purpose of reorganization the company should go into voluntary liquidation, and Mr. W. M. Doherty has been appointed liquidator. It will be remembered that by a recent decision of the Supreme Court the company was ordered to destroy all stoves manufactured from the pattern of the Buck Stove Co., of Brantford. The factory and moulding shop are running a full force, and the proceedings will in no way affect the operations of the company. Their new range will be called the Perfect Irea.

Tenders will be received up to and including Friday, Aug. 25, for the purchase of all the assets, including lands, buildings, plant, office furniture, and back debts, the whole as a going concern.

It does not cost as much to make a handsome looking range, but it does cost us very near the selling price to make one which will bring your customers back with unshaken confidence for other purchases. Some manufacturers go to the extreme of making a fine exterior cover a multitude of interior shortcomings; others make a good interior regardless of outside appearance. We make both good, and will not issue a range from the foundry unless we know it to be the best possible in every respect. That accounts for the popularity of



THE

Oxford Chancellor Range

You can sell our goods with less than the usual effort, and if you will investigate you will find we can help you to accumulate a goodly number of satisfied customers who have not traded with you before. We supply you with advertising literature for distribution which will convince any intelligent person of the unique merits of the goods, and are co-operating with our dealers throughout the Dominion by heavy newspaper advertising. We will add considerably to your list of business friends if you will aid us with a little shop talk.

For sixty years we have been in business, improving the output each year, and the number of complaints are so very few that they need not be considered at all.

Will it not pay you to handle a range which will enable you to make your word good every time?

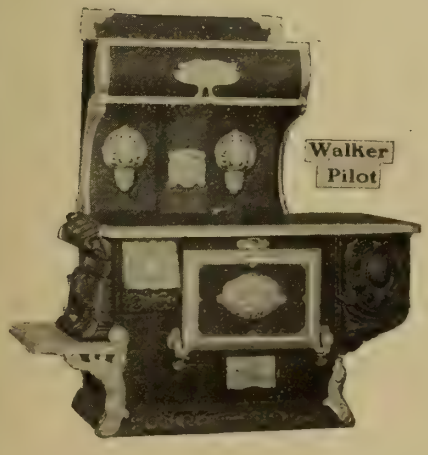
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THE GURNEY FOUNDRY CO., LIMITED

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

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INVESTIGATE

We offer you in our

Walker Pilot Steel Range

a thoroughly up-to-date range in which the dealer's profits are unusually good. Send us a sample order and be convinced of its attractiveness both as regards quality and profit. Do not be misled by anyone who asks you to stay in the "rut" of starvation profits simply because they have hitherto compelled you to do so. You are the one who is interested and you are the one to decide. Do so by sending a sample order.

SEND FOR PARTICULARS.

The Walker Steel Range Company, Limited

Grimsby, Ont.

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Always ready for use. Every Razor guaranteed. With ordinary care will keep an edge for years without honing.

For Sale by all leading Wholesale Houses

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"FAMOUS" BASE BURNER

No. 113 SERIES

Made in two sizes for parlor and in one size with oven.

Has 12½ and 14 inch fire-pots. Large Oven and Duplex Grates.

The fire-pot can be taken out through the front doors and the operation is a very simple one.

The "Famous" has a full nickel dress very artistically arranged, and is equal, if not superior, to any other stove in its class.

THE McCLARY MANUFACTURING CO.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER
ST. JOHN, N. B. HAMILTON

"Everything for the Tinshop"

HARDWARE AND METAL

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PLUMBERS SETTLING DIFFERENCES.

DURING the past month feeling between the master plumbers and the supply associations in Ontario has been rather acute, the former having gone so far as to take steps to establish a co-operative supply house and to consider the placing of a boycott upon the existing supply houses. Until the master plumbers had established their own supply house it was not to be expected that a boycott could be effective, however, so that negotiations between the conflicting interests naturally continued and the air became clearer as each side better understood the position of the other.

The complaint has been that the supply houses have not been selling to association members exclusively, the former contending that they have endeavored to meet the wishes of the master plumbers so far as they were able. They have, in return, complained that certain large contracting houses were doing a jobbing trade contrary to association regulations.

Efforts have been made to avert the trade war which would result from the establishment of a co-operative supply house and the placing of a boycott, the effects of the combat being likely to be felt severely by both sides. The supply houses are understood to have threatened to meet the co-operative competition by using their influence to increase the duty on American goods, to influence the architects to specify the lines carried by the supply houses, and to meet the master plumbers on their own ground by establishing men in business to do contracting work, supplying these agents at bare cost until peace was restored. On the other hand, the Master Plumbers' Association have a strong treasury, and with a compact membership could carry on the fight for an unlimited period. They are naturally unwilling, however, to take from $25,000 to $50,000 from their treasury and invest it in stocking a supply house except as a last resort.

The matter has been discussed exhaustively by both sides, and according to street talk a settlement will soon be arrived at. A co-operative arrangement between the two associations is hinted at, the plan allowing the supply houses to sell to the trade generally regardless of association affiliation, but in return for an agreement by the master plumbers to buy exclusively from the association supply houses that the latter are to allow a special annual discount on the total of the year's business. The two interests are well organized, and Hardware and Metal has too much faith in the executive wisdom contained in the two associations to consider possible of fulfillment the dire predictions of conflict made by some who have little to lose by a declaration of war.

THE PLUMBERS' CONVENTION.

IN another part of this issue will be found our usual complete report of the annual convention of the National Association of Master Plumbers and Steamfitters of the Dominion of Canada. It is true that the bulk of the membership of the association is in Eastern Canada, but the experiment of holding the convention in the Prairie Metropolis was justified by the results. The convention was a complete success in every respect, and the presence in Winnipeg of so many eastern veterans in association work has given the organization in Manitoba a decided impetus. It seems likely that a Manitoba Provincial association will be formed before the next annual convention meets in Ottawa. The reports from British Columbia were most encouraging, and it is not improbable that the convention of 1907 may be held in Victoria or Vancouver.

For an account of the work of the convention our readers are referred to the complete report in this issue. Substantial results will follow from the deliberations of this gathering, but not the least of the benefits derived is the feeling of good fellowship engendered by such gatherings. It is a good thing for members of the same craft to meet in such conventions and cultivate each other's acquaintance.

General regret was expressed at the unavoidable absence of President Ross of Toronto who because of illness was forced to give up the idea of attending this convention. Those who know his enthusiasm for the work know how keen must have been his disappointment, and that disappointment was shared by his fellow members. It is satisfactory to know that the mantle of Mr. Ross has fallen upon worthy shoulders, and that under the guidance of President-elect A. J. Hammond the association may look forward to another year of prosperity.

MODERN PLUMBING IN THE EAST.

THE advances made by the plumbing trade during the past four years raise it to the rank of an art and a science. The utmost skill is now required in a "plumbing and heating" job; for the public have become so discriminating that they now demand not only mechanical perfection, but also real beauty in their plumbing. So much importance is being given to the equipment of the bath room that in many houses it is one of the most striking of all, and cleanliness is now a good second to godliness.

In no part of our Dominion can the difference between ancient and modern sanitation be so clearly seen as in the east. This is the oldest inhabited part of Canada and, quite naturally, there are many examples of old and even ancient building methods. And, in most parts, the conservatism of the people is such that very little progress is being made in the science.

In Montreal, however, the city is expanding apace, and side by side with old dwellings dating back to the French regime, may be seen modern apartment houses and skyscrapers, wherein the greatest attention is paid to plumbing, and the most advanced ideas are adopted. All the new buildings are equipped with "open plumbing," enamelled baths and sinks; while a great many have shower baths or sprays.

The equipment in these buildings forms such an obvious contrast with the ill-smelling and repulsive plumbing in the older dwellings, that the landlords of the latter are beginning to wake up to the fact that a change in sanitation is necessary in order to keep good tenants. The next few years will see a great change in the plumbing of Montreal's rentable houses, and even the more conservative portion of the east will, no doubt, follow the example.

A CORDIAL INVITATION.

MERCHANTS who visit Toronto to see the exhibition will want to combine both business and pleasure, and this can well be done by devoting the mornings to business and the afternoons and evenings to sight seeing. Toronto jobbers will do their utmost to facilitate the merchant's business, and their customers are welcome to inspect the Fall stocks at first hand, while in the city. The offices of The MacLean Publishing Co. are also at the service of retailers from outside points, and no more convenient headquarters or meeting place can be found than the offices at 10 Front street east, just off Yonge. We invite our readers to have their mail directed in our care and remind them that if they have a letter to write, a telephone call to make, a friend to meet, or an appointment to keep, the offices of Hardware and Metal are available for their use.

AMERICANS EXPLOITING CANADA.

COBALT'S development is another example of how our enterprising southern neighbors step in and capture the cream of the new discoveries of Canada's rich resources before Canadians realize their value, and move in time to secure the skim milk. In the Kootenays, the Yukon, the Alberta oil fields, at Sudbury and the "Soo," at Niagara, in our lumber industry, and in the power plants in Quebec and New Brunswick, the Yankees have been in the van in exploiting Canada's wealth.

At Cobalt it is the same story over again, visitors to this latest nine days wonder stating that already American companies have secured a very large share of the richest ground, the Nipissing Mining Co., said to be controlled by John D. Rockefeller, owning 1,600 acres. The Americans have been doing all the smelting at New Jersey owing to no plants being available in Ontario, but when talk arose of establishing a smelter at Toronto, the Americans controlling the copper industry of Algoma, moved swiftly and arranged to build a smelter at Copper Cliff to handle the rich Cobalt ores.

Every credit must be given our American cousins for their enterprise, but we desire to draw the attention of Canadians to the necessity of having boundless faith in the future development of Canada's riches, and the advisability of retaining control of this development by our own citizens. We cannot expect the Government to erect a high fence to exclude American enterprise, so the only way control can be retained is by developing an enterprising individuality in our own people.

COST OF ELECTRIC LIGHTING IN VARIOUS CITIES.

IN the Municipal Journal and Engineer for June, Mayor Fobes, of Syracuse, N.Y., presents statistics regarding street lighting in a large number of cities in the United States. Both private and municipal electric light plants are included in the list which is given below:

City.	Population.	Municipal or Private Plant.	Cost Per Arc Light Per Year.	Fuel Used.	Average Price Coal.	Capitalization of Plant.
Albany	93,920	private	$117.80	coal	....	$2,060,000
Allegheny	138,018	municipal	68.89	coal	$1.88	.....
Atlanta	96,550	private	75 00	coal	2.50	.....
Baltimore	531,313	private	99 92	coal	3.20	2,700,000
Boston	594,618	private	124.10	coal	....	10,500,000
Bridgeport	77,535	private	82.00	coal	....	.....
Chicago	1,873,890	municipal	75.00	water	....	.....
Cincinnati	332,934	private	96.00	coal	3.75	700,000
Cleveland	414,950	private	54.36	coal	2.75	1,650,000
Columbus	35,487	municipal	66.00	coal	1.75	31,000,000
Dallas	44,159	private	73.56	coal	1.30	2,500,000
Denver	144,583	private	54.36	coal	2.75	1,650,000
Detroit	305,853	municipal	85.00	coal	1.40	485,000
Elmira	37,106	private	78.00	coal	2.00	.....
Fall River	114,004	private	90.00	coal	3 00	3,250,000
Grand Rapids	91,630	municipal	61.65	coal	2.58	849,506
Hartford	87,863	private	80 00	coal	3.00	.....
Indianapolis	196,038	private	109.50	coal	4.15	350,000
Jersey City	219,462	private	70.95	coal	2.85	45,000
Kansas City	173,064	private	70.00	coal and water	4.00	1,900,000
Louisville	215,402	private	74.00	water	....	.....
Lowell	100,150	private	97.50	water	....	.....
Lynn	72,350	private	85.00	coal	3.00	.....
Memphis	113,369	private	84.00	coal	....	.....
Minneapolis	214,112	private	120.45	coal	....	.....
Nashville	82,711	municipal	98.55	....	....	.....
New Bedford	68,955	private	85.00	....	....	.....
New Haven	114,000	private	94.00	coal	5.00	.....
New Orleans	360,625	private	45.00	coal	1.79½	200,000
New York	3,766,189	private	98.55	coal	....	645,000
Omaha	113,361	private	82.12½	coal	3.75	1,000,000
Paterson	113,267	private	77.00	coal	3.25	.....
Portland, Cre	98,655	private	146.00	coal	....	85,338,000
Providence	189,742	private	94.50	coal	....	.....
Reading	85,051	private	101.00	water	....	.....
Richmond	86,148	private	83.33	coal	3.80	5,000,000
Schenectady	43,538	private	109.50	coal	1.75	.....
Scranton	107,026	private	85.00	coal	2.91	.....
Seattle	92,020	private	84.00	water	....	80,000
St. Joseph	110,479	municipal	72.12	coal	1.25	300 000
St. Paul	172,088	private	66.00	water	....	.....
St. Louis	612,279	private	95.00	coal	1.60	102,000
Toledo	145,901	private	98.00	coal	2.00	10,000,000
Trenton	76,766	private	83.00	coal	2.05	.....
Troy	75,567	private	118.62	water and coal	....	2,000,000
Utica	60,097	private	116.18	coal	2.50	2,000,000
Washington	293,217	private	85.00	coal	3.00	.....
Wilmington	81,300	private	.....	coal	5.00	.....
Worcester	128,552	private	108.00	coal	4.75	600,000
Yonkers	52,701	private	109.50	coal	....	200,000

THE PRODUCTION OF MICA.

MICA in its indifference to high temperatures and non-conductivity to electricity possesses physical characteristics which give it a unique position as an article of commerce, particularly in relation to electrical work for insulation purposes, and in minor degrees for lantern slides, negatives, and as a base for paints and explosives. Among other things, the mineral is distinguished by a particularly wide range of geographical occurrence, as also by a large series of mineralogical forms.

The three most valuable occurrences of mica are muscovite, phlogopite and biotite. The first mentioned, which is found in a variety of colors, is mined in India, and in lesser degree in German East Africa and Brazil. Phlogopite is worked in India, Ceylon, Canada and Brazil. In order of importance the three chief producing countries are British India, Canada and the United States. cent years are: 1902-3, 20,412 cwts., valued at $426,595; 1903-4, 21,548 cwts., valued at $420,275.

From the technical point of view, Canada affords the most interesting field for inquiry, since it is here that efforts are being made to work the mineral on a substantial and organized scale, and not merely from hand to mouth. The existence of an unlimited supply of cheap labor has occasioned a singular crudity of method in the Indian mines. Although the finest quality, as well as the largest quantity, comes from the peninsula, the proportion is carried on absolutely without the use of machinery, the mineral and the waste material being passed to surface in small baskets by long lines of women, and unwatering operations being carried on by means of jugs.

Throughout the American continent, practice, although more modern, is still, owing to a variety of causes, of an archaean type. Miners in this branch seem peculiarly prone to the vice of dividing their profits up to the hilt, no proper development work being carried on excepting in certain well-known cases. In Canada the open quarry method is still largely followed, notwithstanding the dangers occasioned by the heavy frosts.

In the Lacey mine, Ontario, however, modern machinery is used and the example of adopting the power-drill has been furnished. A high proportion of waste occurs, the finished product averaging only some ten to twenty per cent. of the output. It is hoped, however, that with improved methods of treat-

The exports of the Indian mines in re-

ment the proportion may be made less disadvantageous.

The Canadian output at present shows an inclination to decline, being valued at $166,810 in 1903 and $159,175 in 1904, though estimated as high as $410,960 in 1902. The American output, which is chiefly small mica—the quality most affected by tariff conditions—shows a steady decline in value since 1900. The decline in values at the end of the century was due to a sudden demand for small mica for the micanite industry, which, of course, lowered the average quality of the mineral exported. The industry in India employs about 9,000 persons, and is worked on a $1.25 gross royalty basis.—Mining World.

TURN ON THE LIGHTS.

ELECTRICITY bids fair to turn night into day. Men are constantly striving to do greater things with the marvelous force in which there is both life and death. It is believed that in electricity has been found the ideal light, and in the cities of the country there is a constantly growing demand for its use, a growing effort to apply the light in a new and more effective manner. The little globes blaze by thousands in the streets, in the stores and in the homes. They shine in colors, and they speak to the public from the fronts of business places in the cause of publicity.

Step into the streets of any of the large cities, and the eye is fairly dazzled with the brilliancy and the flash of the little lights. Business men recognize their value, and the city authorities are coming to an understanding of the fact that the people apreciate and demand streets that are illuminated in an attractive and brilliant manner. For instance, Denver is seeking now to be a "city of lights," and it is planned there to make the main thoroughfares almost as light as day by arches spanning the roadways and illuminated with thousands of incandescent bulbs.

A NATIONAL BOYCOTT.

THE Chinese boycott against the United States which went into effect two weeks ago is proving itself a very real thing, and already the Chinese Government have been warned that the United States will insist on the full observance of the Tientsin Treaty of 1858, providing that

> "at each of the ports open to commerce citizens of the United States shall be permitted to import from abroad and sell, purchase and export all merchandise of which the importation or exportation is not prohibited by the laws of the Empire."

Reports from the Orient regarding the progress of the movement are conflicting. On the one hand comes the news that it is extending rapidly. Others incline to the opinion that Chinese merchants are dissatisfied with the outcome. Ex-Minister Wee Ting Fang, of Washington, declares that the spread of the boycott on American goods is a sympton of extraordinary progress toward a real nationality; that the movement has been organized by the best and most representative Chinese and is entirely pacific in character, and that the extent of the movement and the strength of the feeling manifested not only by the mercantile classes but also by the students are indicative of a new spirit in China. At the same time the boycott ought soon to be rendered unnecessary by a satisfactory settlement of the grievances complained of by the Chinese. No difficulty is presented by the exclusion of coolies from United States territory; at the same time the existing regulations press with severity upon other classes, such as merchants, travelers and students, who are compelled to undergo objectionable examinations. A clearer definition of the word "laborer" is essential, and in addition the right of appeal from decisions of immigration officials. Mr. Wee Ting Fang says an educational test would be the most effective means of preventing the ingress of coolies besides eliminating undesirable class distinctions.

Canada is an interested spectator, not only because the crisis will afford her a valuable lesson in international affairs, but because it may accrue greatly to the benefit of Canadian trade. The C.P.R. authorities have already received inquiries from Hong Kong merchants asking as to the feasibility of securing heavy supplies of Canadian flour to replace the American article which they will no longer accept. Canada can supply China with a large amount of soft wheat flour and practically unlimited quantities of the hard western Spring wheat variety.

PLUMBERS' CONVENTION REPORT.

On account of unavoidable circumstances it has been found impossible to give a complete report of the Convention at Winnipeg last week. The report of the banquet, resolutions adopted, committee reports, convention notes, etc., have been held over until next week, when they will be published, together with a report of the Maritime Boards of Trade Convention.

TALKING SHOP.

SEVERAL members of the executive staff of the Pease Foundry Co. entered into a compact a couple of weeks ago not to "talk shop" from Saturday noon till Monday morning, but to give this time to rest and recuperation by thinking of and doing things entirely apart from business matters. The necessity of this action was owing to the strenuous pace the staff had been traveling in order to transact the growing business of the company. The staff showed wisdom in agreeing to cut out the shop talk at such a time. There is a time for everything, but the trouble is that many lack the wisdom to do the proper thing at the right time.

* * *

The editor of Hardware and Metal believes the present to be an opportune time to "talk shop" briefly.

This is the banner year in the Canadian plumbing trade, the banner year for the master plumber, for the supply houses and for the manufacturers. Every branch of the trade is handling all the business possible and few labor strikes have marred the reaping of the harvest of Canada's growing time by the plumbing fraternity.

* * *

This is the banner year for organization in the plumbing trade. The Provincial Conventions in Ontario and British Columbia and the National Convention at Winnipeg are the most important gatherings in the history of the trade in Canada. The number of master plumbers and steamfitters on the inside is steadily increasing and the effectiveness of the organization is reaching its zenith. The supply men and manufacturers in Ontario have also gotten together and a strong and compact organization is now in existence to govern this branch of the trade. Hardware and Metal can claim some credit for aiding in the growth of this organization and it congratulates both master plumbers and supply men for the progress they have made. Organization is the order of the day.

* * *

This is also the banner year for Hardware and Metal, it having practically every live plumber in Canada on its list of subscribers and every up-to-date supply house represented in its advertising columns. The increase of Hardware and Metal's circulation amongst Canadian plumbers during the past year has been marvellous and the publishers can account for the gain only by believing that their efforts to provide a readable, newsy and instructive paper are appreciated. Through this increasing circulation the paper is able to be of greater service to the Master Plumbers' Associations in extending their organization, and to advertisers in giving them results. In our advertising columns will be found the announcements of every progressive supply house deserving the support of our readers. In these announcements the best and most up-to-date goods are advertised, while the reading columns of the paper keep the plumber and steamfitter informed re-

garding the latest novelties and goods introduced to the trade.

* * *

A comparison of this year's Special Plumbing Number with previous issues cannot but impress upon our readers the wonderful advances made in trade organization, in the increasing number of supply houses and manufacturing plants doing business in Canada, and in the marked value of Hardware and Metal and its plumbing department and market reports to the trade. The commendatory letters recently received from Messrs. W. H. Meredith, Ontario secretary, Toronto; J. A. Gordon, Dominion secretary, Montreal; J. Thorp Blyth, association secretary, Ottawa; H. T. Andrews, Orillia; W. A. Loughrey, Amherst, N.S., and many other representative plumbers in Canada indicate the valuable place Hardware and Metal has won for itself amongst its readers. On the other hand the fact that the plumbing advertising in these columns has doubled during the past year proves the paper's value to advertisers as well as indicating the prosperity of the trade generally. Hardware and Metal has made good as the representative Canadian plumbing paper, and its editorial staff is endeavoring to do still better work in order to merit the increasing support being given the paper.

* * *

In addition to the very full and interesting report of the Winnipeg Convention and the many valuable articles on heating and plumbing in this issue, we would draw special attention to Mr. Quinn's article on the ventilation of the new School of Science Building in Toronto. The article deals with the most up-to-date job in Canada and should be especially interesting to plumbers in the smaller towns and country districts, giving as it does the principles upon which they can build their plans for smaller but similar systems in schools and other public buildings in their own districts. Another article dealing with the heating of the same building will be given in a later issue, while it is also proposed to discuss the system in use in the Toronto City Hall, where a humidifier was recently installed, in still another article.

* * *

Mr. Quinn endeavors to treat his subjects in the language of the workshop rather than that of the university, and it is pleasing to note that some of the most successful supply men as well as the most intelligent master plumbers (such men as Mr. Edward Gurney, of the Gurney Foundry Co., and Mr. George Clapperton, of Bennett & Wright, Toronto,) have commended Mr. Quinn's articles highly. It is impossible, of course, to cover all the minor details in the articles, but we would again remind our readers that our columns are open for articles or communications criticizing or discussing in detail any points touched upon in any article published.

* * *

We particularly invite questions and letters describing difficult jobs done or obstacles met with by plumbers or steamfitters. W. A. Hillhouse, a progressive plumber at Shelburne, Ont., has promised Hardware and Metal a description and photos of work done on a contract he has under way to instal a hot-water heating system as well as a septic tank and plumbing system in a residence in that town. Plumbers are busy men and not usually given to letter writing, but we trust others will follow Mr. Hillhouse's example. A job illustrated by a blue print or plan will prove of interest to plumbers in all parts of Canada, while a short description of work done or some news telling of contracts secured will also be appreciated by our readers.

* * *

A leading manufacturers' agent who called on Hardware and Metal recently stated that one of the firms represented by him was receiving a very large number of replies in response to an advertisement recently placed in our plumbing department. That is an old story, but it bears repitition.

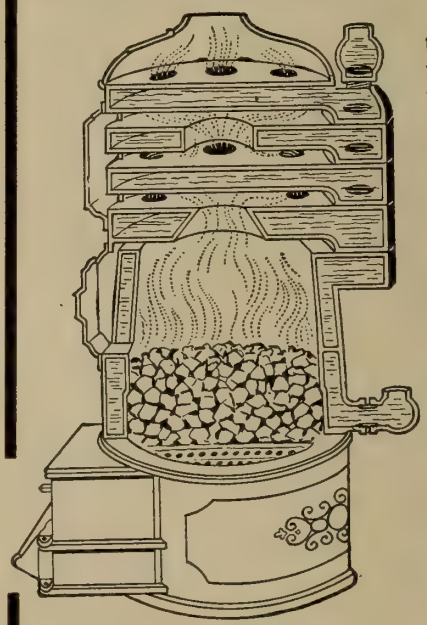
Another visitor, a retail hardwareman, stated that he subscribed for the Iron Age as well as Hardware and Metal, but he always read our paper from cover to cover in preference to the larger American paper. He said the concise statements and newsy paragraphs, as well as the editorials on local subjects, were what attracted him. He agreed that the comparison might be made with the liking most men have for their local paper if it is capably conducted. Even though a larger and better paper is published in a nearby town, the local paper has the preference because it appeals to the home spirit of the reader.

A letter also comes from a commercial traveler, who is well acquainted with the trade in Canada, in which he says: "Hardware and Metal appears to be a genuine favorite and almost every hardware merchant who will take anything already has it."

THE OXFORD HOT WATER HEATER

Before we presented the OXFORD HOT WATER BOILER ("B" Series) to the trade of Canada we put it to the crucial test of actual use under every natural condition.

All of these tests demonstrated its thorough efficiency and durability and most particularly its economy in the use of fuel. It was our intention to produce a heater from which could be derived the maximum of heating capacity with the least possible amount of fuel and throughout our sixty years of experience in this line of business we have never obtained more satisfactory results.



A most favorable element in construction is the increased diameter of the fire-pot at the bottom, giving the sloping walls expanse of surface directly over the fire: it also prevents the accumulation of ashes and dead fuel around the fire and permits of the most thorough dissemination of heat.

The construction of the grate is worthy of special note. It is of the triangular revolving kind with revolving bars which provide a large air space but do not allow the coal to fall through. The handle is in front of the boiler, and by turning the grate the dead ashes are sharply cut off and with a few extra turns the entire contents can be dumped into the ash-pit. By removing two outside screws any grate-bar can be taken out through the ash-pit door.

The material used greatly lengthens the life of the boiler; in fact, makes it indestructible and unbreakable. It is constructed from steel and iron exclusively—metal to metal joints in every connection. Every heating expert will appreciate the superiority of this method of production over the use of rubber or fabric washers which in other similar goods is the weak link in the chain.

The first water section of the OXFORD BOILER is double the thickness of the other sections and is bell-shaped (larger at the bottom than at the top) giving a much greater surface in direct contact with the action of the fire. This adds very largely to its heating power.

The ash-pit is deep enough to contain a large accumulation, requiring less frequent attention than is usually necessary and an ash-sifter is provided.

We can recommend the OXFORD HOT WATER BOILER to the trade with full assurance that it will give thorough satisfaction and suggest that you send for illustrated catalogue giving complete details.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.

The Gurney Standard Metal Co., Limited, Calgary, Alta.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 82.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 18, 1905.

COOL weather is bringing many Montrealers home from the Summer resorts, and city trade is, consequently picking up, many good assorting orders having been received during the week. Orders are coming in well from country dealers, who are asking for Fall goods.

Sporting goods continue to occupy the most important place in the market, and the demand for cheaper and medium guns, is unprecedented. A few orders, too, are being placed for the expensive English goods. Ammunition is selling very briskly.

Horseblankets, skates and sleigh bells are being extensively inquired for, and there will no doubt be a lively business in these lines when the season is in full swing. So far, the great demand in horseblankets has been for the cheaper grades, but, as most dealers are well stocked up, there has been no exceptional activity as yet.

Axes—Are selling steadily and the price remains firm. Our quotations are: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—The trade is quiet, but healthy. Prices are: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—The demand is fair and it will assuredly pick up in the Fall. Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Are still dead, in the market, as dealers have not yet sold the big stocks bought during the recent slump in prices. Quotations are: Cold blast, $4.50; No. 0, Safety, $3.50.

Barb Wire—Is a very slow seller, at this season. Prices remain as before: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Are another dead issue, and there will be little activity in this line until next season. Our quotations are: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—The demand for these goods is constant, and the market is in a most satisfactory condition. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—There is no let-up in the usual demand for screws, and good orders are reported by all the jobbers. We give prices as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Business remains very active. No disposition is shown to make any change in prices, which are still as follows: 3-8 and smaller, 60 to 10; seven-sixteenths and larger 55 to 5.

Wire Nails—The large building operations in all parts of the country keep the jobbers busy shipping wire nails at the following prices: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—No activity is apparent on the market, though prices are firm. We quote: $2.20 per keg f.o.b. Montreal.

Horseshoes—Good sales are reported, and there is every prospect of a busy season. We quote: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all 1 to 4. $6.75. Packing—Up to three sizes in a keg, ten cents per hundred pounds. More than three sizes twenty-five cents.

Sporting Goods—Business in this line is tremendous, eclipsing all previous records. We give prices: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—There is practically no movement, and, even for the season, the dullness is phenomenal. There has, however, been no change in prices.

Cordage—A quiet trade is reported. Prices are steady, at our last quotations.

Cement and Firebrick — Contractors are waiting for a settlement of the labor question before placing further orders. ders. Trade, consequently, is quiet. Our quotations are as follows: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—This is an active branch just now, good orders being received from all parts of the country. We quote as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Spring Hinges—Are very slow, as the season is late. We quote: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—A fair demand is evident, the prices remaining unchanged. We quote: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Many orders are being booked for Fall delivery. Prices are 25c. to $2.50, according to quality.

Sleigh Bells— Though the season is young, many inquiries are reported for all lines. Our quotations are as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common 70c. to $1.50, pear shape $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—The advance in jute has raised the prices on horseblankets, and they will be firm all season. Retailers, however, are well stocked, and trade is not very lively. There is every indication that prices will be higher next season. We quote: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12.00; 16-oz. Hessian, unlined, $6.50; 3-4 lined $11.50; full lined, $14.00, and up to $24.00; Kersey blankets, $9.00 to $21.00; all wool, $24.00, $30.00, $48.00, and $60.00.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Aug. 18, 1905.

CONSIDERING the season, the general run of business is exceptionally good. Naturally the holiday season tends to keep things rather quiet, and thus the hardwaremen are very well pleased with the way things are going. Sporting goods for the Fall trade are having a very good demand, and the opening of the season in this way predicts well for the weeks to come in this

line. The big demand is for shot guns and shells, the season for rifles of course, coming somewhat later. Washing machines are having a good sale. There is a considerable movement in contractors' supplies of all kinds. Bolts and nuts are rather quiet at present. The chief market for these is in the agricultural machinery manufacturing line and during this season manufacturing in this line is quiet.

There are no changes in prices to report.

Sporting Goods—The demand for Summer goods is about over now, but the season for Fall sporting goods is opening up splendidly. There is already a good demand for shot guns and ammunition. Rifles at present are not a feature.

Washing Machines—There is quite an active demand.

Chain—The ordinary Summer trade is being done. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demands for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—Demand is reported good and country merchants are ordering in fair quantity.

Wire Nails—There is an exceptionally good business being done in this line, due probably to the extensive building operations.

Cut Nails—Trade continues satisfactory. Prices are firm. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is particularly good for this season. We quote as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller. $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4. $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonable trade is noted. Prices are the same.

Screws—The mills are busy, but stocks are satisfactory. The strong demand keeps prices firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—The demand for bolts and nuts is quiet, due to its being the slack season in the agricultural machinery interests.

Cordage—Sorting orders are coming in. Prices remain firm at last week's changed prices. We quote as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is brisk, demand being strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper— The general activity in building circles has resulted in a good business being done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—Trade continues in activity. Hides are coming in freely, but not in excess of demand; prices have slightly modified, but more by way of getting to an even basis. We quote as follows:

Hides, No. 1 green steers, per lb		0 10
" " 2 " " "		0 09
" No. 1 green, per lb		0 09½
" " 2 " "		0 08½
Country hides, flats, per lb	0 08½	0 09½
Calf skins, No. 1, selected		0 10
" " No. 2		0 08
Lamb skins, each		0 60
Shorn pelts "		0 55
Rendered tallow, per lb		0 04½
Unwashed wool, new clip, per lb		0 16
Wool-washed fleece	0 25	0 26
Rejections		0 20
Pulled wools, super, per lb	0 21	0 23
" " extra "	0 22	0 24

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 18, 1905.

GREAT excitement in copper is the feature of the week's metal trade. A corner has practically been achieved, and the result is seen in the serious scarcity of ingot casting copper. Whether this is a result of trade conditions, or persistent bulling on the exchange, cannot be determined by the local dealers, though both of these have undoubtedly worked to bring about the present want. The result will almost certainly be a general advance in copper and brass goods. Manufacturers have already withdrawn prices on brass goods, and the effect will be particularly apparent on all staples.

Antimony is now so high in price, that there is practically none selling, as dealers refuse to pay the figure asked. This metal has advanced fully one hundred per cent. in a comparatively short time.

Ingot tin is higher again this week, and indications are that it will remain so. Otherwise the market is without feature, but the general trade is good.

Canada Plates— A slightly lower price is shown in galvanized plates. Current prices are: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4.00, $4.10.

Ingot Tin—A decidedly upward tendency is shown. We quote prices: 35c. to 35 1-2c. per lb.

Pig Lead—The range of prices is narrower this week, the maximum price having been lowered. Our quotations are: $3.75 to $3.85 per 100 lbs.

Boiler Tubes—Prices are slightly easier than in our last report, though trade continues brisk. We give prices: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—The market has settled down to a normal activity. We quote prices:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.00	"	"
" (special)	18.00	"	"
Ayresome No. 1	18.25	"	"
" No. 3	17.50	"	"
Summerlee	18.25 to 18.75	delivered	Montreal.
Clarence No. 1	17.50	"	"
" No. 3	17.00	"	"
No. Cleveland	17.50	"	"

Tool Steel—No change in prices has occurred since our last report. Trade is brisk. Our quotations are as follows: Colonial Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c: "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—Shares the general briskness of the metal market. We quote: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2: spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.10; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting — Conditions and prices are unchanged. Our quotations are as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3,50 per 100 lbs.

Galvanized Iron—Much activity is still shown, and prices are firm as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra

Black Sheets—Prices are steady at our last week's figures. We quote: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The price now ruling is practically prohibitive, and there is

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scarcely any movement in the market. Prices are: 14 1-2 to 15c.

Sheet Zinc—This is another scarce article. Prices are firm, as follows: Cask lots, $7.25, small lots, $7.50.

Tin Plates—Prices are steady, but may be advanced as a result of the raise in ingot tin. We quote: Cokes, $3.75; charcoal, $4.

Ingot Zinc—The acknowledged shortage on the market has not yet produced a change in prices. Our quotations are: 6 1-4c. to 6 1-2c.

Scrap Metal—The market is much more active than last week, except in scrap iron. Both wrought and cast iron scrap are in very light demand, despite the fact that the American market is steadily advancing. The stocks are small. Our prices are as follows: Copper and wire, 12 3-4s.; light copper, 11 1-2c.; heavy red brass, 10 1-2c.; yellow brass, 8 3-4c. to c.; light brass, 6c.; lead, 2 1-2c.; zinc, 3 1-4c. machinery cast scrap, $13; wrought scrap, $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, August 18, 1905.

NOTHING very important is to be noted on the metal market this week, except it is the scarcity of copper. However, that is not serious as yet. There has been quite an active market in bar iron during the past week, and the mills are now running to their full capacity. There is not so much being done on the tin plate market this week. There is a quiet antimony market, due probably to the excessive price. Youghiogheny soft coal is very firm and is advancing gradually.

Bar Iron—There is a very active market. The mills are running to their full capacity. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—Market is very strong and buying active. We quote: 35c. to 36c. per lb.

Tin Plates—There is lessening demand this week.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—The market has been improving and is now quite active. Prices steady. We quote: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Copper is very scarce, but the market is active. The scarcity is not causing any serious inconvenience on the local market as yet. Our quotations are as follows: Ingot copper, 15

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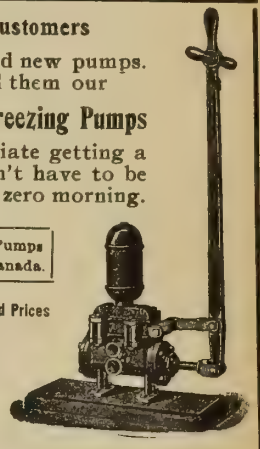
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OPEN HEARTH STEEL

3-4 to 16c. per lb., and sheet copper, 21c. per lb.

Antimony—The high prices on this market are almost prohibitive to buyers, and consequently things are very quiet.

Old Material—The advances in the States have not been sufficient to warrant an increase in the prices on the local market. Dealers' buying prices are: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Youghiogheny soft coal is stiffening very perceptibly, and there is an increase in the quotation. Otherwise prices remain unchanged. Our quotations are as follows: Anthracite in cars at bridges: Grate, $5.15 per gross ton; egg, stove and nut, $5.40 per gross ton; pea, $3.80 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKET.

Advance proofs furnished HARDWARE AND METAL by The Iron Age, August 17, 1905.

IN pig iron the week has been rather quiet, taking the country as a whole. The purchases of the United States Steel Corporation will probably not be made until early in September. In the east there has been a further moderate movement in basic pig, one interest taking 10,000 tons at a concession, while another buyer took 4,000 tons in addition to previous purchases of 8,000 tons. In the Pittsburg district a leading maker of cast iron pipe has bought 10,000 tons of gray forge pig, while in the Chicago district one foundry is in the market for 15,000 tons.

In the east there has been a little wavering as to prices, one large producing company offering iron at somewhat lower figures.

Steel billets are scarce and the situation is rather acute, particularly in the Chicago district. At some points accessible to tidewater small lots of foreign billets have been sold.

It is reported that the Canadian Government has suspended for four months the anti-dumping clause so far as steel billets are concerned, the fact that the two leading Canadian steel works are engaged on rails making it difficult to obtain Canadian steel for the rerolling industries. Our own steel works are so busy, however, that they cannot take advantage of the situation.

Orders for steel rails for 1905 delivery continue to roll in to the works. The Harriman roads have just placed 75,000 tons with the Steel Corporation. It is not known whether this system accepted offers for Pacific Coast delivery made by works in Eastern Germany which are not associated with the other German mills.

In the structural trade the event of the week has been the award of the contract for the new Manhattan Bridge to the Pennsylvania Steel Co. It calls for the enormous quantity of 43,937 tons of material.

The pressure upon the structural mills is exceedingly heavy and the payment of premiums for prompt delivery and the importing of occasional lots of foreign shapes seem to foreshadow an upward movement.

It has developed that in all, eight boats were ordered from Delaware shipyards. The shapes went to an Eastern Pennsylvania mill, while the plates were divided between Pittsburg and central and eastern Pennsylvania works.

During the week car builders have gathered in additional work. It is expected that the order for 12,000 steel cars for the Pennsylvania line west of Pittsburg will be put in hand either this week or early next week.

In nearly all the heavy lines the tonnage on the books is enormous and further work cannot be taken in many instances from sheer inability to meet even distant deliveries.

In the lighter lines the most important development is that a heavy buying movement has set in all along the wire trade. The tonnage in sheets, too, is picking up, but the merchant pipe trade is afflicted with sharp cutting of prices.

In bars the agricultural implement makers and other consumers who contracted for their requirements for six months and a year ahead have now pretty well covered. The aggregate tonnage has been very large.

LONDON METAL MARKETS.

From Metal Market Report, Aug. 16, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 47s. 1 1-2d., and Scotch warrants at 50s. 6d., making prices, as compared with last week, 3d. higher for Middleboro, and 1s. 2d. for Scotch warrants.

Tin—Spot tin opened firm at £149 10s. futures at £148 15s., and after sales of 80 tons of spot and 230 tons of futures, closed firm at £149 15s. for spot and £149 for futures, making price as compared with last week, £1 5s. higher on spot, and £2 higher on futures.

Copper—Spot copper opened firm at £69 10s., futures £69 10s., and after sales of 100 tons of spot and 700 tons of futures, closed easy at £69 5s. for spot, and £69 5s. for futures, making price as compared with last week, 5s. higher on spot and 7s. 6d. higher on futures.

Lead—The market closed at £13 18s. 9d., making price as compared with last week, 11s. 3d. higher.

Spelter—The market closed at £24 12s. 6d., making price as compared with last week, 5s. higher.

Nova Scotia Trade News

Halifax, N.S., Aug. 15.

THE hardware trade is very quiet in all lines, and dealers do not expect that business will show any improvement before the end of the month, if then. Not until the harvesting is over will trade brighten. Dealers, however, are not complaining over the dull spell. While business was slow at the opening of the season it showed a remarkable improvement later on, when orders came in very freely. The white lead market has attracted considerable attention here during the week, due to the rapid advance in the price of that article. This was expected, however, owing to the change in the tariff. The increase was 50c. all round. Lead pipe is also stronger, showing an advance of 20c., the price now quoted being $4.90. Barb wire is $2.55 in less than carload lots, and $2.45 for carload lots.

The Maritime Hardware Association has still under consideration the revision of the price list. The members here are waiting for a reply from St. John. The articles over which the hitch has occurred are glass, paints, and nails. Dealers here are anxious to have these articles listed in what they considered a more beneficial way to the trade in general. Under the existing arrangement they are obliged to charge the same for one single barrel of nails as they would for one hundred.

The Oxford Copper Co. have bonded their property to a company composed principally of Halifax capitalists. A representative from Halifax is going to inspect the property this week, and if it is considered satisfactory development work will be commenced at once.

The hardware stock of the wholesale firm of W. B. Arthur & Co., which is in financial difficulties, is offered for sale by tender. The firm's building is also to be sold by tender.

Prices quoted here follow :

Lead pipe	$ 4 90
Sheet zinc, in casks	7½c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3½ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 30
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 00
Black sheet iron	2 25
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94
Boiled oil	54
Raw oil	51

The Dominion Natural Gas Co. will extend their system to Galt, and are now negotiating with the Galt Gas Co. to use the latter's mains. The Galt Gas Co. will receive natural gas from the Dominion Gas Co. at a price which will allow a 35-cent per 1,000 cubic foot rate to Galt consumers.

PERSONAL AND TRADE NOTES

Toronto.

Mr. F. O. Lewis, of Lewis Bros. & Co., Montreal, spent Thursday at the Toronto branch of the company.

Mr. Walker Holborn, hardware merchant, Sutton, is spending his holidays with his family in Toronto.

Mr. Lou Robb, manager of Fred Hunt's plumbing business at London, was in Toronto and Montreal during the past week.

Mr. Thomas Elliott, who for some years conducted a retail hardware business in Perth, Ont., has accepted a position with H. S. Howland, Sons & Co.

Jas. Johnston, of the Dominion Wire Co., Montreal, is spending three weeks' holidays with Mr. Thomas Hodson, Toronto. Mr. Johnston is much improved in health.

Mr. John McLaren, traveling representative of the Canada Brass & Supply Co., London, passed through Toronto last Saturday on a business trip to Montreal.

Mr. John Bowman, London, former president of the Ontario Wholesale Hardware Association, was a caller at the Toronto office of Hardware and Metal last Saturday.

The Queen City Cutlery Co., 169 Spadina avenue, Toronto, have arranged with their creditors to close out their business and pay 100 cents on the dollar. Mr. I. A. Tobias, manager, will continue to represent the Clauss Shears Co., and is arranging to organize a joint stock company to carry on a wholesale business.

Mr. W. P. Millar, of the James Smart Mfg. Co., Limited, Brockville, was a caller on the Toronto office of Hardware and Metal last week. Mr. Millar reports that the "Kelsey" warm-air heater is steadily increasing in popularity and in conjunction with their blower system is winning great favor for heating and ventilating large hospital buildings, etc., as well as the smaller school and church structures.

Montreal.

Mr. White, hardware merchant, of Orillia, was in Montreal the early part of the week.

J. A. Bremner, of Alex. Bremner, importer of cement, firebrick, etc., Montreal, is confined to his bed through illness.

F. W. Wilkinson, of B. & H. Thompson, metal merchants, Montreal, is enjoying a three weeks' vacation at East Boulton.

Mr. Spragg, late of Emerson & Fisher, St. John, N.B., has joined the invoice department of Lewis Bros. & Co., Limited, Montreal.

The employes of the Dominion Cartridge Co., Montreal, are holding their ninth annual picnic at Brownsburg, Que., to-day, Aug. 19.

Fire gutted the premises of the Montreal Engine Works early Tuesday morning. The loss is placed at between $2,000 and $3,000.

Mr. Moser, of Caverhill, Learmont & Co.'s Winnipeg office, was a caller at the firm's headquarters, Montreal, on Saturday and Monday.

Mr. E. C. Eaton, director of Frothingham & Workman, Limited, Montreal, has so far recovered from his serious accident as to be at his office again this week.

J. P. Seybold, senior member of Seybold & Sons Co., wholesale hardware merchants, Montreal, returned last week from a three weeks' outing at Proud's Neck, Maine.

Mr. E. Dowsley, secretary of A. Ramsay & Sons, manufacturers of mixed paints, Montreal, has returned from a pleasant three weeks' vacation on the coast of Maine.

John James Brown & Son have let contracts for building a large dancing academy and private hotel for Prof. L. Norman, Montreal. D. M. Long is the contractor. Metallic ceilings are to be installed throughout by the Pedlar People.

Mr. W. P. Crary, president of the 20th Century Mfg. Co., New York, was in Montreal this week, and while there appointed Mr. Walter Grose Canadian sales manager for his firm. The Ontario Lantern & Lamp Co. have obtained the right from Mr. Crary to manufacture the 20th Century White Flame Burner in this country.

Mr. K. B. Thornton, superintendent of lines for the Montreal Light, Heat & Power Co., left this week to take a position in the operating department of J. G. White & Co., New York. Before leaving, Mr. Thornton was presented with a loving cup by the superintendent and officers of the company. Mr. W. McLea Walbank, vice-president, made the presentation.

Mr. M. P. Shea, who has traveled in Eastern Ontario and the Soo line for the past two years, representing the Canadian Fairbanks Co., Limited, has taken control of the advertising and publishing department for the company, and will be succeeded by Mr. E. J. Holland, who is well known in that territory. The company intend making other additions to their traveling staff in Quebec Province.

"Steeple Jack" Murphy has been in Montreal for some time executing contracts of repairing and re-painting galvanized iron work on the tall steeples of St. Antony's, Dominion Square Methodist, American Presbyterian and St. Gabriel's Churches. His method of work is unique inasmuch as he uses no scaffolding or ladders. Jack intends to visit Ontario in the near future, and if any of the trade would like to secure his services letters addressed care of the Pedlar People Montreal, will catch him.

Elsewhere.

The employes of the Vulcan Iron Works, Winnipeg, hold their annual excursion on Saturday, 19th inst.

Purvis Bros., hardware merchants and plumbers, Sudbury, have completed a large two-storey brick addition to their store on Larch street.

Mr. W. G. Seyffert will shortly open a store on Ainslie street, Galt, for the sale of sporting goods, light hardware and stoves and ranges.

Mr. H. E. T. Haultain, mining engineer, Toronto, has been appointed to take charge of the mining and milling for the Canadian Corundum Co. in Renfrew County.

Mr. M. R. Summerfeldt, hardware merchant, Mount Albert, is making an extensive trip to the Northwest and Pacific Coast and will be gone about two months.

Mr. Robert Piper, of Gillard's hardware store, Cobourg, was injured recently while taking down a can of pitch tar from a shelf. It exploded and flew into his face, burning it severely, especially about the eyes. It is thought that his sight is not permanently injured.

Robert Hobson, manager of the Hamilton Steel & Iron Co., who had planned to start for England shortly, was taken suddenly ill a few days ago, and his condition became so serious that it was decided to remove him to the city hospital, where doctors operated on him for appendictis. His many friends will hope for a speedy recovery.

Mr. H. Saprey, vice-president of the Montreal Copper Co., Limited, was in Hamilton last week. Mr. Saprey says the boycott on the United States products by the Chinese is not hurting Canada any. As an instance, his company shipped 100,000 tons of copper to the Celestial Empire recently, and is sending another big order to the same place next week.

Mr. W. H. Wiggs, the proprietor of the large plumbing supply house (Mechanics' Supply Co.) in Quebec City, has just returned from Europe, having gone with the Canadian Manufacturers' Association. He also visited France, Germany, Holland and Belgium, and while there saw the Liege Exhibition. Canada has the finest foreign building on the grounds and it is daily crowded with visitors.

John Lemmon, of the firm of Lemmon & Lawrenson, hardware dealers, Kingston, has purchased the interest held by the latter partner. The firm will hereafter be known as Lemmon & Sons, and will consist of Mr. Lemmon and his two sons, Allen and Melville. It was just exactly five years ago that Lemmon & Lawrenson went into business on King street. The business has grown from a $5,000 basis the first year to over $40,000 this year, and prospects are good for future development.

GAS FLASH LIGHT SIGNS.

A taking novelty is being introduced in Canada by the Rochester Lamp Co., 109 Church street, Toronto. It is a flashlight sign with an automatic gas burner, allowing the sign to show dark for a minute or a few seconds and then light for a longer or shorter period. All contrivances of a similar nature in the past have been electrical affairs. The device is of great value to merchants desiring to attract attention to special sales or seasonable merchandise and there is room for several in every town.

FARMERS ARE LEARNING.

Mr. W. A. Hillhouse, hardware merchant and plumber, Shelburne, writes that the trade in his section is very prosperous. He says: "Our farmers are beginning to instal heating and plumbing in the handsome new houses they are building, the same as their town cousins. Trade in all lines is good and a magnificent crop is about to be harvested."

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

TRAVELERS WANTED.

A MIDDLE-AGED gentleman of good address is wanted to call on the trade in Ontario. No samples to carry. A very good opening for a retired or retiring general merchant who desires a light, healthy occupation with good remuneration if successful. Give references. Box 260 HARDWARE AND METAL, Toronto. (25tf)

SITUATIONS VACANT.

HARDWARE clerk, with knowledge of tinsmithing by September 1. Box 483, Essex, Ont. (34)

TINSMITHS wanted; 20 to 25c. per hour. Apply to Pedlar People, Oshawa, Ont. (34)

TINSMITH wanted; experienced; must be good on furnace work; steady employment; wages $12 per week. Box 269, HARDWARE AND METAL, Toronto. (34)

WANTED—Good hardware clerk; one who has the knowledge of cutting glass and stocking; keeping suitable for the country trade. Address Jas. Wright & Son, Glencoe, Ont. (35)

WANTED—At once, one first-class tinsmith; must be temperate; steady job to right man. Apply to S. B. Merrill, Enterprise, Ont. (34)

GRANITEWARE REPAIRS.

TINSMITHS, attention—Graniteware repaired by new process; durable and good. Send one dollar for recipe. O. S. Wright, Hardware and Tinware, Vienna, Ontario. (33)

TO LET.

WAREHOUSE in Galgary, newly built; wired for electric light and with railroad siding facilities; basement, 44' x 32'; ground floor, 44' x 32½'; first floor, 73' x 48'; with or without heat as tenant desires, also Elevator if required. Apply to Wm. Head, P.O. Box 104, Calgary, Alta. (33)

FOR SALE.

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. (38)

AS AN ENGLISHMAN SEES US.

AN Englishman, now resident in Toronto, recently wrote the Ironmonger, of London, England, the interesting letter reproduced below. The writer, Mr. E. P. Oxenden, has been in Canada a year and is now manager of a hardware business in Toronto. He says:

"One of the first impressions I received on arriving was of the large scale on which the hardware trade is conducted here and the wideness of its scope for individual enterprise as compared with England. Here in Canada we have no equivalent of the Thames street houses to compete for the builders' trade. The builders, as a matter of course, go to the local hardware and plumbers' stores for all their supplies. Moreover, owing probably to the existence of so many manufacturers' syndicates and associations and to the high import tariff, the selling prices are high and well maintained, especialy in plumbers' goods. The population of our immediate market in Toronto is now about a quarter of a million and is rapidly growing, and we also supply a big district outside the town, so that there is an enormous demand and market for our goods.

The almost universal business terms in the retail trade here are net cash, and no discount is expected by the buyer, but the wholesale houses allow the retailer 2 per cent. for cash within thirty days. Many retailers, of course, give credit, usually on the hire-purchase system, which is rather popular. No stamp is needed to make a contract legal, so that this form of trading is simple and safe. Receipts also are free from stamp duty here.

Toronto is a large manufacturing town. In the hardware department it produces stoves, furnaces, tinned and japanned ware, enamelled ware, woodware, cutlery, tools of various kinds, and machinery. Moreover, throughout the Province of Ontario, works of all kinds are growing up. In imported cutlery Rodgers' brand is generally called for, but some of the German makes have a pretty fair reputation, and Canadian manufacturers are coming to the front in table cutlery. In axes there is a very large demand for the famous American patterns, American saws, planes, and levels are also mostly used, but in chisels, English-made goods hold the market. The prices for tools generally rule low, but good cutlery, owing to the carriage and duty, is high in price. All sheet iron and tinned goods are remarkably light in quality and of cheap grade. A really strong coal-hod, pail, or dustpan, for instance, cannot be found here. The Canadians are also very weak in brass foundry, and the patterns of this stock in the ordinary hardware store, are few and flimsy, iron goods, japanned or bronzed, being often substituted for brass. The practice of only keeping a very small variety of patterns and sizes makes stockkeeping easy, and fresh supplies can usually be obtained within twenty-four hours, the order being sent by the telephone (telephones, by the way, are almost universal). Travelers call weekly, and many goods are ordered six months in advance. There is a large sale for American pattern locks, which are wonderfully cheap. Brass door furniture is unknown, china or mineral furniture of American pattern being almost universal. All hardware retailers sell window glass, for which there is a very large demand, as also for ready-mixed paints, turpentine, oils and varnishes. Gardening tools (mostly of American pattern) are cheap, but the variety is very limited. In spades, shovels, and digging forks, for instance, only one size is usually kept in stock. Side-driven lawn mowers, the only pattern used here, are in large demand, and very cheap, retailing at from $3 to $5 for 14-inch to 18-inch cutters. Such domestic goods as mangles and laundry stoves are rarely seen, as the Chinamen do practically all the laundry work. Their laundries are to be found in every street, but the Government does not encourage the increase of this type of "washerwoman," for Chinese women are altogether prohibited from entering Canada and the men may only come in on payment of a heavy poll-tax.

Painters' brushes in good quality and well assorted are found in all hardware stores, but domestic brushes are poor in quality and assortment, because the almost universal corn broom and the American mop are made to serve all purposes, and floors are very largely painted, stained and varnished, or oiled and polished. Hence the large demand for paints, oils, and varnishes. A great deal of the splendid turnover in the hardwareman's business here as compared with England is due to the greater extreme of cold and heat, every change of season producing its fresh demand for hardware goods. Thus, every autumn brings with it a call for stoves, furnaces, and their fittings from every house, as well as for storm doors and windows, together with the demand for the necessary outfit for this; while the severe frosts of Winter regularly cause bursts in the water pipes, taps, and hydrants, and Spring means the removal of all stoves and their pipes. Spring cleaning, moreover, brings with it a call for screen doors and windows to keep out the flies and mosquitoes, and after a year's residence I have come to the conclusion that there is no better country than Canada for the hardwareman who knows his trade, especially if he is able to combine plumbing and tinsmithing with his ironmongery business."



BUSINESS CHANGES

Ontario.

John Simpson, blacksmith, Carleton Place, is dead.

J. D. Mills, hardware merchant, Prescott, has assigned to G. W. Wallace. A meeting of creditors will be held Aug. 19.

The Guelph Foundry Co., Limited, Guelph, are in voluntary liquidation. The assets have been advertised for sale by tender.

Quebec.

Berthiaume & Pepin have been registered as plumbers, Montreal.

J. R. Durand, tinsmith, Berthiersville, is offering to compromise.

J. O. Gervais, hardware merchant, Montreal, is offering to compromise.

Vaillancourt & Lafrancois, plumbers, Montreal, have dissolved partnership.

The assignment of J. H. Lacroix, hardware merchant, Shawinigan Falls, has been demanded.

J. I. O. Guindon, hardware merchant, Montreal is offering to compromise. The assets were sold Aug. 18.

Gravel & Duhamel, wholesale saddlery and hardware merchants, Montreal, have purchased the bankrupt stock of O. L. Richardson & Sons, wholesale asddlery, Quebec.

Manitoba and N.W.T.

J. Harrison, blacksmith, Wapella, has been succeeded by J. Hazelwood.

GODERICH HARDWAREMAN IN WEST.

MR. MELVIN HOWELL, a prominent hardware merchant of Goderich, Ontario, was in Winnipeg early in the week and called at the Winnipeg office of Hardware and Metal. Mr. Howell is taking an extended trip through the west, and on Tuesday night he left for the Coast. He intends visiting the Portland Fair and returning home by way of Chicago. Mr. Howell has been brought up in the hardware trade, being for years in the employ of R. W. McKenzie, the veteran hardwareman of the pretty town of Goderich. Later he was admitted to partnership, the firm becoming McKenzie & Howell. About two years ago Mr. McKenzie retired from the business and Mr. Howell took over one of the most progressive hardware stores in Western Ontario.

NOW "MADE IN CANADA."

The 20th Century Mfg. Co. of New York have granted to the Ontario Lantern & Lamp Co., Montreal, the right to manufacture their white flame burner in Canada. This article is already in brisk demand, and buyers in the Dominion will be glad to know that they can henceforth secure it in their own country without paying duty. The Canadian sales will be under the management of Mr. Walter Grose, who is so well known to the trade through his connection with the Ontario Lantern & Lamp Co. All communications from Canadian dealers in reference to the 20th Century White Flame Burner should hereafter be addressed to Walter Grose, 28-30 St. Dizier street, Montreal.

Pressed Zinc Ornaments often make the beginning of a profitable trade in "Metallic" Building materials. Their beauty suggests many other metal things.

Dealers catering to the Sheet Metal Trade find the quality, workmanship and variety of the "Metallic" line more satisfactory than any other.

Being of solid zinc or copper they last forever and their outlines are clearer cut and sharper than any similar die stuck work.

The use of "Metallic" Pressed metal goods in the form of Friezes, Festoons, Centres and other Ornaments for interior and exterior decoration are innumerable. New designs are added constantly.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg 314

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (stone brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Aug. 18, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

IN another part of this paper will be found an extended account of the National Plumbers' Association convention, which was the big event in Winnipeg trade circles last week. The holding of the convention in Winnipeg this year has already given the association work in the west a new impetus and it is probable that the Province of Manitoba will have a Provincial association very soon. Hardware and Metal was the only Canadian paper having a representative at the sessions of the convention.

* * *

Geo. Clare, M.P., for South Waterloo and head of the firm of Clare Bros., of Preston, Ont., was in Winnipeg last week visiting Clare & Brockest, the western selling agents for the firm. Mr. Clare will visit the coast and probably the Portland fair before his return east.

* * *

On Saturday the office staff of the J. H. Ashdown Hardware Co. held their annual picnic at Winnipeg Beach. The excursion was very successful, the only regret being occasioned by the absence of Mr. Ashdown.

* * *

Prices are steady this week, the single exception being a decline in zinc. Many travelers are enjoying their holidays and consequently wholesale business is not so brisk as it has been.

* * *

Screen Wire Cloth—Price is still quoted at $1.55 per 100 square feet. The season's trade is almost over.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch	roll,	perroll	$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Lanterns—Selling in large quantities for Fall trade. Prices, as recently announced by the wholesalers, are as follows:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Trade in all kinds of staple wire and fencing, is fairly active, orders being for Fall delivery. Prices are still quoted as follows:

Barbed wire, 100 lb	$2 85
Plain galvanized 6 to 8	3 39
" 9 2 50	2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Stephens'

Paint and Varnish Solvent

For removing paint or varnish from any desired surface.

It acts quickly and will not stain or raise the grain, leaving the wood in its original condition ready to be repainted or finished.

Absolutely reliable and a ready seller.

Write for information in detail and lowest prices.

G. F. STEPHENS & CO. LIMITED

WINNIPEG, CANADA

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent., "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. The price is steady since the recent reduction to $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—There have been no changes since the reduction in Anchor tarred paper, recorded last week. Prices are as follows:

Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—Trade is now very brisk for September delivery. We quote:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is only fairly active. Prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—A reduction of 50 cents per cwt. has been made this week. The

price of cash lots is now $7.75 and the price of broken lots is $8.25.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅜ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ⅜ "	3 00
" ½ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints and Oils—Prices are steady this week, and general business continues very active. We quote again as follows:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls		0 02½
" " in kegs		0 02¾
Turpentine, pure, in barrels		0 96
Less than barrel lots		1 01
Linseed oil, raw		0 62
Boiled		0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70. "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6to 100 "	

WINNIPEG HEATING CONTRACT.

D. W. Dwight. of Toronto, manager of the G.N.W. Telegraph Co., has presented to his daughter, Mrs. D. Ross, of Winnipeg, a Pease Economy heating and ventilating system. Waterloo vapor registers will be used throughout the system, and all materials are being furnished by the Pease-Waldon Co., Limited, of Winnipeg.

A new water service has been established at Grimsby.

Sarnia is extending its waterworks system. Two new high-pressure boilers are being installed.

A. Rodgers & Co., plumbers, Hamilton, have secured the contract for the alterations to the plumbing, etc., in the court house, the price to be $1,018. This includes the mason work, carpentering, painting, plumbing, plastering and tiling.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory 76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

FOR **STORAGE** IN **WINNIPEG**

Handling and reshipping of goods. Brick warehouse with track facilities

MACKENZIE BROS. WRITE 244 PRINCESS ST. OR P.O. BOX 579 **WINNIPEG.**

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

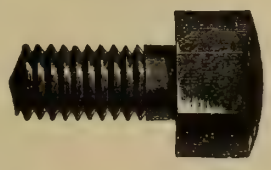
SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

HARDENED AND TEMPERED

SPRINGS

Send specifications to ANY SHAPE

The WALLACE BARNES CO., BRISTOL, Conn.

NEW CATALOG JUST ISSUED.

Manufacturers of High-Grade

PLUMBERS' SUPPLIES

and

STEAM GOODS



J. M. T. Valve

RETURNED AUG 21 1905

THE J. M. T. VALVE—The "Standard of Excellence." Made in heavy and extra heavy pattern, for high pressure, of best Steam Metal, with Jenkins or Copper Metallic Renewable Disc.
Supplied in all styles of "Globe," "Angle," "Check" and "Gate" Valve patterns.

Our 1905 Engineers' and Steamfitters' Catalogue now ready for the Trade



RETURNED AUG 21 1905

The "Astoria" Closet with low Tank

THE "ASTORIA"—Our Special High-Grade Syphon-Jet Closet, Square Back, Noiseless Tank, Saddle Seat, Piano Polish Wood Work; also supplied with "Nethery" Patent Flush Valve, the simplest flushing device on the market, dispensing with Tank.

Try J. M. T. Cushion Disc Compression Work. The best wearing goods made.



RETURNED AUG 21 1905
To Owner
Ast Book 39
Page 18

Designers and Manufacturers of

ARTISTIC GAS AND ELECTRIC FIXTURES



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HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
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ARTICLE XII.

AN EXAMPLE OF MODERN STEAM HEATING AND VENTILATION FOR PUBLIC BUILDINGS.

WHAT is, perhaps, the most modern system of steam heating and ventilation in Ontario has recently been completed in the new Science Building, Toronto, and it is the purpose of the writer to describe, so far as that is possible in a short series of articles, its method of operation, and by a few sketches, the general scheme carried out in its installation.

Of course it is to be understood that the drawings used are not scaled, so far as the building is concerned, and are not intended to give a correct idea of its interior, but rather to give the reader an opportunity of studying a scheme of heating and ventilation which it is expected will at once prove economical as regards the consumption of fuel, and effective as regards its ability to properly heat the building and provide the required number of changes of air.

In this respect, attention is drawn to the fact that the amount of air required in the various rooms in the building varies, not altogether because of the varying number of inmates—which is usually the only consideration in considering schemes of this kind,—but because of presence in greater or smaller quantities of noxious gases and pungent odors in many of the apartments, due to the work of experiment and research which is almost constantly going on in such an institution.

We will take up first for consideration the question of ventilation, a question which all will agree is one of the first importance, and which, perhaps, is today receiving more attention and careful thought on the part of heating and sanitary experts than any other with which they are called upon to deal. And because of the increasing recognition which it is receiving on the part of health authorities, who are meeting with a large measure of success in their efforts to gradually educate the public along proper lines, it becomes a matter of prime importance to every member of the heating and plumbing fraternity, be he master or journeyman, to make good use of every opportunity which presents itself to study the work of the best engineers in this line, so that they may be in a position to adopt, in a larger or smaller scale, the ideas therein contained.

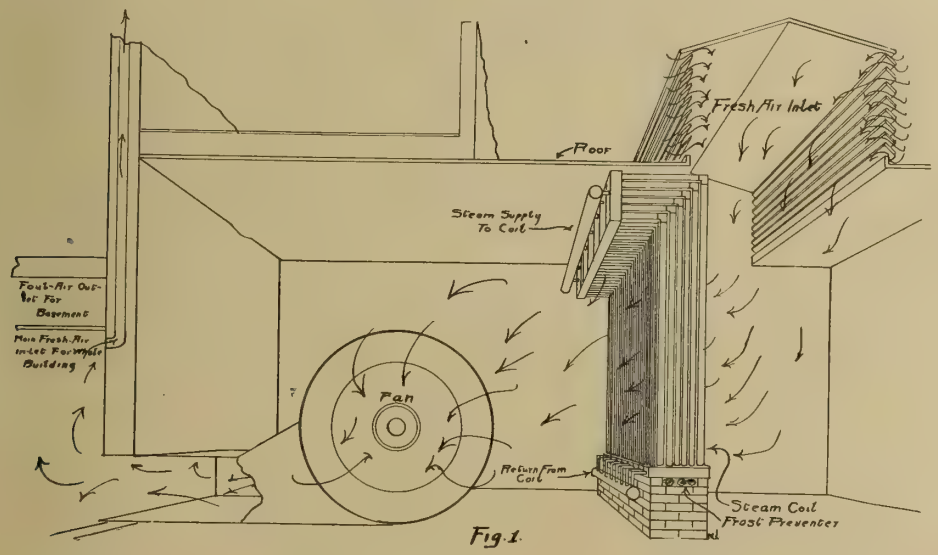


Fig. 1.

In designing a system of ventilation for a building, whether it be of a large public character, such as a church or school, office building or factory, or a private residence, two systems are available, viz., the gravity or ordinary indirect system which depends for its operation upon the difference in weight between the inside and outside atmosphere and which, because of the great fluctuation between these two bodies, cannot be relied upon to deliver a definite quantity of air in a specified time; and the mechanical system, which, through the medium of a fan, either steam or electrically driven, can, when of the correct size and driven at the proper velocity (accurate conclusions regarding both of which points are easily arrived at), deliver a constant supply of air of any desired volume without regard to atmospheric conditions.

It will, of course, go without saying that the latter system is the one adopted by the engineer who designed that in use in the Science Building, and a study of the cuts shown, together with the following explanation of the system, will, we hope, convey a clear idea of its essential features.

Referring to Fig. 1, it will be seen that within a large chamber, which is built immediately adjacent to the boiler room, is placed a large steam coil or "main heater," extending from a foundation of brick to a point close to the ceiling.

The coil is made in sections, each having fourteen one-inch pipes built in two rows of seven pipes each, and connected together top and bottom with cluster heaters, the tappings of which are made in straight rows, instead of "staggered"—the usual method,—and each section is separately valved and tapped, though these details are not shown.

Under the bottom headers is run a continuous three-pipe steam coil, without valve, but returned through a trap, so that it is kept constantly hot, to prevent the action of frost on the lower portion of the main heater, where condensation is liable to congeal when the outside temperature is at a very low point.

In front of the main heater is placed a double inlet supply fan, of the "full housed" cone construction. This fan is 14 ft. high, 6 ft. wide, with 7 ft. inlets, is belt connected to a 35-horse-power engine, and is run at a maximum velocity of one hundred and fifty revoluzions per minute.

When in operation the air is moved in the direction indicated by the arrows, a partial vacuum being created by the withdrawal of the air in that portion of the chamber in which the fan is situated, the fresh air from outside rushes in through the towers above the roof and is drawn through the steam coil, where it is heated to the desired temperature, passed through the fan as indicated, and discharged under pressure into the "main fresh-air inlet for the whole building," which is in reality a corridor under the basement floor, about 12 ft. wide and 7 ft. high, running the whole length of the building, and into which open the flues connecting with the various apartments.

Referring now to Fig. 2, it will be seen that flues are built in the walls on each side of the corridors, through which the air is delivered under pressure to the rooms on the different floors. A separate flue is provided for every room, and enters the same at a point between seven and eight feet above the floor.

On the face of every fresh air register is placed a galvanized sheet iron construction, an example of which is shown in Fig. 3, the object of which is to properly diffuse or distribute the incoming

currents of air so that a comparatively even distribution of the same is assured.

The angles at which the various deflectors are set depends, of course, upon the position of the register in its relation to the centre of the room, and the proportions of deflector are worked out with a view to fulfilling the requirements of the room for which it is intended.

With regard to the removal of the foul air, Fig. 2 shows a passage under the basement corridor floor, and above the fresh-air duct, which, like the latter, runs the full length of the building. Into this passage open flues which connect with the apartments in the basement only, and at the end of this "foul-air outlet from basement" is placed an exhaust fan, similar in construction to the main supply fan, though much smaller, being 7 ft. in diameter, 4 ft. wide, with a single inlet 5 ft. in diameter, an outlet 4 ft. square, belt connected, motor driven at a maximum velocity of 165 revolutions per minute.

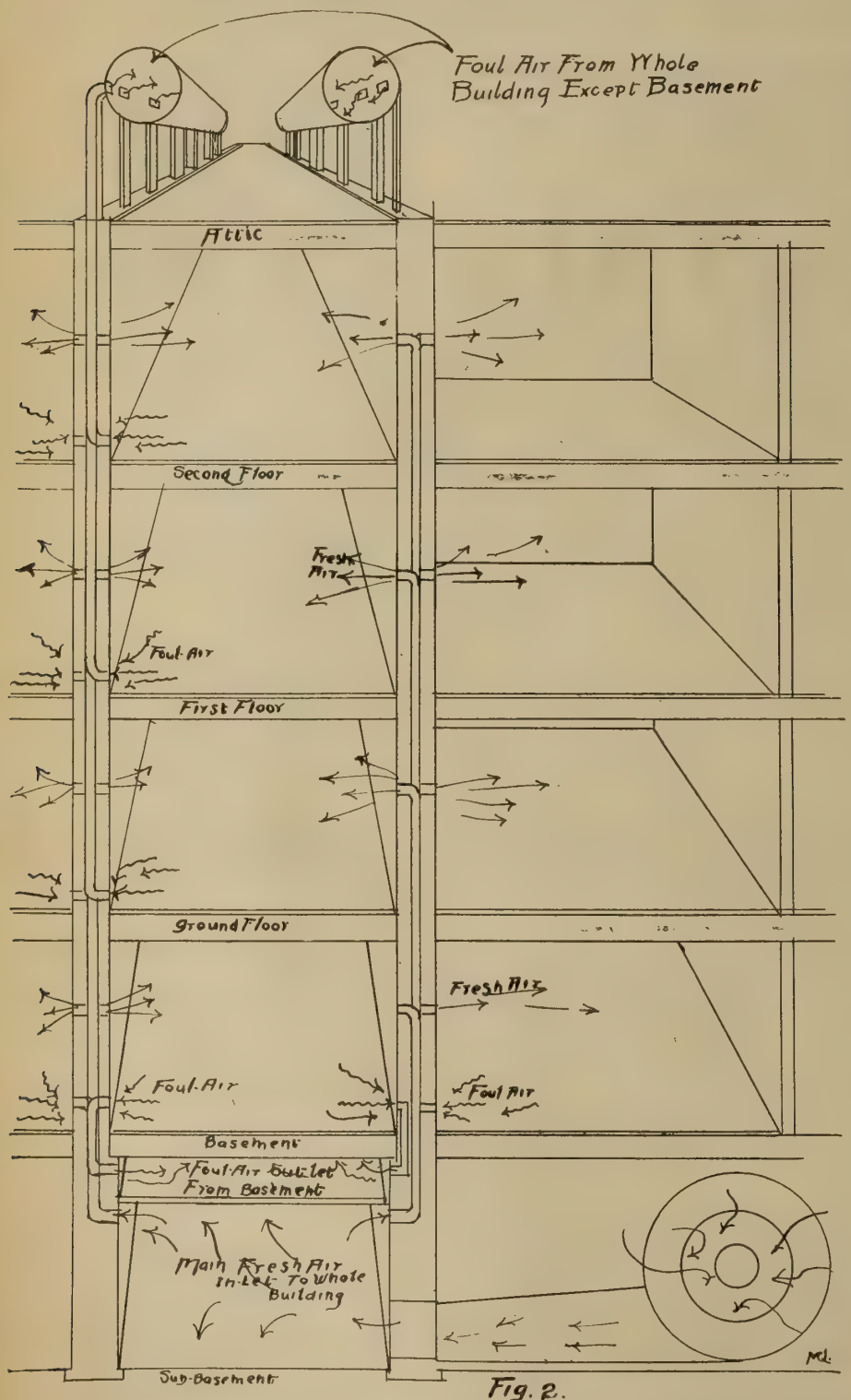


Fig. 2.

The foul air is in every instance taken from the apartment at a point close to the floor.

The removal of the foul air from the three upper floors of the building is accomplished by means of flues in the walls, more distinctly shown on the left side of Fig. 2, and of construction similar to those used for fresh-air inlets.

All foul-air flues extend to top of wall in attic, where they are connected to "main foul-air ducts by means of rectangular galvanized iron pipes of the proper dimensions.

The "main foul-air ducts" terminate in two chambers, one of which is shown in Fig. 4, in each of which is placed a fan, one 7 ft., the other 8 ft. in diameter, full housed, double inlet with outlets 48 in. by 136 in. and 49 in. by 155 in., respectively, each with a maximum velocity of 165 revolutions per minute.

These fans exhaust the air from the "main foul-air ducts" and deliver it into a large foul-air duct placed under the apex of the roof and running the full length of same.

This arrangement is more clearly shown in Fig. 5, which is a cross section of the fan chamber.

From this "main foul-air duct" the air is forced through an opening about 4 inches wide, which also runs the full length of the roof, and which is surmounted with a heavy galvanized iron hood set at a height sufficient to allow of the free exit of the total volume of air discharged by both fans, this arrangement obviating the necessity of constructing anything in the shape of a ventilating tower.

All fresh and foul-air ducts are fitted with a close-fitting damper, which is pneumatically actuated by a thermostatic device situated in the apartments to which they are connected, so that any desired constant volume of air may be delivered to any portion of the building.

This system of ventilation is undoubtedly as nearly perfect as it is possible to make it, careful regard having been had to all losses by friction and otherwise, the amount of air which can be supplied to each portion of the building is definitely known, and it being entirely separate, and in no way dependent upon the direct heating system, which will later be described, can be run, if so desired, only when required for ventilation, thereby effecting a very large saving in fuel which would be required if all the necessary heating and ventilation were attempted with one plant.

POSSIBILITIES IN HOT AIR HEATING.

Addresses delivered by R. S. Thompson at a semi-annual meeting of the American Society of Heating and Ventilating Engineers, Chicago, July, 1905.

JUDGEMENT is liable to be influenced by interest, and it is natural to suppose when a person advocates any particular system of heating that he has a special financial interest in that system. That the arguments I present may not be thus discounted I will state that the concern with which I am connected is just as well pleased to get a contract for heating with hot water or steam as with hot air, and my opinions are therefore unbiased by interest.

The primary object in all house-heating apparatus is to fill the house with warm air, and in all systems the air is warmed by contact with heated surfaces, as air is absolutely transparent to radiant heat. In heating with hot air the air is heated by contact with hot surfaces in a central heating apparatus and is then conveyed to the rooms. In heating with hot water or steam the water is heated

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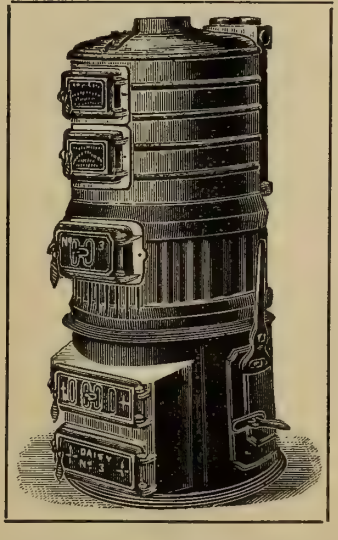
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in the heating apparatus, conveyed to the rooms and there used to heat the iron of the radiators, which in turn heats the air.

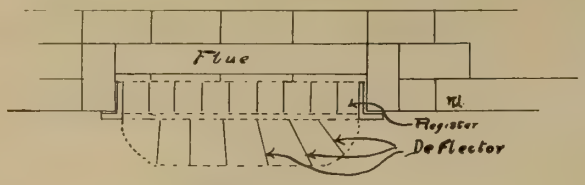


Fig 3

The difference between the two systems is, therefore, practically that in the hot air system the air is heated by one

But economy of operation is no less important. The plant is paid for once, the fuel bill is a continuing expense and

A given amount of fuel will in perfect combustion set free a given amount of heat, no more and no less. The heat is in the fuel, not in furnace or boilers. No heating apparatus can add a single unit. The theoretically perfect plant would be one in which there was absolutely perfect combustion of the fuel and complete utilization of the heat released by this combustion, and on these two points depends the comparative economy of operation.

On the first point, completeness of combustion, while there is large difference in different apparatus there is no essential difference between the two systems. The fuel can be burned as perfectly and as large a proportion of the heat units contained in it be released

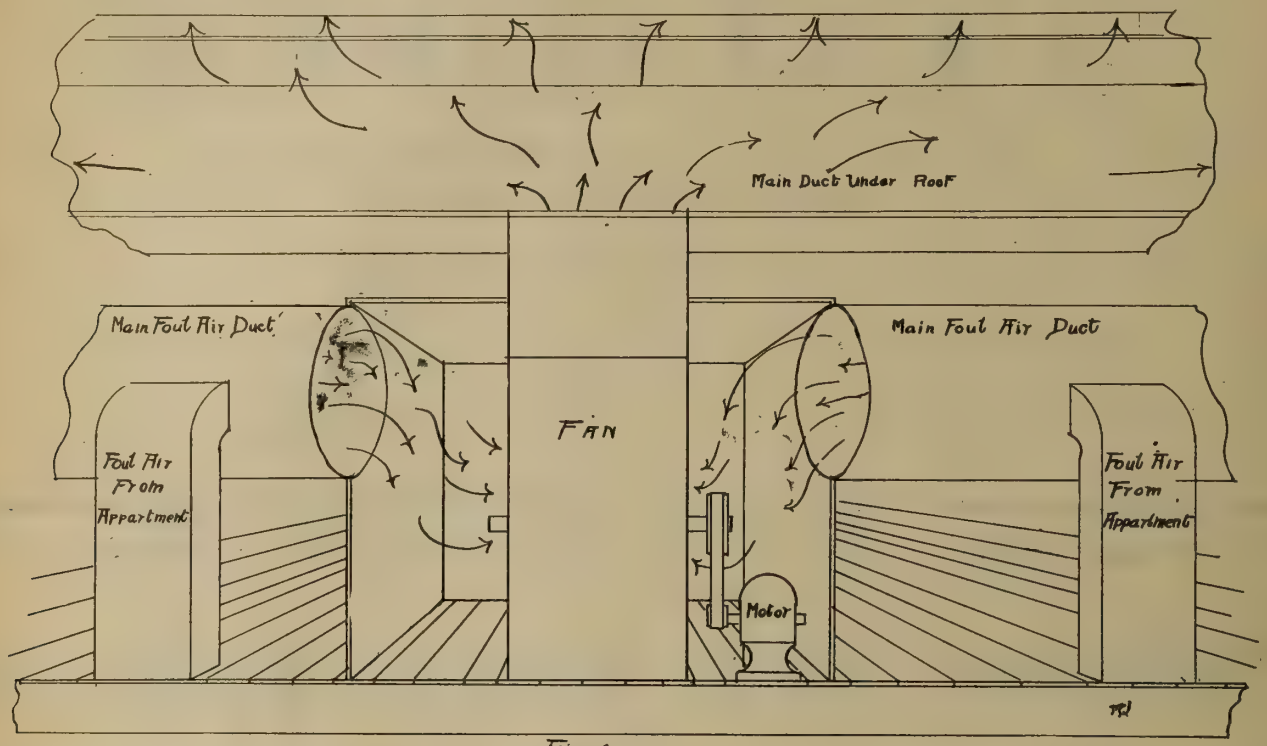


Fig. 4

central plant, while with hot water and steam the air is heated by a separate plant or substation in each room, which substation is heated from a central station.

It is not my purpose to disparage the system of heating the air by individual heating plants, but to show some of the possibilities in heating the air by a central plant, a system which, in my judgment, has been largely left to incompetent men and has not received the attention and scientific study which it deserves. That this system has been in a large proportion of cases unsatisfactory I freely admit, but believe that the failures have been due to errors in construction or operation and not to any inherent defect in the principle.

First Cost of Hot Air Heating.

Heating the air by a central plant involves less expense in the installation, and this is a matter which demands the consideration of the practical engineer. Economy in first cost is not everything, but it is something, and with probably 99 out of 100 people who have homes to heat a very vital something. While a really first-class hot air plant cannot be installed at the prices commonly charged for inferior and inefficient ones, yet even

frequently amounts to more in a few years than the first cost of the plant. No system is economical which involves a continuous useless expense. What are

with one system as with the other. The issue is therefore narrowed to what becomes of the heat after it is released from the fuel.

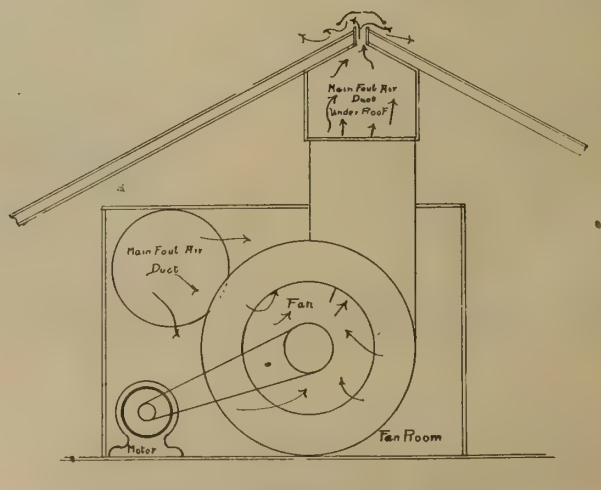


Fig 5

the specific facts in regard to cost of operation in heating with hot air?

Heat cannot be destroyed. Once produced, it must either be transformed in-

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to some other form of energy or continue as heat. In house heating it may be practically said that all the heat released by combustion either goes toward heating the house—that is, to replacing that which has been lost by radiation and leakage through walls and windows—or escapes up the chimney, having performed no more useful function than the creation of a draft.

The extent to which the heat produced is utilized can therefore be practically determined by ascertaining the per cent. which escapes to the chimney. The lower the temperature at which the waste products of combustion escape to the chimney (velocity of current being the same) the larger will be the per cent. utilized for heating the house and consequently the greater the economy of operation. In other words, the extent to which the cooling of the products of combustion can be carried is the measure of the efficiency of any heating apparatus.

Efficiency of Hot Air Heating.

Let us see the theoretical limit to which the cooling can be carried, keeping in mind the fact that the theoretical limit can never be reached, much less passed, in practice.

The products of combustion are cooled by contact with metal which is cooled by contact with water or air. The theoretical limit of cooling is therefore the temperature of the air or water by which this cooling is accomplished.

With live steam the possible minimum is the temperature of water boiling under normal atmospheric pressure, or 212 degrees.

With hot water the possible minimum is the temperature of the water as it returns to the boiler from the radiators, usually 140 to 170 degrees.

With hot air the possible minimum is the temperature of the cold air entering the furnace, anywhere from below zero to 70 degrees.

The theoretical limit of cooling and consequent theoretical economy in operation is therefore lower with hot water than with steam, and lower with hot air than with either hot water or steam. It is therefore possible, throretically, to heat with hot air more economically than with any other system.

But the advocates of the other systems will contend that while this may be so in theory, yet in practice, owing to the greater power of water to absorb heat, it is otherwise, and that actually the exhaustion of the heat contained in the products of combustion is carried much further in both steam and hot water heating than it is in hot air heating.

In many cases I admit the contention, but in turn contend that the reason is to be found in the construction of the apparatus and not in the principle and that it is entirely possible to so construct hot air apparatus that the same difference in its favor, as compared with hot water and steam, will exist in practice as is shown in theory.

A few days since I made a test with a hot air furnace and found the temperature in the smoke pipe was 120 degrees, or at least 20 degrees lower than the theoretical minimum with hot water and 92 degrees lower than the theoretical minimum with steam. Probably you will say that the fire was low. Judge for yourselves. At the time I took the temperature of the smoke pipe the furnace was delivering over 1,000 cubic feet of air a minute at a temperature of 210 degrees. And when this test was made the temperature of the outside air was 80 degrees, or at least 40 degrees higher than would be usual in the use of the apparatus. It may safely be said, therefore, that in actual practice the cooling of the products of combustion in a hot air furnace can be actually carried from 40 to 120 degrees lower than the theoretical minimum with hot water and steam. I think it therefore demonstrated, both by scientific deduction and practical test, that one of the possibilities in heating with hot air is the utilization of a larger per cent. of the heat contained in the fuel than can be secured by any other system.

In heating with hot air, however, there is an expenditure of heat which may perhaps be called waste—namely, the heat contained in the air which is forced out of the building by the pressure of the warm air that is being poured in. But this loss of heat is due to the necessity for ventilation. A given amount of ventilation will involve the same loss of British thermal units whatever the heating system may be. It is true that with hot water or steam heat it is possible to reduce the ventilation below the proper ratio and thus save heat. But this is equally possible with hot air if the plant is so constructed that the amount of ventilation can be controlled.

It is true that with hot air heating ventilation can be carried to a point which will involve large loss, as I shall show hereafter. The same is true with hot water and steam. You can open the windows and crowd the fire. But in either case the loss is to be charged up to ventilation or bad management and not to the system of heating, and can be as well controlled under one system as another.

It is a possibility in heating with hot air to heat all the rooms in a house at the same time. I am compelled to admit that this is not always done in practice. I could not even dispute the statement that it is not often done, but I can demonstrate both theoretically and practically that it can be done, and that which can be done is a possibility. The difficulty has not been in the principle, but in the apparatus; not in the gun, but in the man behind the gun.

If the amount of cold air that is supplied to the furnace is equal to the amount that can be forced through all the hot air pipes; if the construction of the furnace is such that this amount of air can pass through the casing and reach the hot air pipes, with velocity unreduced by friction; if the furnace has the necessary surface and the necessary arrangement of surface to heat all this air; if the size and form of the hot air pipes is such as will permit the passage of the required amount of air to each room, and if there is no serious back pressure in any room, the furnace will heat them all at the same time; for if enough air is being passed through the furnace to supply all that can be carried by all the pipes the pressure in the furnace will force this air through all these pipes if the resistance due to friction and back pressure in the rooms is less than the pressure in the furnace. That is a simple matter of mathematical demonstration.

There are a great many "ifs" in that claim. Certainly. And it is the business of the heating engineer to look after those "ifs." If he can't do it he has not yet mastered his profession. These "ifs" cannot be met either by guesswork or by a set of hard and fast rules. They require a thorough scientific knowledge of the principles involved, a considerable amount of practical experience and a liberal use of horse sense.

Air is compressible and elastic. It is subject to friction, inertia and momentum. The fact that two pipes have the same area is not proof that the same pressure will force the same amount of air through each. To get proportions correct is not a simple or easy matter, but requires the exercise of brains and judgment.

Hot Air Heating for Exposed Situations.

It is possible in heating with hot air to heat those rooms which are most exposed to the wind, or the windward side of large rooms. The course of heated air is subject to definite laws and by the use of these laws it can be controlled. But the man who would control it must make himself familiar with these laws and not content himself with a lot of empirical formulas.

The cause of trouble in heating rooms exposed to the wind is that the air pressure on the outside by leakage produces air pressure in the room, and if the pressure in the room is greater than the pressure in the pipe the greater will overcome the less. If the pressure of air on the outside is so great that the pressure of air in the pipe cannot force air out through the crevices around windows, and there is no outlet for the air, it will be impossible to force air into the room and consequently impossible to force air into the room and consequently impossible to heat that room. But the difficulty can be overcome by providing a proper outlet of the proper size and in the proper location.

Nothing has done so much to injure heating with hot air as the common idea that neither skill nor scientific knowledge is needed in connection with it. This system has been neglected by scientific men and the work is frequently turned over to common mechanics. In many places the carpenter is given the job of having the house piped and he turns it over to whoever gets the contract for roofing and spouting. The average man, who would not think of laying out a shoe closet in the house he is building without consulting an architect, will give all the directions for putting in a furnace, determine its size, its location, the pipes and registers. Then he expects the furnaceman to put in the furnace on plans of the builders' selection and guarantee the working of the plant.

And, strangest of all, there are plenty of furnacemen who will do it. No wonder guarantees on the working of hot air furnaces are worth but little.

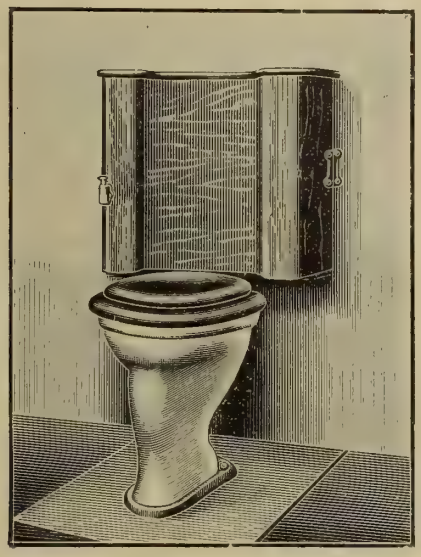
Recirculation to Cure Over-Ventilation.

There is one point in connection with heating with hot air, to which I have already referred, in which there is a possibility of great waste of heat. This is overventilation. Take a house in which the loss by radiation from walls is 80,000 British thermal units per hour in zero weather. To maintain the temperature by replacing this loss will require the use of 62,857 cubic feet of air per hour at a temperature of 140 degrees.

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persons, the maximum requirement for ventilation would be 11,800 cubic feet per hour. In this case we are using 51,057 cubic feet of air per hour in excess of the amount required for ventilation. If this air escapes at 70 degrees and has been heated from zero it represents a loss of 64,963 British thermal units, or about 8 pounds of coal per hour. In my judgment the remedy for this is to make provision for recirculating this excess of air.

AMONGST CANADIAN PLUMBERS.

ENTERPRISING AMHERST PLUMBERS.

AN original picture is reproduced herewith showing Mr. W. A. Loughrey, of Amherst, N.S., hard at work setting up one of the Amherst Foundry Co.'s Beaver brand lavatories.



W. A. Laughrey, Amherst, N.S.
Specially posed for reproduction in HARDWARE & METAL

It will be news to many in the west to know that the Amherst concern is now manufacturing some beautiful lines of baths, sinks and lavatories. The company are developing a large business in the Maritime Provinces, however, and Amherst is proud to have the second purely Canadian enamelled-ware factory.

W. A. Loughrey, who had the accompanying photograph taken especially for Hardware and Metal, has been in the plumbing business in Amherst for nine years and has now formed a company, the business being conducted hereafter under the name of W. A. Loughrey & Co., doing general plumbing and hot water fitting. Mr. Loughrey's enterprise is shown by his letter head, on which a small oval picture of the gentleman appears, together with the words: "In the long run it pays to do good work. That is why I secure contracts all over the Maritime Provinces."

GROWING BUSINESS AT GALT.

THE above is a snapshot of the interior of Allan & McKenzie's hardware store at Galt, Ont. It shows the every-day appearance of this well-known house, consisting of a basement, showroom, workshop, stockroom and garret, with a back shop and storeroom overhead. The showroom is nicely arranged for the display of hardware, stoves, tin and graniteware, paints oils, varnishes, etc., and general house-furnishings.

This house has always been noted for the high class of goods carried in stock. The patronage bestowed on it is very extensive both at home and distant parts of the province. Table and pocket cutlery is one of the specialties and their reputation for up-to-date goods is well established, a common saying being that if there is anything new and good you can get it at Allan & McKenzie's. The stock carried is very large and extensive and increasing every year.

The workshop on the second flat is large, airy and light, and is fitted with a complete set of tools and machinery for tinsmithing, furnace work and general repair work. An iron brake eight feet long is used for eavetroughing, etc. The stockroom, garret and back stockroom takes care of the surplus stock. They have also a large storeroom on Ainslie street, where the surplus stock of new stoves are kept and second-hand stoves are repaired and sold. One feature of this business is that everything is marked in plain figures, this ensuring one price for all.

PLUMBERS' SHOW ROOMS AND SHOPS.

IN my travels through the country I am constantly running up against new ideas in the matter of displaying plumbing goods, writes a traveler in the Metal Worker. Some plumbers are content with little or no display, relying upon their ability to talk or on the value of the work executed by them in the community in which they live. Others, however, take special interest in preparing an attractive showroom, displaying new features and keeping their establishment up to date in all particulars. One way to bring to the public notice new fixtures and to demonstrate the application of old ones is to set closets, basins, tubs, etc., both under water pressure and with sewer connections. This allows the prospective purchaser to see the working of all fixtures in a much better way than if water pressure and sewer connection were not at hand. It is also a good idea to rough in the entire plumbing for a bathroom, leaving the floor open so that the soil pipe may be inspected, showing how the lead bends are connected up, and in all respects to bring to the view of prospective customers the actual working and uses of various fixtures, traps, back vents, air chambers, etc. This affords the plumber an opportunity to explain at some length the superiority of his work over that of others, to show why back vents are used, and in a general way to bring out the mechanical features of a plan.

A wrinkle which is sure to bring trade is to inclose a small room about the size of an ordinary bathroom, have it nicely papered with a varnish paper and set up the fixtures in the way they would be used in the room. This affords an opportunity to display to advantage various nickel-plated fixtures, such as towel racks, clothes hooks, soap boxes, etc., used in bathrooms and which are a profitable line for the plumber to carry. This method of displaying fixtures has the advantage of showing off the goods in their true size; goods on the floor being apt to be dwarfed by the large dimensions of the room and the size of other goods near them. If space is available and business warrants, two or three bathrooms should be fitted up with different priced fixtures to explain quickly and forcibly to customers how certain priced goods will look when installed in their homes.

Another feature which has been found to be of advantage is to have neat photographs of important pieces of work either in a book in the office or framed to hang on the walls, showing customers different arrangements, expensive fixtures and general conditions in op-to-date houses regarding plumbing fixtures. A plumber in a small Pennsylvania town has one of the neatest showrooms I ever witnessed, and the expense connected with fitting it up was not more than is ordinarily incurred by plumbers. The first space of 15 feet was devoted to the display of tubs and other fixtures, which were arranged tastefully so that people could walk around all sides of them and view the fittings. On the walls, which

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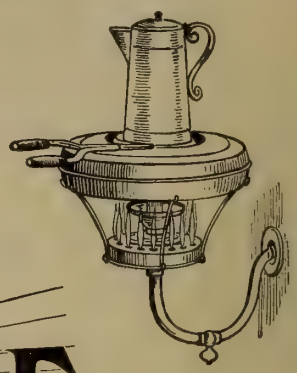
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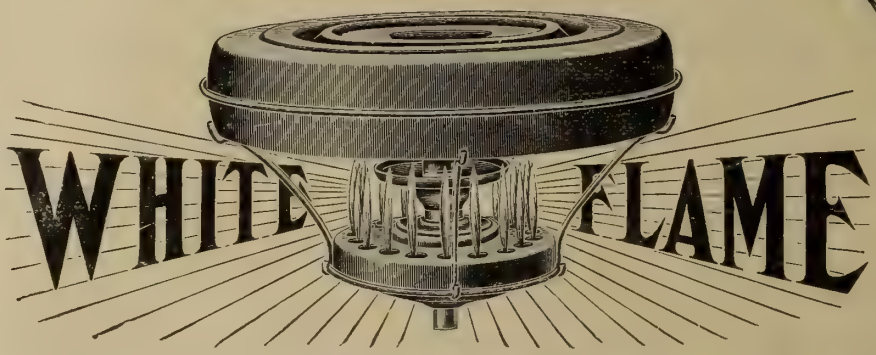
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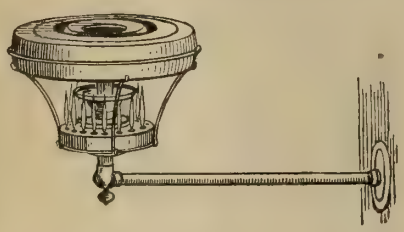


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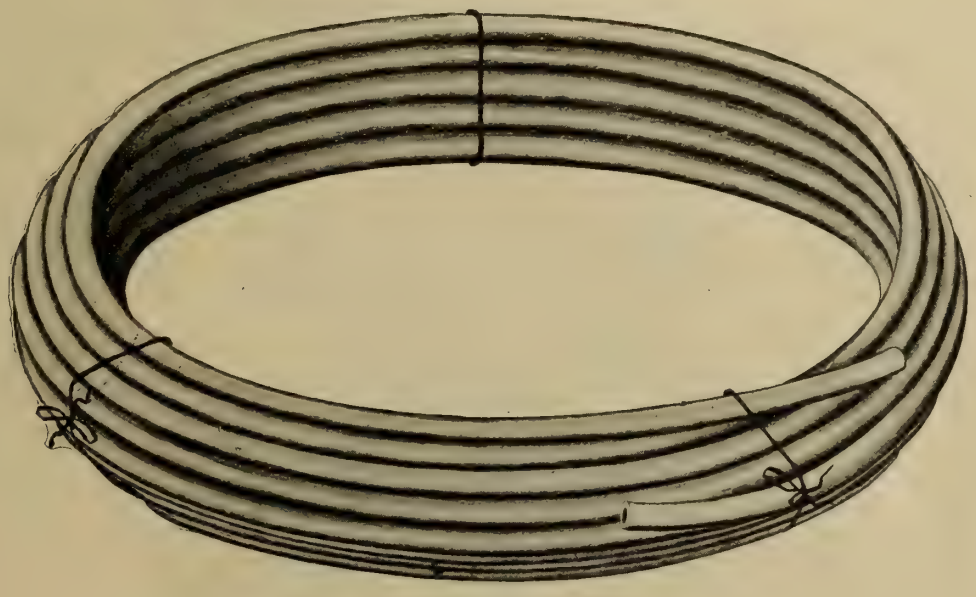
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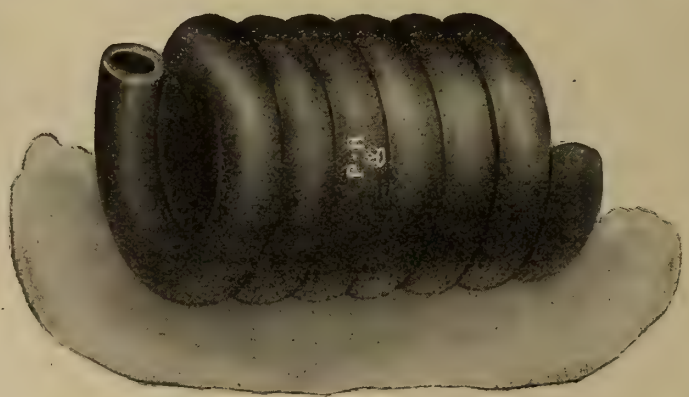
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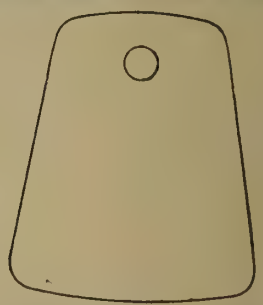
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WROUGHT MERCHANT PIPE

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GUELPH, CANADA

were free from shelves, were arranged either photographs of the buildings or architects' wash drawings where this firm had installed the plumbing work. The rear of the room instead of having the usual rough counter with showcase on top, found in so many stores, had neat glass show counters about 12 feet in length, of the same kind as those ordinarily used by cigar dealers and which cost very little more than the ordinary wooden counter with glass showcase on top. In these were placed nickel-plated fittings of all kinds, which not only displayed themselves to the best advantage but were kept free from dust. Back of these counters were desks for the proprietors and the bookkeeper, and still further back in the room was a door leading into the shop. The shop, however, had an entrance to the street through another part of the building so that workmen never came through the showroom. This is very desirable, as I have often seen careless workmen run up against a prospective customer with a piece of soil pipe.

PORT ARTHUR'S PLUMBING GROWTH.

FOR many years the Marks, Clavet, Dobis Co. and the Wells & Emmerson Co. have been in the plumbing and heating business at Port Arthur. Last year they decided to pool their interests in plumbing and heating goods only and to go out of plumbing and steam fitting, leaving this work to the younger concern. The latter had been buying large quantities of supplies but it was felt that it would be to mutual advantage to the trade in Port Arthur and Fort William to have a jobbing house in this important and growing centre between Toronto and Winnipeg. The new supply house is now well stocked with a full line of all the standard goods and enjoys the patronage of the master plumbers and trade generally in the New Ontario district, the withdrawal of the jobbers from the retail field leaving no ground for dispute and causing the best of feeling to exist between all branches of the trade.

MAKING OF ENAMELLED WARE.

ONE of the surest signs of the general prosperity of Canada, and more particularly of her plumbing trade, is furnished by the rapid growth of the Standard Ideal Sanitary Co., of Port Hope. Established only two years ago, this firm has made such progress that its plant is already three times its original size, and even this will be enlarged in the near future. A Hardware and Metal representative visited Port Hope recently and, guided by Mr. H. T. Bush, the genial manager of the company, was shown over the entire plant, where the numerous operations necessary to turn out fine enamelled baths, sinks, and tubs, were courteously explained.

The splendid new offices of the company were the first to attract attention. Situated on the second floor of a recent addition to the buildings, the offices command a magnificent view in three directions. To the north lies the picturesque Town of Port Hope, while eastward and westward the shores of Lake Ontario present a view which makes this office unique in the country. The interior of the offices is in keeping. Windows on three sides distribute the light almost perfectly, and even in the hottest weather the lake breezes make the offices most comfortable. The private office of Mr. Bush, the president and manager of the company, is finished throughout to harmonize with the mahogany office furniture, and is handsome in the extreme.

The plant of the Standard Ideal Sanitary Co. is situated on a neck of land 1,025 feet long, and containing about eight acres. In choosing the site, shipping facilities were of first importance, and a unique spot was selected for this purpose. On the east side of the works the raw material, such as coke, coal and pig iron, is landed at the very doors from boat or train, and on the west the shipping door opens on another spur line and wharf, whence the finished product is shipped in all directions. Thus no teaming is necessary, and a considerable saving is effected in the cost of production. Another important saving is effected by up-to-date methods. No heat is allowed to go to waste, but be means of automatic fans is utilized for enamelling and steaming purposes.

The process of manufacture includes so many operations that only an expert could hope to describe it satisfactorily.



Excursion party of Employes of Standard Ideal Sanitary Company.

The tubs are first cast in a mould, but the large size of the casting, and the thinness of the walls, make necessary skilled workmanship and unusual care. From the foundry the tub or sink is taken into the cleaning room, where it is trimmed and polished by sand blasts. It next moves into the slush-room, where the first coat of enamel is put on. This is a white liquid of such consistency that it spreads itself evenly over the entire surface. After this coat dries the article is taken into the furnace room, where it undergoes the most interesting operation of all. By the aid of huge tongs, the workmen easily put even the heavy baths into the furnaces, where a heat of 2,200 degrees expands the iron and allows the first coat to amalgamate with it. It is then removed, and while still red hot is laid on a table which, by means of levers, can be placed in almost any position. The real enamel is now put on in the form of a powder, which is sprinkled from pneumatic sieves. This operation is repeated, after which the bath or sink is put in a cooling oven, and the work of enamelling is over.

Mr. Bush firmly believes that the best work can only be done under the best conditions. The splendid situation of the works affords the most essential things in this business—good air, good light, and freedom from dust, and the work of the employes is made as easy as possible by the use of such aids as pneumatic hoists and cranes, which do away with all heavy work in the foundry.

The employes of the company, numbering 200, have caught the enthusiasm of their manager. An instance of this was afforded by the success attending their first annual excursion, which took place on August 3. The party accompanied by their own band, went by special train to Lakefield, whence they took a steamer up the beautiful Stoney Lake. At McCracken's Landing a most enjoyable day was spent, and the men are already looking forward to their next outing.

An encouraging feature of the Standard Ideal Co. is the outlook for an export business. Already goods are being sent to India, Buenos Ayres, Cape Town, and London, Eng., and Australia will soon be invaded. Altogether the expansion of the Standard Ideal Sanitary Co., indicating as it does the prosperity of the Canadian plumbing trade, is a matter for national congratulation.

Messrs. Cotter Bros., plumbers, Winnipeg, have been awarded the contracts of installing the heating and plumbing systems of the new post office. As is to be expected, the plans call for the most modern and up-to-date equipment.

WROUGHT STEEL PIPE AS COMPARED WITH WROUGHT IRON PIPE.

Written specially for HARDWARE AND METAL, by George Clapperton, Toronto.

THE manufacture of wrought pipe, while being of special interest to those who are interested in its production and sale, is of more than passing moment to steamfitters and plumbers; not alone because it is the principal material used in their trades, but the many inquiries they have to answer, giving their opinion as to the relative merits between the steel pipe as made to-day and the wrought iron pipe used in former days.

It may, therefore, be of interest to the readers of this article to have the benefit of what knowledge I may have gained of both the manufacture and durability of wrought pipe.

The first machine made pipe, was manufactured in America under patents secured from England about the year 1835, an industry that afterwards had enormous development. Prior to the time stated, pipe had been made by hand in England and America, and was necessarily very expensive, so that when gas was first introduced into the City of Philadelphia, old gun barrels were used as a substitute, until the supply became exhausted.

With regard to the original makers of wrought pipe, there seems to be some uncertainty, the claim having been made by Mr. Samuel Griffith, who had a furnace in Philadelphia, and Tasker & Morris, who were located in the same city, where they carried on a foundry business and made a specialty of manufacture of stoves and heaters. It is no providence of mine to endeavor to establish, as to which of these claims was correct; Griffith never reached a point much beyond his original venture, and Morris & Tasker & Co. expanded, and at one time controlled the pipe industry.

It is, of course, understood that all wrought pipe, made and used at the time mentioned was iron and butt welded, the lengths being about twelve feet long and the gross product about ten tons per week, and in order to protect same from foreign competition, it was decided to adopt a different standard of threads, to be known as the American guage.

From this small beginning has grown up one of the great industries of America: the present production of wrought tubular goods in America is not less than 5,000 tons per day, a capacity which equals, at least, that of England and Germany combined. Where the original range of sizes was from 1-2 inch to 1 inch, there is now manufactured from 1-2 inch to 30 inches, the larger sizes being lap welded instead of butt welded. The growth has, of course, been gradual, and much of it has been attained since the introduction of steel as a factor in pipe making, which was first done successfully in 1885 by Mr. F. J. Hearne, of the National Tube Co., which is one of the constituent companies of the United States Steel Products Export Co.

Pipe of the smaller sizes up to 3 inches, has been made successfully in Canada for the last sixteen years, mills being located in Montreal and in Guelph. The output of these mills has grown very rapidly, and last reports show that 100,000 tons of finished pipe annually, and it is fast becoming one of the principal industries of our country.

This innovation, you will readily understand, was vigorously combated by the makers of iron pipe, but slowly and surely steel has forced its way until it is to-day more of a king in the industrial world than cotton ever was.

I have reached a point where there may be differences of opinion and I wish express to say that any sentiments which I may express simply represent my experience and judgment. To my mind there is no question that iron pipe, as originally made from A1 quality pig iron, was for some purposes superior to the present soft steel article manufactured by the Bessemer process, but unfortunately commercial conditions have made it impossible to procure this pipe except at a price which would be practically prohibitory to the ordinary user, and we therefore have to choose between a so-called wrought iron pipe, which is manufactured largely from scrap iron and which, frequently contains a mixture of hard steel, which unfits it for many uses; particularly where you have to cut it up and thread it by machine.

Understand, I am making no charge of any unfairness on the part of the manufacturers, as it is necesary to bring the cost down to a point where they can make such selling prices as will enable them to compete with the cheaper article. It has become a choice betwen good steel pipe, and uncertain iron pipe, and my leaning is towards the former. Even if it were possible to get the kind of pipe our fathers used, there would still be many uses for which steel pipe would be preferable, paticularly where tensile strength is to be considered. To more readily understand the difference between iron and steel pipe, it might possibly be well to explain the difference in their production.

In making iron pipe originally, a high grade of pig iron was used, same being puddled by hand labor into what is termed "muck bar." This is then piled into fagots, which in turn are rolled into sheets of the proper size, the term for which is "pipe skelp." The skelp is then brought into the welding furnaces and brought to a finished condition.

The difference in making steel pipe is, of course, in the process. Previous to its reaching the welding furnace, where the work is practically the same, the steel process of to-day has simply changed the manufacture of the raw material from hand labor to a mechanical manipulation of the original melting stock; the only difference being that the steel ingot is cast and consequently devoid of the fibre which you find in iron. The steel pipe, owing to this process, has much more tensile strength than iron, and is therefore much more suitable for high pressure work. Iron pipe, when made as it should be, is undoubtedly more ductile than steel as made at present, but if, as claimed, there is at least two-thirds scrap placed in the puddling furnace, the result must be a bar, which is hard and uniform, in consequence, of which, the skelp of which the pipe is made, does not possess the ductile and welding qualities which formerly distinguished the iron pipe.

I have not touched on the matter of corrosion, because that becomes at times a matter largely of local conditions. I have seen cases where iron pipe did not give as good satisfaction as steel, and others where the reverse was the case, so that I think it is only fair to leave that question an open one.

There is another point in this connection which is an important one to the users of wrought pipe, and that is the matter, electrolysis. While I have no special data on this subject, I have heard it stated that wrought steel pipe will show less impairment from electrical action than wrought or cast iron pipe.

I think the efforts of the future will not be to make iron pipe to compete with steel at the expense of the quality of the former, but rather to improve the quality of steel pipe as to make it equal in every respect to iron pipe, leaving iron pipe to occupy the same position relative to steel pipe, as other iron products do to similar articles of steel.

IN NEW QUARTERS.

Mr. Fred. Somerville, manager of the Ontario Lead & Wire Co., Toronto, is now receiving admiring callers at his new offices at 59 Richmond street east, just off Church street. Many are the compliments he has received and the handshakes he has handed out since Saturday last, when the office staff deserted the Lombard street quarters and moved around the corner to the handsome new suite of offices. The plumbing supply showroom will be ready for Exhibition visitors, and photographs have been promised Hardware and Metal so that out of town buyers can see for themselves the beauty of the new headquarters of the firm. In the meantime Mr. Somerville is busy with his "glad hand."

The contracts for the Regina water works and sewage extensions have been let to Messrs. Dobson, Jackson & Fry. The contract provides for the putting down of 11,400 feet of water mains and the same amount of sewage extensions, and the contract figure is in the neighborhood of $23,400. The council has decided to give a trial to wooden water pipes and the contract for the supply of the pipes required for the extensions has been awarded to the Canadian Pipe Company, of Vancouver, who have also secured the contract for valves, hydrants and valve boxes, the value of the company's contract being $6,600.

Toronto Foundry Company

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FIRST ATTEMPTS AT SYSTEMATIC VENTILATING AND HEATING.

PRACTICALLY the history of systematic ventilation begins with the building over the House of Parliament, in London, in 1660, by Sir Christopher Wren, of four flues to carry off the heated air. Two of these flues are illustrated in Figure A. They are important only because they were made use of by J. T. Desaguliers, who was called upon in 1723 to devise a more satisfactory system. He built two closets, one at each end of the room above the assembly room, between the flues, cc, and put in pipes, ee, from the flues to square put in pipes, ee, from the flues to square cavities of iron, xx, that went round a fire-grate, b, fixed in the closets; as

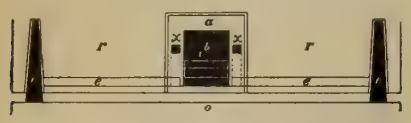


Figure A.1

soon as the fire was lighted in the grate the air came up from the house through the heated closets, and then went up their chimneys.

The thermo-ventilator became an object of hostility to the housekeeper, who did not like being disturbed in her possession of the rooms of which she had the use, and she defeated the operation of the ventilating closets by not having the fire lighted until the House had sat for some time and was very hot, for then the air in the closets descended into the rarer air, and the assembly room became hotter instead of cooler.

The uncomfortable members, seeing that the design for cooling the house was being frustrated, called upon Dr. Desaguliers to devise some contrivance which would be beyond the machinations of the housekeeper. The doctor, who some time before had made a machine

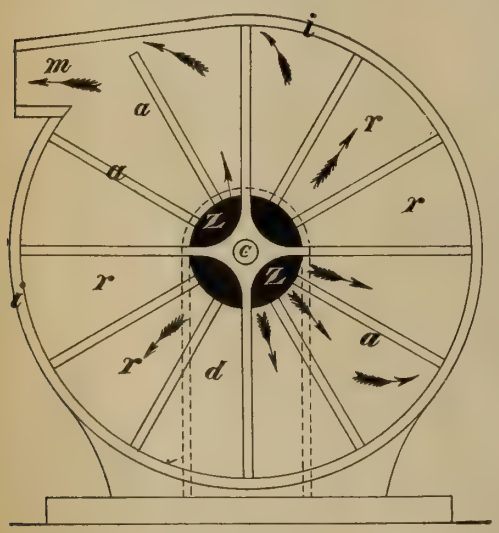


Figure B.

for freeing mines of foul air, put in one of these machines. The machine is shown in Figures B and C, and is, of course, the forerunner of the fan of the same general type now in common use. The wheel is described as being seven feet in diameter and one foot wide. The twelve radiating partitions, aa, approached to within 9 inches of the axis, leaving the circular opening z, 18 inches in diameter. The wheel was inclosed in the concentric case, i, which had a "blow pipe," m, on the upper part of its circumference, and a suction pipe, n, that communicated by a pipe, d, with the central opening, z, in the wheel, which was turned by the handle, e, attached to the axis, c, that went through the case and rested on a standard. The "fanner" was adjusted to revolve easily, but as close to its concentric casing, i, as possible, and it had no communication with the air except through the suction and blowing pipes. The wheel was turned by a man who received his ordets directly from the Speaker of the House. The apparatus was arranged so that when the suction pipe, n, was open to the atmosphere, or to a space containing heated air, and the blowing pipe connected with the room, the apartment was filled with cold, or with heated, air, in any desired quantity by increasing or decreasing the speed of the wheel. If foul air had to be drawn out, the suction pipe was connected with the room, and the blowing pipe with the atmosphere; and when it was not required to draw out foul or introduce fresh air, but to keep the air of the room in motion only, the suction and blowing pipes both opened into the apartment. In order to make the fan more effective, in 1791, is was moved into a position over the centre of the House. Desaguliers' contrivance, with some modifications, was in use for eighty years.

It would seem that at this time the members were annoyed with cold which did not depend on the ventilator, and, with an accumulation of heat, which did. On the advice of Mr. Adam Walker, a large stove, six feet on the side, and fourteen feet high, and filled with earthen pipes and retorts, was placed under the floor, and the air, warmed in moving through them, entered the house at a grated aperture three feet in diameter made in the floor. To improve the ventilation, two chimneys with cowls were placed on the roof. Their effect, being unconnected with the centrifugal ventilator, was to render its otherwise effective operation nearly useless.

The House of Lords also was not sufficiently warmed by the flues built under the floors, and its ventilation had always been very imperfect. Sir Humphry Davy devised a plan to ventilate and heat the room by admitting fresh air through a large number of holes in the floor and by withdrawing the foul air at the ceiling through two apertures covered with open wire-work, from which metal tubes were carried to the external air, and when extra ventilation was required, these tubes were heated to accelerate the velocity of the air passing through them. The whole plan was a failure, as Sir Humphry badly calculated the capacity of the tubes. The heating flues gradually cracked and permitted some of the furnace gases to escape into the hall, and finally in 1834, when a large quantity of waste paper was burned, the woodwork in the vicinity took fire, and both Houses of Parliament were destroyed.

When the temporary building for the House of Commons was supplied with heat and air, its atmosphere was quite as defective as any that had pervaded the ancient building. The modifications introduced by Dr. David B. Reid will be understood by an inspection of Figure D. The external air was admitted through a coarse gauze screen into a porch communicating by doors with a room under the house. At one of these doors was placed the heating apparatus, b, which consisted of a collection of hollow cases, formed of parallel cast-iron plates or pipes, containing hot water, and placed at a small distance from each other; the air from the porch, heated in passing through the intervals between them, flowed into the warm air chamber, d, from which it was conveyed

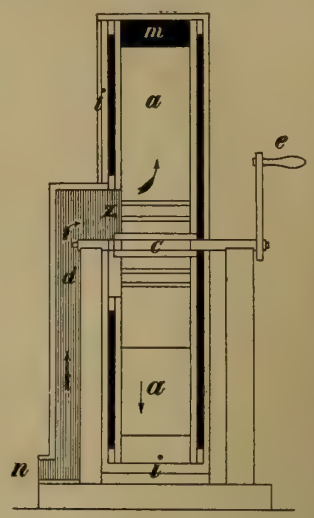


Figure C.

through about twenty apertures, ee, made in its ceiling, into a space formed under the floor of the house; from this space about 36,000 cubic feet of air rose every minute through several thousand holes about a sixteenth of an inch in diameter, made in the floor and under the seats in the pit and galleries. The ascent of this pure air into the house expelled the effete air through openings in the ceiling formed by some of the panels, with which it was ornamented, being raised about an inch above their styles. Through these apertures the air passed into the space h, under the roof, and thence it was conducted by the descending tunnel, i, into the ash pit, k, and, rising through the fire in the furnace, m, was emitted into the atmosphere at the

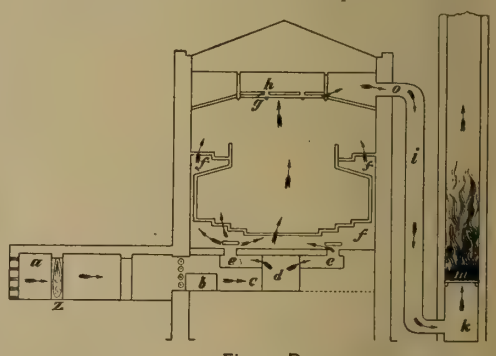
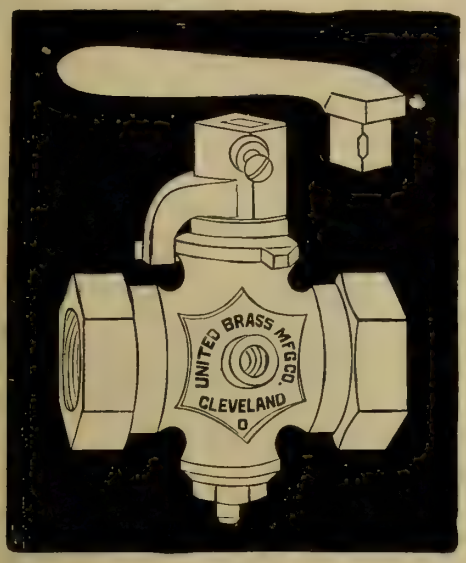


Figure D.

summit of a chimney stack about one hundred feet in height.

The room under the floor, that formed the warm air chamber, was partitioned so that by opening certain doors cold air could be admitted either to reduce the temperature of the warm air flowing into it from the heating apparatus, or to fill it with pure unwarmed air when that only was wanted. The air was also supplied with moisture previous to its admission into the house. The air received the necessary moisture by means of pipes filled with water, which were placed on the floor of the porch, and perforated with a number of small holes. —The Valve World.

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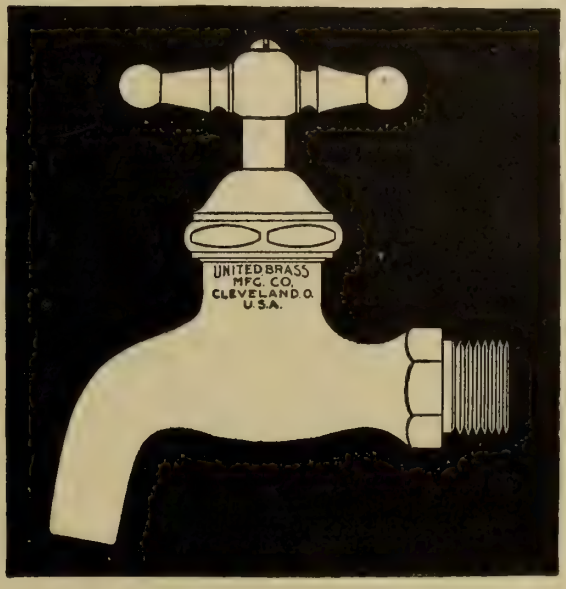


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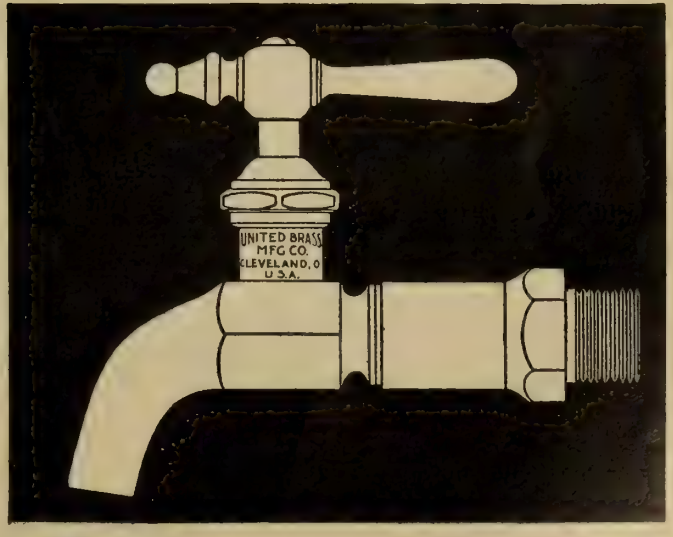
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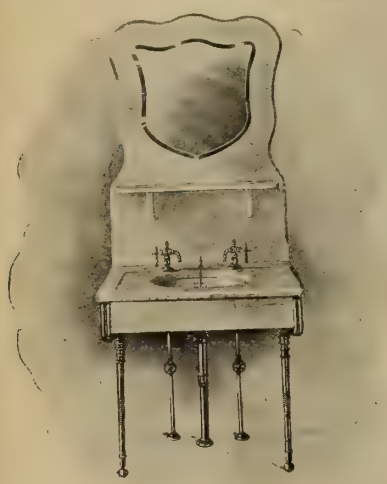
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MARBLE LAVATORIES.

Many Canadian manufacturing concerns have used the motto "Made in Canada" extensively to draw attention to the wonderful development of our manufacturing industry. This development has been not only in the quantity but also in the quality of the articles produced, an illustration of this being shown in the accompanying cut of one of the marble lavatories manufactured by the James Robertson Company, Limited, in their works at Toronto.

The cut shows an Italian countersunk lavatory, 24 x 33 inches, with back and mirror frame in one piece, bevel mirror and marble shelf, Robertson's nickel-plated brass trap and brass recess legs, nickel-plated supply pipes with stop valves, nickel-plated brass Fuller basin cocks, 15 x 19 inch oval basin, and nickel-plated chain stay and chain with brass basin clamps. All of this work is "Made in Canada" with the single exception of the bevelled mirror, which is the best that can be imported. The marble work is of selected stock, deeply



Robertson's Marble Lavatory.

countersunk, carefully finished and highly polished.

CENTRAL HEATING PLANT.

IF arrangements at present in progress with the Port Huron city council can be carried out, Port Huron will have a $50,000 central steam heating plant, similar to those which have been recently established in many metropolitan cities of the United States.

A thirty-year franchise is granted by the city council. The company will commence the putting in of the system at once, to be completed in three months and ready to furnish heat when cold weather comes at about the bare cost of the coal.

A large power house will be erected and steam heat will be furnished to business houses, public buildings, stores, offices and residences, at an expense said to be much less than the cost of maintaining individual heating plants.

The method of heating on the co-operative plan is much the same as the system of gas heating and lighting. Pipes are laid along the streets at a depth sufficient to prevent them from being affected by cold. Service pipes are connected with business houses or residences, and the heat is forced through from the main plant.

The Port Huron men who have interested themselves in the scheme have looked carefully into the experiences of other places, and have learned that wherever central steam heating systems have been established they have met with unqualified success. It is claimed that there is no trouble about maintaining steady and equable heat whatever the weather. There is a great lessening of cost as compared with ordinary methods of heating; and there is, of course, a complete saving of the trouble attendant on running stoves or furnaces.

ELECTRIC LAMP BRACKET.

Mechanics and others who work on important jobs in dark corners or after daylight has gone will be interested in the electric lamp bracket which is manufactured by Henry Wallworth & Sons, Limited, Manchester, England. The feature of the bracket is its ball socket, which allows it to be placed in almost any conceivable position very easily and with perfect safety. It is claimed that the bracket will sustain a weight of four pounds at a radius of three feet, and that it will not damage or strain the flexible wire. The advantages of this scheme for such work as armature winders, marking out tables, large radial drills, etc., are obvious. The manufacturers have appointed as their Montreal agents McLean & Sophus. Mention Hardware and Metal in writing for particulars.

TORONTO SUPPLY MAN HURT.

What might have been a very serious accident occurred in Toronto last Friday, near the corner of Church and Charles streets. Mr. W. B. Malcolm, proprietor of the Queen City Brass Foundry, 64 Lombard street, and one of the oldest and most popular supply men in Ontario, in some manner fell from a moving street car near his home. The momentum of the car swung him around and he fell on his back, receiving a severe scalp wound which required several stitches. He was unconscious for some time, and the bad shaking up he received will keep him in his bed for a week or two. Danger of fatal result has now passed away and the trade will be glad to learn that Mr. Malcolm is doing as well as could be expected and will be around again soon.

ELECTRIC FANS.

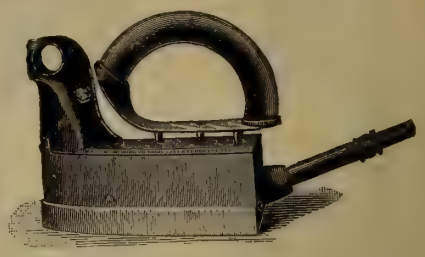
It's an ill wind that blows nobody good, and this Summer's heat, distressing as it has been to the average mortal, has made great business for the manufacturers of electric fans. The demand this year has exceeded anything that was expected, and, in consequence, some of the smaller firms find themselves short in their supply.

Electric fans are no longer a luxury to be enjoyed only by the extremely well-to-do, and the price now quoted on them is within the reach of nearly all. The fans also are being found useful in Winter, as well as in Summer, for the purpose of keeping display windows clear of frost. This is a great boon to the retail dealer, who takes pride in a tastefully decorated window.

Next season promises to add still further to the popularity of this comfort-making article, and manufacturers will prepare for a still greater demand.

GAS HEATED SAD IRON.

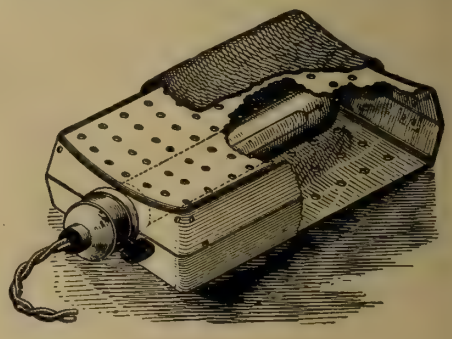
A GAS heated sad iron, manufactured by the Central Mfg. Co., 196 State street, Binghampton, N.Y., has been put on the market, its construction being shown in the accom-



panying cut. It can be used for domestic or steam laundry use, natural or artificial gas. The burner is of an improved Bunsen type, using several times as much air as gas to make the expense of heating merely nominal. It is explained that the use of the iron is unaccompanied by escaping flame, smoke, soot or smell, and that as the flame is entirely inclosed the bottom of the iron is always clean and ready for use. The weight of the iron is about 6 pounds and its length 6½ inches. The handle is of semicircular pattern, and being protected from the body of the iron by an air space does not become hot. The iron, it is remarked, will heat quickly and evenly and can be made hot enough for ironing a wet tablecloth or cooler for use on a cambric handkerchief.

ELECTRIC HEATER.

As a substitute for a hot water bag, a resident of Napoleon, Ohio, has devised the electrically heated bag, which is illustrated herewith. It consists of an incandescent electric lamp, inclosed by a perforated metal casing. The device may be connected to any electric lamp socket, and when the current is turned on the lamp will heat the casing.



Electric Heating Bag.

Over the latter a bag of soft fabric is placed, to prevent direct contact of the metal with the body. One side of the casing is made slightly concave, in order that it shall conform to the body when hot applications are made. The casing is made detachable, so that it

TRADE
PENBERTHY
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FIRST  QUALITY

AUTOMATIC INJECTOR

RETURNED
SEP 11 1905

OUR
SATURN

Plain Compression
Grease Cup

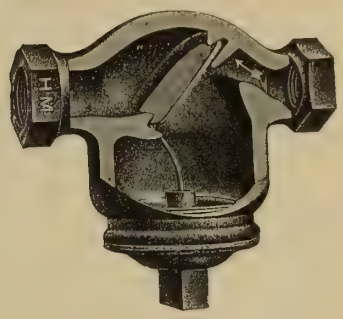
MADE IN
ROUGH or FINISHED
BRASS

A GENERAL PURPOSE CUP.



MUELLER STRAINER

PATENTED



C-109

The clogging of fixtures with sediment from the water supply is a nuisance which the plumber can prevent profitably to himself and very satisfactorily to the customer.

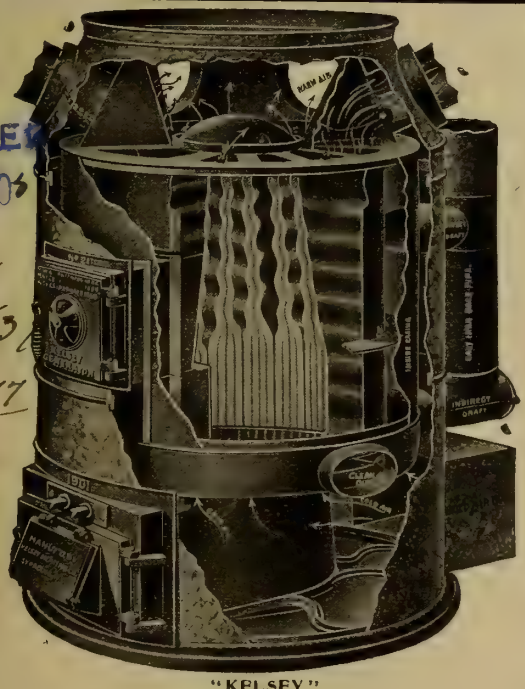
A Mueller Strainer connected in the service pipe will exclude sediment from the fixtures. A customer is easily convinced how this will benefit him and will readily pay the cost of installation to escape the nuisance.

The Mueller Strainer is made of cast iron, has a brass gauze screen and is made for all sizes of pipe up to 3 inch.

Each strainer bears the Mueller trade mark and is *unconditionally guaranteed.*

H. MUELLER MFG. CO.

Decatur, Ill., U.S.A. *New York, N.Y., U.S.A.*



"KELSEY"

MADE IN SIX SIZES

Heating Capacities: From 5,000 to 100,000 cubic feet.

KELSEY Corrugated Warm Air GENERATORS

Da't'd

Heat Makers Fuel Savers for Home Church School

THE KELSEY SYSTEM is unlike all others but most closely allied to **indirect** steam and hot water heating.

THE KELSEY SYSTEM when **properly installed** never fails to give the most **economical** and **satisfactory** result and is a permanent advertisement for the dealer.

THE KELSEY SYSTEM gives the dealer something to talk about excepting "**How Cheap.**"

THE KELSEY SYSTEM has proven to be the most **sanitary, efficient** and **satisfactory** for **schools, churches** or other public buildings.

THERE'S ONLY ONE WARM AIR GENERATOR.

The James Smart Mfg. Co., Limited

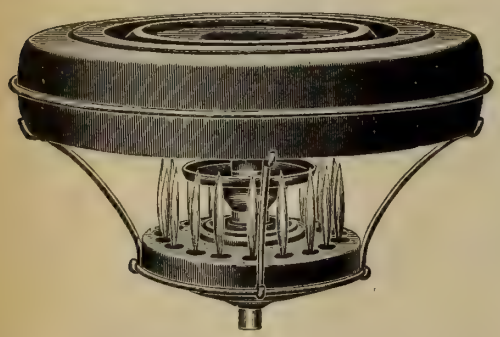
Winnipeg, Man. *Brockville, Ont.*

EXCLUSIVE MAKERS FOR CANADA

may be removed when the lamp burns out, to permit of renewal. The advantage offered by this heater over the ordinary hot water bag is that it will remain hot continuously and at a constant temperature, whereas a hot water bag will rapidly become cooler as the water loses its heat.

A SEASONABLE ARTICLE.

AN article that should meet with an especially large sale throughout the Fall and Winter is the Twentieth Century White Flame Heat and Light Burner, being placed on the market by the Twentieth Century Manufacturing Co., of New York. This article, which is illustrated herewith, is composed of three separable parts, and in packing are nested compactly in a pasteboard box, the whole package weighing 18 ounces. This burner can be used to good advantage by the hardware dealer for window display, as it not only furnishes light, but at the same time it attracts attention, sells itself and prevents the frosting of the window. The Twentieth Century Co. furnishes with each order a large assortment of attractively printed showcards, electrotypes for local advertising and circular matter. In cold climates the "White Flame" keeps the house comfortable in Spring and Fall, delaying "furnace time," and in dead of Winter there are



White Flame Heat and Light Burner.

frequently bath rooms and other places about the house that would be better for extra heat, particularly when one can have it with no cost beyond that for the usual illumination. The "White Flame" attaches to any chandelier, wall bracket or portable stand.

PLUMBING GOSSIP.

Montreal plumbing contractors report business very brisk, and many who wished to attend the convention at Winnipeg were unable to do so, owing to the pressure of business. Journeymen plumbers are hard to get, and it is feared that there will be a scarcity of steamfitters when the season's rush begins.

* * *

Thomas O'Connell, Ottawa street, Montreal, reports the following recent contracts for plumbing and heating: St. Agnes Church, St. Denis street; St. Bridget's Refuge, Lagauchetiere street; Troy Steam Laundry, Verdun; Catholic High School, Desrocher street.

* * *

The journeymen plumbers of Montreal held an enjoyable picnic at Iroquois last Saturday, going there by rail.

Messrs. Sumner Company, Moncton, N.B., report a big trade in their plumbing and heating business. In addition to local work they have their gangs of men at outside points. At Sackville they are putting in hot water heating in the upper floors of the college residence, there being some 69 radiators in the plan. Plumbing is also being installed in the same floors. At Shediac plumbing is being put in Mr. McQueen's residence, while at Dorchester general repairs are being made in the heating of the court house and jail.

* * *

Sudbury is to have a new public school, 68 x 82 feet, two storeys and basement, and containing eight rooms. The newest German system of ventilating, by which the air in a room is changed every twenty minutes, will be adopted. When fully completed the cost will be in the neighborhood of $20,000. Lawson & Busby are the contractors.

* * *

The Municipal Water and Light Company, Limited., have their steam ditcher at work at Pincher Creek, and the laying of the water mains will begin immediately. When the system has been installed the town will be provided with as good water and as efficient fire protection as any town in the west.

* * *

An agreement has been drawn up between the town of Port Hope and the Standard Ideal Sanitary Company. The town desires to induce the company to locate a new factory there to manufacture waterworks supplies. The company agrees to erect a building costing some $8,000, to employ not less than twenty-five men for ten months in each year and to put into the new enterprise not less than $25,000 of capital. On its part the council is to grant exemption from taxes, except school taxes, for ten years and to make the company a grant of $5,000.

* * *

Hospital sanitation is a subject which is of great importance, not only to plumbers but to the entire community. In a recent article by Wm. Paul Gerhard, of New York City, in the American Architect on the subject, it is stated that one bathtub should be provided for fifteen patients, that it should be located in the centre of the room, so an attendant can stand on any side of it, and that the cocks should be provided with key valves. In insane hospitals soil and waste pipes should be of an extra large size, on account of the refuse sometimes thrown in the fixtures by that class of patients.

THE NATONAL ASSOCIATION OF MASTER PLUMBERS AND STEAM AND HOT-WATER FITTERS OF CANADA.

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Canada's Leading Supply House



RETURNED
SEP 25 1905
To Ounce
Cut Book
page 75

WE ARE NOW IN OUR NEW QUARTERS

Offices: 59 Richmond St. East
Showroom: 122 Church St.

Factory and Warehouse: 54-56 Lombard St. 55-57 Richmond St. East

ONTARIO LEAD AND WIRE CO., LIMITED

Fred Somerville,
General Manager

Toronto

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, August 18, 1905.

COPPER and brass goods have been the issue on the market this week. There is a great scarcity of copper, probably due to the control of the bulling interests on the exchange. The result will inevitably be to boost the price of all copper and brass products.

Business is keeping up with remarkable persistence, and large orders are being placed in all lines. Big developments are bound to come in enamelled ware during the next year, throughout this Province, and the large supply houses are making extensive preparations to meet the demand. The best grades of Canadian and American goods are attractively displayed, and it is encouraging to note that the domestic product is gaining rapidly in favor.

Though pig lead is as strong as ever, lead pipe remains at the old figures, and is very steady.

Range Boilers—Share in the general activity of the market.. We quote: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Contrary to general expectation, there has, as yet, been no advance in this line. Our prices are as follows: Discount 30 to 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B.. and Halifax; f.o.b. London, 15c. per hundred lbs. extra.: f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—No change is chronicled in the price of iron pipe fittings. The market is strong. We quote: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—There has been no special feature in this market during the week, but the trade has kept up strongly. We quote: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—A satisfactory trade is being done and a good business is looked for throughout the Fall. We quote as follows: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list. Medium and extra heavy soil pipe 60 per cent. off. Fittings 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, Aug. 18, 1905.

BUSINESS could not be much better for the Summer season than it has been recently. The supply houses are selling such large quantities of goods that the manufacturers, working their factories at their utmost capacity, find it impossible to keep up with their orders. The supplies of enamelware, traps and bends, closet bowls, etc., are all on the short list, in some cases orders a month old being still unfilled.

Prices are firm on nearly every line, the surprising demand allowing no weakness to result. On the other hand, the recent advances tend to higher prices. Last week saw solder go up on this account and the indications are now that lead pipe will participate in the advance. Some expect a rise on iron pipe also and some large stocks are being laid in by jobbers. So far, however, this is all surmise.

There are no changes to report this week.

Lead Pipe—Prices are very firm, and an advance is looked for. We quote: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Demand is very keen, but supplies are plentiful We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Buying is heavy and prices continue very firm. Our quotations are as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.: Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers— The large amount of building accounts for the general activity in buying. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy $8.50; 40 gallons, standard, $7; extra heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Some dealers are buying large stocks in anticipation of an advance. Prices are firm. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder— Last week's prices hold firm. Our quotatoins are as follows: Bar solder, half and half, guaranteed. 19 1-4c.; wiping solder at 17 1-2c., and refined 17 3-4c.

Enameled Ware—Demand continues exceedingly strong for Canadian ware, but manufacturers keep well up with their shipments. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

LOCATION OF RADIATORS.

IN spite of the successful efforts which many firms have made to put on the market cast iron radiators which are both efficient and ornamental, many people still object to the room they take up in a residence.

This brings up a problem to which architects have paid scant attention in drawing up their plans. Long since provision was made by architects for concealing all objectionable pipes necessary to sanitation, and the question arises why some scheme cannot be devised whereby the heating apparatus could be put out of the road without damaging its efficiency ?

A good plan suggested has been to place radiators so as to hide them under windows, but this is not always possible. Under existing conditions, however, this is, perhaps, the best arrangement possible.

A Michigan professor has brought forward another idea, which would revolutionize not only inside architecture, but also the manufacture of radiators. He proposes that "the base-board of a room be made of iron and hollow, and through it be circulated either water or steam." If this scheme is ever adopted, no doubt the manufacturers will aspire to make back-boards as ornamental as



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

Let us have your name for our illustrated lists

The Welsh Tinplate & Metal Stamping Co., Ltd.

LLANELLY, WALES

"MADE IN CANADA" The only sifter of its kind—the

METALLIC ASH SIFTER

HAS NO RIVALS, HAS NO FAULTS

Is cheap, neat, light, strong and easy to operate. With **Our Patent Wire Bale** and **Metal Cover,** to lighten work and keep down dust, it is Ideal. Get our prices.

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

SEND FOR CATALOGUE TO

American Shearer Mfg. Co., Nashua, N.H., USA

Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

Swedish Neverturn Connectors

Made from Electro BO-RAS-IC Steel—toughest metal known. Good tools produce good results.

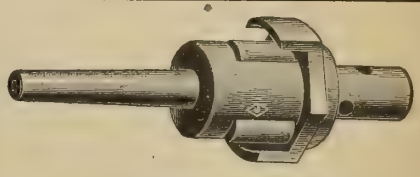


No. 716.—For Nos. 6 to 14 Iron Wire, and 4 to 14 Copper Wire. 10 to 14 Sleeves.

Ask your dealer or jobber for SWEDISH NEVERTURN Tools, or write us.

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Canadian Office: Coristine Building, Montreal, Canada



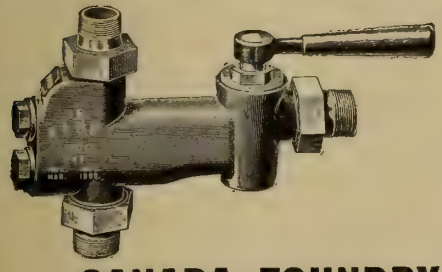
JARDINE'S

Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.

HESPELER - - - ONTARIO



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A Double Tube Machine at Single Tube Price.

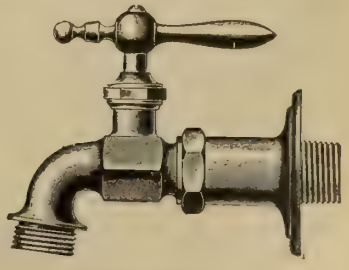
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CANADA FOUNDRY COMPANY, LIMITED

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District Offices: Montreal, Halifax, Ottawa, Winnipeg, Calgary, Vancouver, Rossland.

GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, CLEVELAND, OHIO, U.S.A.

COIL CHAIN

also B, BB & BBB

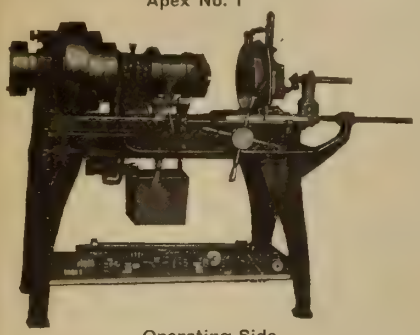
TIN, TERNE AND CANADA PLATES

J. A. HENDERSON, *Board of Trade Building, MONTREAL*

Agent for ***T. W. & J. Walker*** *Wolverhampton*

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

This machine is especially adapted for making nipples. The nipple attachment used in connection with it is so arranged that the grippers can be closed on the threaded end without injury to the thread, thus avoiding the necessity of screwing the nipple into the grips after they are closed. Capacity of machine from ¼ to 2 inches inclusive.

Send for Catalogue.

THE CANADIAN FAIRBANKS CO.
Sole Agents for Canada Limited
MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's "Copper-Alloy" Disc
GLOBE VALVES

are superior to any other disc valves on the market for high steam.
This is a very superior valve, at a moderate price.

The KERR ENGINE CO.,
MANUFACTURERS Limited
WALKERVILLE, ONT., CANADA

they have already made steam and hot water radiators. This is a question on which plumbers will no doubt take one side or the other, and Hardware and Metal would be very pleased to have them air their views in its Plumbing and Heating Department.

INTERESTING ITEMS.

An exhibition of plumbing and sanitary appliances has been held in Paris during the past month. It was organized by a local journal, "Le Batiment, and was divided into four sections — roofing materials, water fittings, gas lighting and heating, and bathroom apparatus.

Herr Carl Wichera, Freiburg, Baden, has introduced a form of globe for incandescent lamps in which the thickness of the glass is greatest at the bottom and diminishes steadily towards the upper rim. The effect of this is to divert the light so as to make most of it come downwards.

In spite of the excellent quality of the Vienna drinking water, which comes a distance of some 116 miles from Alpine glaciers and snowfields of the Alps, several cases of poisoning have occurred in a particular district of the city. Careful investigations proved that the source of the poison was lead contained in the water pipes supplying that district.

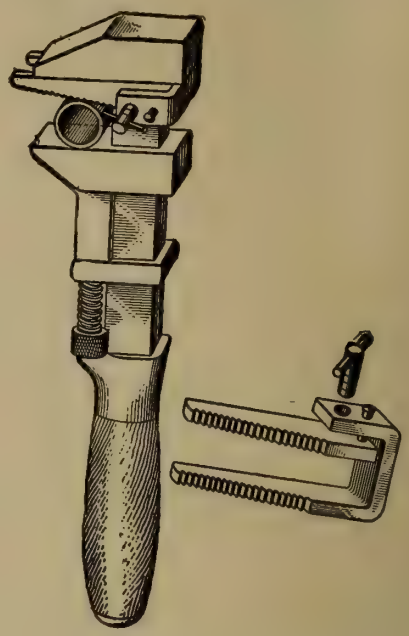
There is no country in the world in which workmen are so protected by the state or are so cared for as in Germany. Even clerks and shop assistants and servants are compelled to insure. This insurance is effected by pasting stamps into a book every week, and it is the duty of the employers to see that this is faithfully done. It represents the small premium collected every week on the insurance.

A septic tank sewage disposal system has recently been installed for a college in Sydney, N.S.W., with a capacity to dispose of the sewage for 200 people. There are two covered tanks 15 ft. by 78 ft., and from these tanks the sewage passes to a 14 ft. by 10 ft. steam filter, 8 ft. deep. The sides of the filters are battened one to six, and gravel is used as a filtering medium. A pit receives the filtrate, from which it is pumped to the college farm. This filter, which is the first continuous streaming filter in Australia, cost about $2,900.

Preventing back water entering soil stacks in a large Pittsburg building is accomplished by having all the fixtures on the basement and first floor located on a separate stack, which is cut off by gate valves in times of high water. The upper floors discharge through the main house stack under a head, so while a portion of the building is without the use of sanitary appliances, the larger portion is not deprived of their use.

PIPE-GRIPPING MONKEY WRENCHES.

A RECENT patent provides a very simple means for converting an ordinary monkey wrench into a pipe wrench. It consists of a pair of toothed members, adapted to be fitted under the upper or fixed jaw of the wrench. One of the toothed members is formed with a U-shaped body, adapted to embrace the stock of the wrench and overlap the other toothed member. The device is clamped to the wrench by means of a clamping screw in the overlapping end, which may be turned to press the adjustable member against the stock. The adjustable member carries a guide pin, which extends through the overlapping portion. At the top of the pin a head is formed which holds the



two parts together, thus preventing one or the other being mislaid or lost. The advantages of this invention should be apparent to any mechanic.

EXTENDING FOUNDRY PLANT.

THE general activity in building throughout the Dominion has created an unusual demand for building materials, so much so that the supply has proved quite inadequate. Thus many of our local manufacturers have been forced to extend their plants in order to meet the requirements of the trade.

The Toronto Foundry Co., Limited, have just completed a large addition to their already extensive moulding shop at the plant on Jefferson avenue, whereby the output of soil pipe and fittings will be doubled. The new shop is 100 feet in length by 75 feet in width, being what is known as "double foundry construction." This building, like the rest of the plant, has been built with the heaviest of materials and is practically fireproof. The whole plant is being equipped with an overhead trolley system for conveying the molten metal to the various floors and for handling the pipe and fittings in their passage from the foundry to the milling and finishing rooms.

Many other improvements are being inaugurated which will tend to add to the already enviable reputation this firm have acquired for the line of goods they handle. With a capacity for 30 tons of pipe and fittings per diem, the Toronto Foundry Co. hope to be in a position to keep up with the trade, no matter how heavy the demand. In order that a heavy reserve stock may be carried to meet emergencies, an additional commodious warehouse, 200 feet in length, is in the course of construction and will be completed before the Winter months have set in.



A Summer Dollar

Do you know what this is we are advertising?

It is something that will make a few dollars for you in the quiet summer season.

COW-EASE

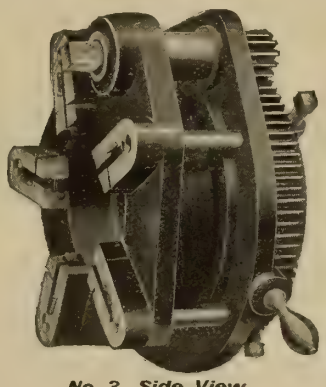
made expressly to give rest and ease from flies and vermin to cattle and horses. Farmers must have this. It sells easily for **$1.00,** and yields a profit for you. Write us for particulars at once.

A. RAMSAY & SON COMPANY

Est. 1842 MONTREAL Sole Agents

The "Toledo" Adjustable Threading Device

Threads pipe from 4½ inch to 8 inch inclusive. A new principle in hand power pipe threading. One man can easily thread any size the tool cuts. The tool weighs 200 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.



No. 3, Side View

Ask your jobber about them. If he don't know write us for catalogue and discounts.

THE TOLEDO PIPE THREADING MACHINE CO.

Toledo, O., U.S.A.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR
ALL CAST Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

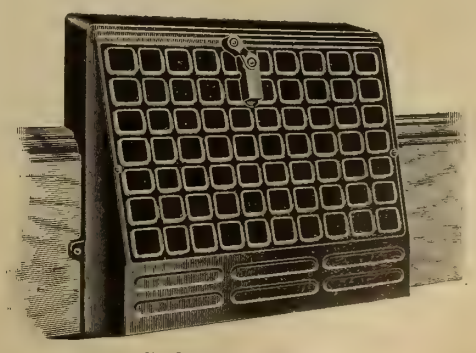
THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers

HART & COOLEY CO.

NEW BRITAIN, Conn., U.S.A.



H. & C. No. 100.

ELECTRICAL GOODS AND SUPPLIES

BEAUTIFUL ELECTRIC FIXTURE.

HAMMERED brass lighting fixtures are very popular in Europe, and the United States at present, there being a revival of the ancient art of many centuries ago. The accompanying cut shows a very beautiful electric wall fixture, recently turned out by the expert operators employed by the James Morrison Brass Manufacturing Co., Toronto. All the work is done by hand, the odd dragon design and antique finish being hammered out of sheet brass. In order to show the fixture to good advantage, the bead curtains were removed from the central bulb. The fixture will probably be shown at the coming Canadian National Exhibition, where it is certain to attract the attention of all artistically inclined visitors, who are looking for articles suitable for home adornment.



Handsome Wall Bracket, executed by Jas. Morrison Brass Mfg. Co., Toronto.

ELECTRICAL GOODS PAYING LINES

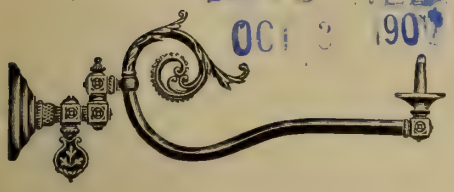
ELECTRICAL goods are one of the last lines to be taken up, but by no means should it take rank with the least, for it is profitable and satisfactory to a large degree. There is less of care and attention demanded for it than for any other the writer has in mind. This statement is based on a conservative, safe stock for ordinary merchandising, and does not include installation and all the attendant intricacies of a strictly electrical business. It is easy to draw a line and separate those parts that sell over the counter as against the expert end of the business. It seems to the writer it would not be policy to consider installation and expert wiring at any stage of the hardware merchant's busy life, for the reason that, like plumbing and all expert work, this part of it should be done by a professional, or at least, by one who is more than a student or clerk. The danger of doing improper, ill-fitting and cross wire work is too evident.

A Line Safe to Carry.

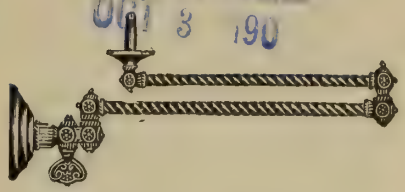
It is a profitable one, carrying with it but little, if any, loss, and realizing as much average profit as any goods that go over a merchant's counter. It is true the goods do not sell as rapidly as some lines, but they are always in good condition, and when wanted by the customer, are badly wanted. I submit quantities also, based on a similar stock with which the writer started some years ago.

1-2 dozen No. 1 liquid or wet batteries.
1-2 dozen No. 2 liquid or wet batteries.
25 good dry batteries.
25 pounds of sal ammoniac.
2 No. 10 spools No. 18 annunciator Wire.
25 pounds No. 14 water proof wire.
1-2 dozen 2 1-2 inch iron bells.
1-2 dozen 3 inch iron bells.
1-4 dozen 3 1-2 inch iron bells.
1-4 dozen beehive buzzers.
1-4 dozen iron box buzzers.
1-4 dozen common tape.
2 dozen com. sq. zincs.
5 pounds small staples.
1-4 dozen desk pushes.
1 dozen assorted bronze and brass pushes.
2 dozen com. wood pushes.
1 dozen single point switches.
2 dozen 2-point switches.
1-4 dozen pear pushes.
1-4 dozen table pushes or plugs.
10 yards double silk covered wire.
50 only cleats.
50 only assorted porcelains.
1-4 dozen electric hand lamps.
1-4 dozen electric pocket lamps.
1-2 dozen extra batteries for same.
1-2 dozen door alarms.

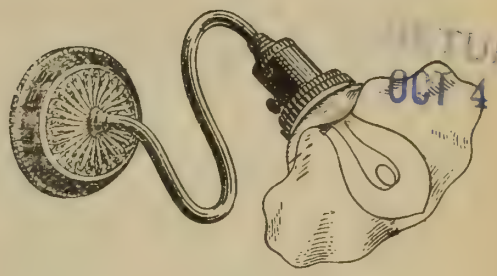
GAS and ELECTRIC PRICES



Nos. 121 and 122. Stiff, 75c., Single Swing $1.00. No. 123, Double Swing, $1.50



No. 100, Stiff, 19c.. No. 104, Single Swing 28c. No. 105, Double Swing, 50c.



No. 4, Bracket, 27c.



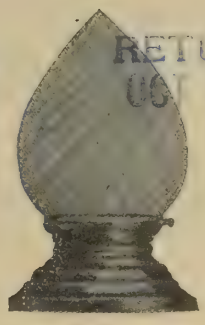
No. 180, Bracket, Portable, 75c.



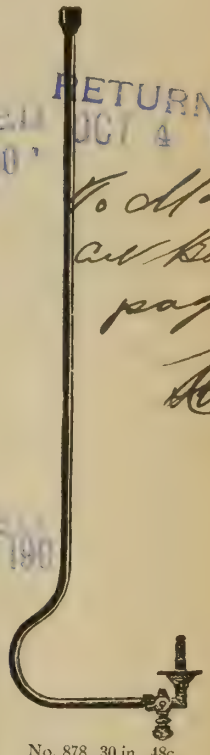
No. 20, Gas or Electric, 60c. Portable.



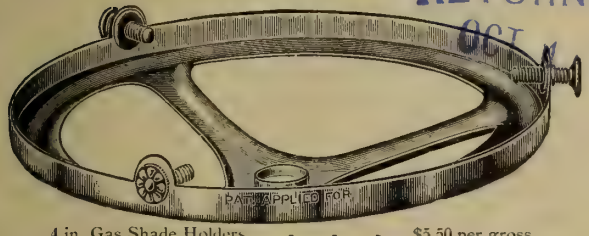
No. 193, Gas, Portable, 90c.



No. 20, Collar and Shade, $1.00. No. 1200, Collar only, 60c.



No. 878, 30 in., 48c
No. 879, 36 in., 53c.
No. 881, 36 in., with curve at bottom, 60c.



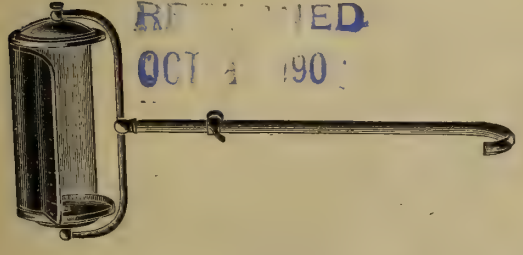
4 in. Gas Shade Holders. - - - $5.50 per gross
2¼ in. Electric Holders, - - - $3.70 "
3¼ in. " - - - $7.75 "



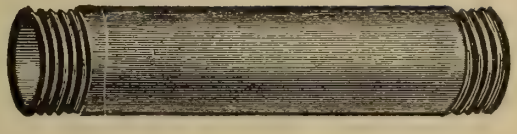
Illum. Tips, per gross, $2.50.
Lava Tips, per gross, 50c.



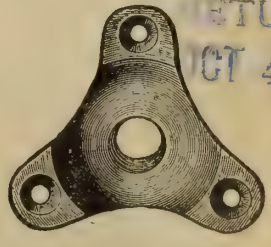
Pillars, per gross, 95c.



No. 52, Desk Light, Electric, $1.85



⅜ in. Brass Tubing, polished and threaded, 14c. ft.
Not threaded, 12c. ft.



Crowfoots, ⅛in. to ⅜in $2.00 per 100.

GOOD PRICES IS ONE OF OUR SPECIALTIES.

All of the above quotations are for dozen lots or more Portables and Brackets, and above prices do not include shades or other fittings, except where specified. All prices F. O. B. Montreal.

THE SAYER ELECTRIC CO., MONTREAL

10-12-14 BEAVER HALL HILL

1 dozen window alarms, etc.

This should readily be a money making stock. There is nothing to spoil, no style to change, and, with the omission of the hand and pocket lamps, the stock would not cost to exceed $40, and the near at hand jobbing stocks to draw from will easily and always keep it full.

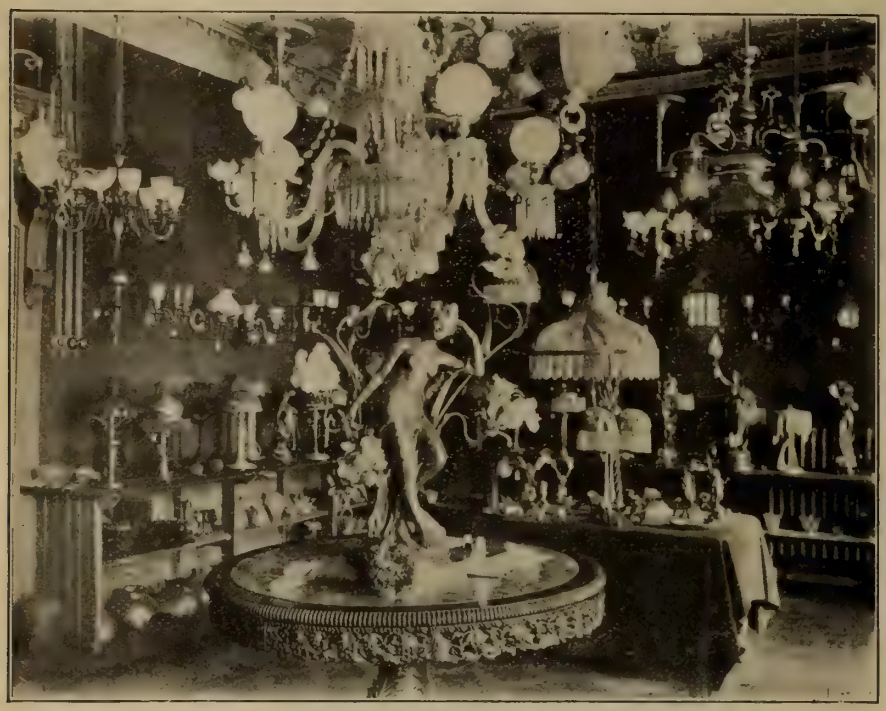
Batteries and Automobile Supplies.

All sorts of batteries are now in almost universal use, and the coming of the automobile makes a ready sale for the better grades of dry ones. The smaller, as well as the larger, manufacturer of gas engines makes a constant demand for batteries, switches, waterproof wire, spark coils, etc., and in talking here and there with customers, with salesmen and the amateur electrician, both employer and clerks will easily pick up the gift of gab in connection therewith, so that selling will be as easy as is any other line.

Additions as trade grows are easy to make, and every addition adds a profit. There is no end to the lines of electrical lamps, electrical fans, toy and amateur motors, electrical tools and the hundred and one things of this class being put on the market, all of which sell over the counter and at a good round profit. By all means add a small stock. It is more than profitable, in that it brings sale of other lines, and one great point is it occupies but little space and the goods are clean and attractive. H. C. W. in the "Iron Age."

DISPLAY OF ELECTRICAL FIXTURES.

A MOST expensive and artistically arranged suite of electrical showrooms are those of the Henry Morgan & Co., of St. Catherine street, opposite Phillip's square, Montreal. This department represents a house, being composed of a hall and three rooms. Each room is decorated with different material, of different colors. The green room, which the accompanying illustration shows a part of, is the largest and most expensive room of the number. The walls are covered with green burlap, as wall at a height of from 2 1-2 to 3 feet are the shelves which run along each from the floor The fixtures that are displayed from the ceiling, from the wall, and on these shelves, are connected by means of covered wires to switches. The mere pressing of a button will show a customer the effect of the fixtures when in use. The lighting system, for the fixtures displayed on the shelves, is operated by means of Chapman plugs, which are situated near the back of the shelf. These are operated by separate switches near the front of the shelf, and connected with the fixtures. In this room are displayed some of the most expensive fixtures to be found in Canada.



Handsome Display of Electrical Fixtures.

These fixtures which are manufactured of old brass, polished brass, oxidized silver, wrought iron, bronze work, marble work, and many others, are imported exclusively from Germany, France, Italy, Belgium, and England. Departing from this room, we enter the hall. In this part of the department is displayed all such fixtures as may be used conveniently in hall or porch of a dwelling. Proceeding onward, we enter the red room, where the medium class goods are kept. The walls of this room are covered with red burlap, and, to correspond with the walls, the decorations of the room are of a like color. Here, as elsewhere, the fixtures are all connected with wires. Leaving this room we enter the room where a cheaper grade of fixtures are displayed. This part of the department is called the blue room, because of the color of its trimmings. By means of these separate rooms the average purchaser may gain a fair idea of what style of fixture is wanted for the different compartments of the home. When this point has once been settled, the device of lighting each fixture materially helps the customer to decide much more quickly in purchasing.

TIME SWITCH.

THE Canadian agency for the Campbell time switch, as is illustrated herewith, has been secured by the Sayer Electric Co., of Montreal. This time switch is a new departure in the line of shutting lights off, and on automatically. It is neat in design and can be placed anywhere the wires happen to run; no shelf to build, no closet necessary, can be installed in five minutes, is artistically finished, well made and reliable. The clock can be detached in a second, and replaced as quickly. These switches are made from 10 to 35 ampere, double pole or triple. Style "A" turns light on or off. Style "B" turns light on and off. The prices are very moderate.



The Campbell Time Switch.

RETURNED
OCT 4 1905
To Owner
on Book
page

RAILWAY WRECKS AND THE STEEL TRADE.

NEW activity has been given to the steel trade by the large orders for steel cars which are being placed by some of the big companies. The disastrous wrecks recently suffered by the eighteen-hour flyer on the Pennsylvania and Lake Shore Railways, have called the attention of officials to the danger of wooden cars, in collisions, while tests have shown that steel cars are comparatively uninjured even in serious wrecks.

Among recent orders for cars may be mentioned the Pennsylvania Railroad's call for 18,000, most of them to be made of steel. This opens up the prospect of a large business in this line, and an added impetus will be given to the steel trade.

Meanwhile, the railways continue to keep the rail mills busy, in spite of the remarkable orders which have been placed during the past few months. There is no abatement in the demand for fabricated steel, and the trade generally is in a most satisfactory condition.

MONTREAL BOARD OF TRADE.

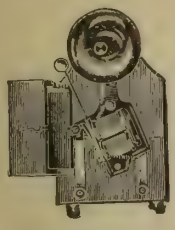
A new rule adopted by the Montreal Board of trade provides that the use of the rooms of the Board shall be restricted to its members. A doorkeeper will be placed at the entrance to the Exchange Hall and members must be recognized or show their membership cards. A local stock ticker and Associated Press dispatches have been added to the commercial information supplied by the Board and a feature is to be made of the personal association of the members between 12 noon and 1.30 p.m.

NOT TOO EARLY.

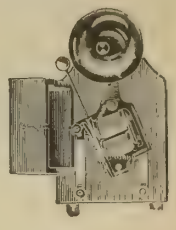
Now is the time of year for the live hardware merchant who is thinking of store to come to a decision. If it is to be a stove, it may be all right to wait until the cold weather is at hand; if it is a hot-air furnace or hot-water system, which requires some time to set up, it is none too early for him to complete his arrangements now.

TRADE MARK
This design a guarantee of quality

Heavy Red-Brown Wrapping
FOR EXPRESS PARCELS. STRONG, TOUGH AND STIFF
SAMPLES AND PRICES GLADLY SENT.
CANADA PAPER CO.
TORONTO LIMITED MONTREAL


Just Give Them a Trial

BUY A BELL THAT IS A BELL!
REGAL WOOD BOX BELLS
Are unrivalled---All up-to-date
Dealers buy them---Prices low.
MUNDERLOH & CO., - MONTREAL


Cannot Rust Always Ring

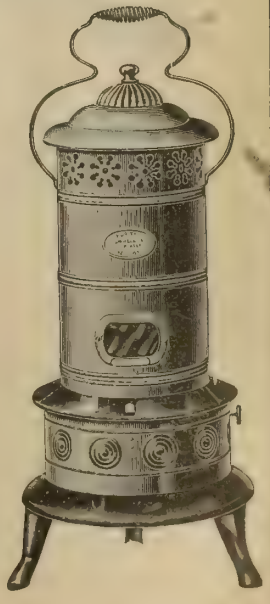


A LIGHT TOPIC

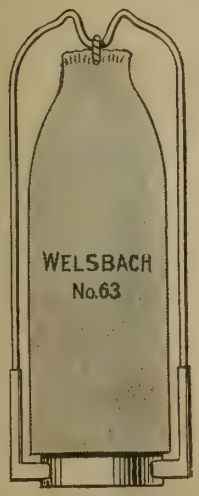
There are many kinds of light. You want the best. We have it. The two best gas lamps are the

Welsbach No. 71
and the
Lindsay No. 5

We also carry the ordinary cheap lamps for gas, and a great variety of lamps for burning coal oil. We have the best and cheapest 4 burner arc gas lamps ever sold.



Our **Parlor Oil Heater** is just what your customers want to remove the chill from the room during the cool fall evenings which will soon be upon us.



Those **Gas Mantles** of ours, too, are a good line, both reliable and cheap. Write us for prices.

THE ROCHESTER LAMP CO., TORONTO

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

The Best South Wales Produces

IN STEEL COKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

882. A Midland firm manufacturing special cold blast pig iron for use in foundries and forges is prepared to appoint suitable Canadian resident agents.

883. A London company manufacturing bearing metals of all grades is open to appoint suitable Canadian agents.

887. The makers of a successful form of agricultural motor which will haul 3-furrow ploughs, mowing machines, reapers and binders, and in addition drive threshing machines, chaffcutters, mills, pumps, dynamos, etc., desire to sell their patent rights for the manufacture of the motor in Canada.

893. A Bristol firm wants to be put in touch with some Canadian firm that could handle a pure vegetable concentrated boiler preservative composition.

895. A Bristol firm wants a Canadian market for "Condor" brand steam joint cement.

PIONEER COMPANIES PROTECTED.

FOR some time past the American Steel Corporation has been casting envious glances at the large and growing trade of the Dominion. Indeed, it had almost decided to establish a Canadian branch, but it is reported that this idea has been abandoned, for a time, at least.

The reason for this is said to be that the Canadian Government has unofficially advised the officers of the corporation that in the event of their establishing a branch here the bounty which is granted to Canadian-made steel would be withheld in their case.

The consumption of steel in this country, though growing, is still limited, and the Government rightly considers that the pioneer industries are entitled to privileges which cannot be granted to those who wish to share in the benefits of the Canadian trade without having experienced its early difficulties. Furthermore, Canada has no sympathy with the methods which have resulted in the steel corporation dominating the United States market, and our own iron and steel industries must not be swallowed up by this aggressive monopoly.

That the steel corporation has thus been driven from the intention of invading the Canadian market is by no means probable, but it is encouraging to know that the Government is alert to ward off foreign trusts and monopolies.

A TRAVELER'S STORY.

In one of the country stores, where they sell everything from a silk dress and a tub of butter to a hot drink and a cold meal, a lot of farmers were sitting around the stove one cold winter day, when in came Farmer Evans, a typical resident, who was greeted with:

"How d'do, Ezry?"

"How d'do, boys?" After a while he continued: "Wa-all, I've killed my hog."

"That so? How much did he weigh?

Farmer Evans stroked his chin whiskers meditatively and replied: "Wa-all, guess."

"'Bout three hundred," said one farmer.

"No."

"Two seventy-five?" ventured another.

"No."

"I guess about three twenty-five," said a third.

Then altogether demanded' "Well, how much did he weigh?"

"Dunno. Hain't weighed him yet."

Other men kept dropping in and hugging the stove, for the day was cold and snowy outside. In came Cy Hopkins, wrapped in a big overcoat, yet almost frozen to death; but there wasn't room enough around the stove to warm his little finger.

But he didn't get mad about it: he just said to Bill Stebbins, who kept the store: "Bill, got any raw oysters?"

"Yes, Cy."

"Well, just open about a dozen and feed 'em to my hoss."

Well, Stebbins never was scared by any order from a man whose credit was good, as Cy's was, so he opened the oysters an' took them out, and the whole crowd followed to see a horse eat oysters. Then Cy picked out the best seat near the stove and dropped into it as if he had come to stay, as he had.

Pretty soon the crowd came back, and the storekeeper said: "Why Cy, your hoss won't eat them oysters."

"Won't he? Well, then, bring them here an' I'll eat them myself."

By an acetylene explosion in the premises of A. E. Jones, baker and confectioner, Caledonia, Ont., twenty-two people were injured, the majority of them seriously. It is supposed that a leakage in the pipes connected with the machine from which the gas is produced caused an oversupply of gas to accumulate in the cellar of the premises.

PURITAN SMOKELESS OIL HEATERS

Absolutely Safe and Reliable
Odorless as Well as Smokeless

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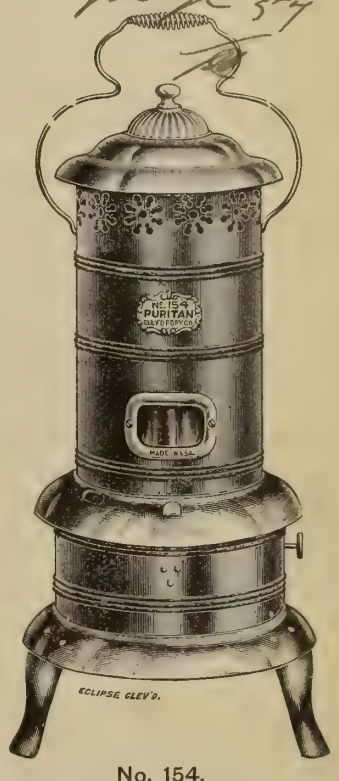


No. 161-S.

No. 149—Height (bail down), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent corrosion, (4 qts.) Polished steel drum, 8 in. in diam. Mica window frame shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Top nickel-plated and highly finished. Legs, base-ring and drum base, black finish.

No. 154—Height (bail down,), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent any corrosion, (4 qts.) Polished steel drum, 8 in. in diam. Mica window shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Legs, base-ring, drum-base and top nickel-plated and highly polished.

No. 155—Height (bail down), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent any corrosion (4 qts.) Polished steel drum, 8 in. in diam. Mica window shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Legs, base-ring, drum-base and top nickel-plated and highly polished. Ruby glass front over mica, softening the light.



No. 154.

Buckeye No. 161-S.—Height (bail down,) 25½ inches. All stamped steel. Removable reservoir of heavy sheet steel heavily coated with lead inside and out to prevent corrosion (4 qts.). Polished steel drum, 8 in. diameter. Mica window shows flame adjustment, without indicator. Top not removable; aluminum finish. Equipped with wick-stop, which prevents smoking.

Write for Prices

FOR SALE BY

The Hobbs Hardware Co., Limited

London, - - Ontario

Manufactured by The Cleveland Foundry Co., Cleveland, Ohio

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

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Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

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Manufacturers' Agent and Metal Broker,
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BRONZE POWDER AND LIQUID

is used by every steam-fitter. Ask your supply house for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE
768 Craig Street MONTREAL
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North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors,
Shipping and Forwarding Agents
and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

SAVED—LOST.

One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3893

TO INCLUDE ADULTERANTS.

The Ontario Board of Health have approved of Dr. Hodgett's recommendation that all milk adulterants be dispensed with. Accordingly, the doctor is communicating with the Minister of the Interior urging legislation from the Dominion Government excluding the importation of all such preparations to the country.

STOVE MANUFACTURERS MEET.

At the annual convention of the American Foundrymen's League, held at Niagara Falls last week, these officers were elected: President, E. C. Stearns, Syracuse; vice-president, Edward Gurney, Toronto; treasurer, J. B. Jones, Utica; secretary, William Sleicher, New York. The next convention will be held in New York. An employment bureau for moulders not affiliated with a union will be established in the United States and Canada.

STOVE MICA.

A subscriber requests Hardware and Metal to supply the names of producers of stove mica in other Canadian centres than Toronto and Hamilton. The producers of the best class of mica for stoves are in the two cities mentioned, but if any correspondent can supply the name of any concern in another district producing high-class goods our subscriber will appreciate the sending of the information through these columns.

K. B. THORNTON LEAVES MONTREAL.

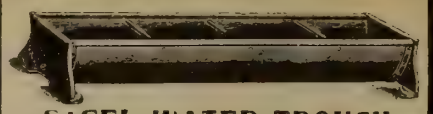
Mr. K. B. Thornton, electrical engineer, who has been connected with the Montreal Light, Heat & Power Co. for the past thirteen years, has resigned, to accept a position with the J. G. White Co., of New York, with which the Canada White Co. is allied.

Mr. Thornton, who is one of the best known electrical men in Montreal, and president of the Canadian Electrical Association, graduated from the Central Technical College, South Kensington, London, England, thirteen years ago, and came thence to Montreal. He became identified with the manufacturing department of the Royal Electrical Co., which developed into the Montreal Light, Heat & Power Co., where, for nine years, he has been connected with the operating end of the business.

In his new position, Mr. Thornton will be associated with the 2nd vice-president of the J. G. White Co., Mr. P. G. Gossler, who was for many years general superintendent and chief engineer of the Montreal Light, Heat & Power Co. Mr. Thornton carries with him the best wishes of his many Montreal friends.

A feature of the development of the "Soo" industries is the large amount of wood which is cut for the various departments of the work. In one year this included 120,000 cords of wood for charcoal used in the manufacture of steel, 130,000 cords of pulp wood, 10,000,000 feet of pine for the saw mills, and 200,000 feet of birch for veneers. This forest wealth is not wasted or sent out of the country to build up foreign industry, but is converted into products of greater value in Canada.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. STEEL TROUGH & MACHINE Co. TWEED, Ontario Limited

Are you interested in any of the lines that are advertised?

A Post Card will bring you price list and full information.

Don't forget to mention Hardware and Metal.

Buy the Best.



HERCULES
Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.



THE BANNER COLD BLAST LANTERN

ALWAYS LEADS
GREAT LIGHT
WIND PROOF.

Note Improvements for Season 1905.

We make twelve different styles of Lanterns in Tin, Antique Copper and Solid Brass.

For Sale by all Prominent Jobbers Throughout the Dominion.

ONTARIO LANTERN & LAMP CO.
LIMITED

SOME PLUMBERS ARE BLIND

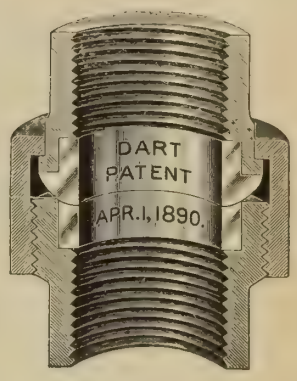


to their own interests when it comes to a question of Valves, Fittings and Steam Goods of every description.

They never pause or endeavor to discriminate between poor quality and the best quality.

The reason we keep "drumming" you constantly regarding Fairbanks Valves, Steam Goods and Specialties is because we really know the quality of our goods to be the very best. This is the open secret of our success and growth in business in Canada.

No one has ever built up an honest lasting trade on poor quality of goods. See the point?



MORAL:

BUY FAIRBANKS VALVES.

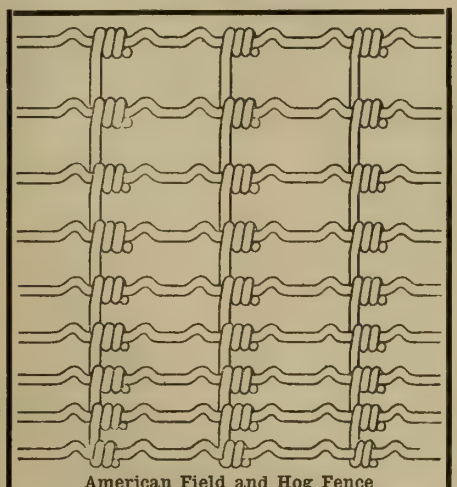
THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO VANCOUVER WINNIPEG

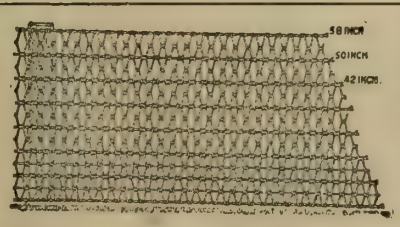
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



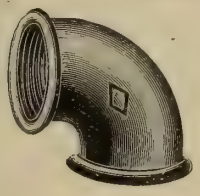
Ellwood Field and Lawn Fence

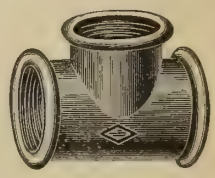
We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us

THE CANADIAN STEEL AND WIRE CO., LIMITED

WINNIPEG, MAN. HAMILTON, ONT





TRADE MARK REGISTERED

DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

FOR FALL TRADE

STOCK

BLACK DIAMOND (registered)

JOLIETTE and CYCLONE (registered)

No sharp salesmen needed to sell these brands of Building Paper. They Sell Themselves. ***Write for Quotations.***

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Aug. 18, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$35 00 $36 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	5 50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. " 14x60, " " 14x65, "	7 00

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality		0 18
"I" "		0 14
"BC" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 40	
22 to 24 gauge 3 50	3 50
26 " 3 75	3 75
28 " 4 00	4 15

Comet Bell. Queen's Head

16 to 20 gauge 3 40	
22 to 24 gauge 3 45	3 65
26 " 3 70	3 90
28 " 3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¼ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
" ¼ "			5 60
" 5-16 "			4 45
" ⅜ "			3 85
" 7-16 "			3 70
" ½ "			3 55
" 9-16 "			3 45
" ⅝ "			3 35
" ¾ "			3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 00	16 55

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 00
inned copper sheet	24 00
lanished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb	4 00
Bar, "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft. lengths, lists at 8c.

ANTIMONY.

Cookson's	per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in. "	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00
Plate 123 E, lavatories	1st quality		8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c.
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 " "	" 1 75
No .7 Fuller's	" 2 10
No. 4½, "	" 2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 " 2 25
Square head brass cocks, discount 55 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40	"	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
80	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND LADIES' SCISSORS

Fully Warranted



Our Eastern Pattern Ladies' Scissors. This is an exceptional scissor, adapted for clean-cutting work where stiffness of blade is required. Hand forged from finest steel. Ask for discounts.

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.
7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17¼

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2		5 05
No. 3		4 12½
No. 4		4 05
Munro's Select Flake White		5 65
Elephant and Decorators' Pure		5 50
Tiger brand, pure		5 75
Decorators' Special for exterior use		5 00
Monarch		5 75
Decorator's Pure		5 50
Essex Genuine		5 00
Sterling Pure		5 75
Island City Pure		5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 60 0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55 0 65
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PARIS GREEN.

Petroleum, barrels, per lb.	0 13½
Arsenic, kegs	0 13½
50 and 100-lb. drums	0 14
25-lb. drums	0 14½
1-lb. paper boxes	0 15
½-lb. paper boxes	0 17

Terms—2 per cent. off 30 days, or 90 days

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent.	
Carriage Bolts, common ($1 list		
" " ⅝ and smaller	60	and 10
" " 7-16 and up	55	and 5
" " full sq. ($2.40 list)	60	
" " Norway Iron ($3 list)	60	
Machine Bolts, all sizes, ⅝ and less	55	
Machine Bolts, 7-16 and up	55	and 5
Plough Bolts	55	and 5
Blank Bolts	55	and 5
Bolt Ends	55	and 5
Sleigh Shoe Bolts	70	
Coach Screws, cone point	70	and 5
Nuts, square, all sizes, 4c. per lb. off.		
Nuts, hexagon, all sizes, 4½c. per lb. off.		
Stove Rods per lb., 5½ to 6c.		

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar " "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 0

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.		
Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Christmas Dinner

without Plum Pudding is no more complete than a Hardware Store without a stock of Paterson's Building Papers and Wire Edged Ready Roofing.

You'll increase your profits and avoid arguments by handling our goods because we make the material your customers want.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
6 "	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western.....70 and 10 per cent.
Arcade.....70 " 10 "
Kearney & Foot.....70 " 10 "
Disston's.....70 " 10 "
American.....70 " 10 "
J. Barton Smith.....70 " 10 "
McClellan.....70 " 10 "
Eagle.....70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5 "
Royal.....80 "
Globe.....70 to 75 "

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2½ 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.		
Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro.. No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list } Oval
M.R.M. Co. brand, 55 per cent. } head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M.Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz.		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut		$ 8 50 to $11 00
Star, 9 -in.	"	6 00 to 6 50
Daisy, 8 -in.	"	5 25 to 5 75
Philadelphia, 7½-in.	"	6 00 to 7 50
Woodyatt, 10½ in., ball bearing		13 25 to 18 00
Grass Boxes		1 75 to 2 00
King Edw'd 12-in., 14-in. cut		9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in.	5 50	6 25
8-in.	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	...per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	7 80
1 " "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ o 40 per cent

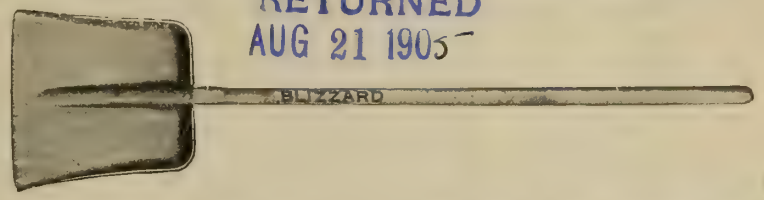
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THE BLIZZARD

Solid, Strong, Steel Shovel for Stable, Store or Furnace

RETURNED
AUG 21 1905

Crowning at point for Cutting Ice.



Two Sizes: No. 1, 14 in. wide; No. 2, 9¼ in. wide

The best and strongest STEEL SHOVEL of its kind ever offered to the trade. Write for quotations.

Factories: NEWMARKET, ONT.

Branches: WINNIPEG, OTTAWA, MONTREAL.

THE OFFICE SPECIALTY MFG. CO., Limited

Everything in Business Furniture and Card Systems In Stock.

97-105 Wellington St. West, (near York) TORONTO

PUNCHES.

Saddler's ..per doz.	1 00	1 85
Conductor's "	3 00	15 00
Tinners', solid..per set	....	0 72
" hollow..per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros " Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0 11
Pure Manilla	0 14½
"British" Manilla	0 11
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ⅛ inch 0 25	0 28
Russia Deep Sea	0 16
Jute	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished...per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Kurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's...per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each 0 75	2 75
" frame only.....each 0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century	$6 25
" " No. 1 Maple Leaf	5 25
" " Happy Medium	4 25
" " Watch Spring	4 25
" common frame	4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	0 85
" 18 x 30	1 00
" 18 x 36	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'	4 50	11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	0 37
2-lb. or over ..... "	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	3 00
Plain	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan "	0 06	0 07
" slip "	0 09	0 09
Labrador "	....	0 13
" Axe "	....	0 15
Turkey "	....	0 50
Arkansas "	....	1 50
Water-of-Ayr "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch " " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" " bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.
German.....per doz. 4 75 6 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging "	0 27	0 35

VISES.

Wright's	0 13½
Brook's	0 12½
Pipe Vise, Hinge, No. 1	3 50
" " " No. 2	5 50
Saw Vise	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge		$2 15
10 "		6c. extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 for small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved	33 00
Daisy	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in.	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

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Canada Metal Co., Toronto.
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Deseronto Iron Co., Deseronto, Ont.
Fotheringham & Workman, Montreal.
Gibb, Alexander, Montreal.
Gilbertson, W., Pontardawe, Wales.
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Morton, B. K., & Co., Sheffield, Eng.
Nova Scotia Steel and Coal Co., New Glasgow, N.S.
Peck Rolling Mills Co., Montreal.
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Saunders, Franklin & Co., Montreal.
Summers John & Son, Stalybridge, Eng
Thompson, B. & S. H. & Co., Montreal.

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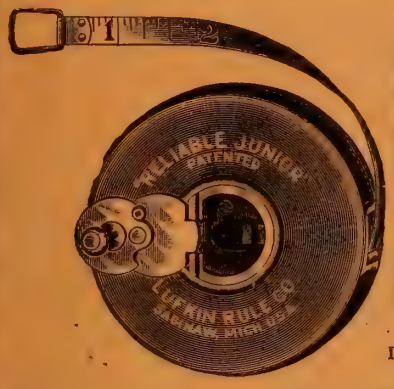
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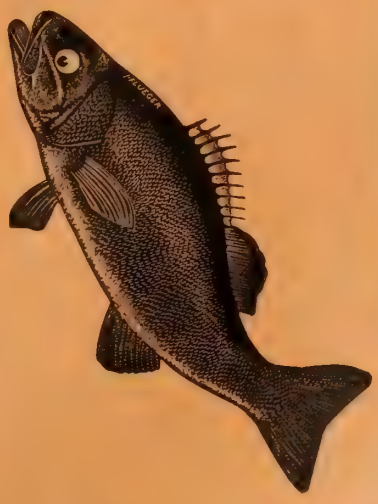
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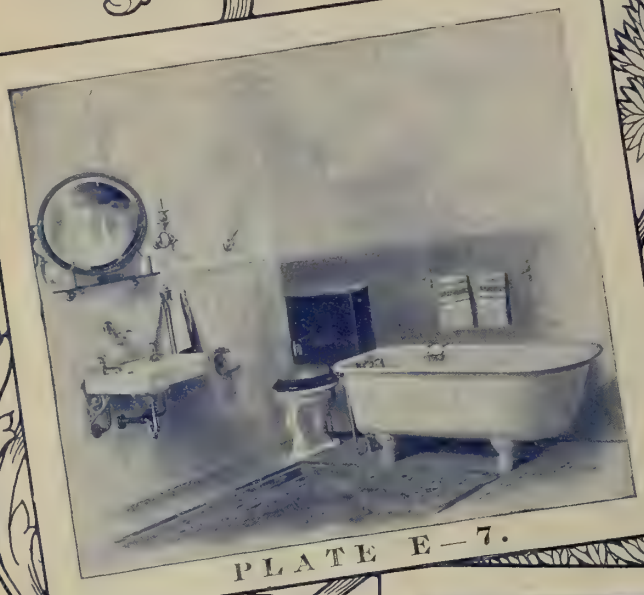


PLATE E—7.



PLATE E—8.



PLATE E—9.



PLATE E—10.



PLATE E—11.

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VOL. XVII. NO. 34.



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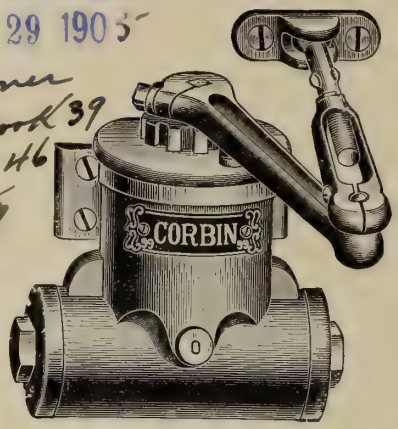
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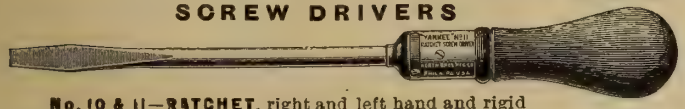
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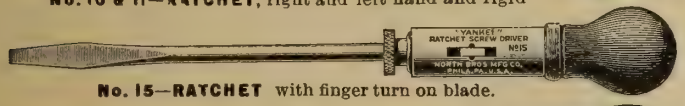
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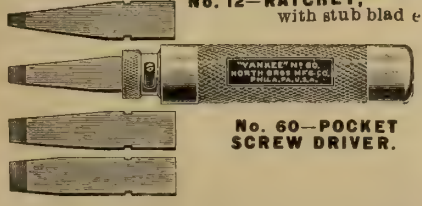
Chuck and 8 Drill Points, for spiral ratchet screw driver.



No. 12—RATCHET, with stub blade



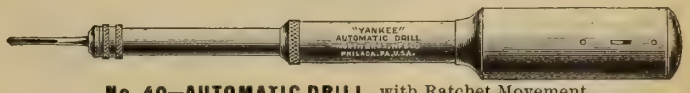
Countersink, for spiral ratchet screw driver.



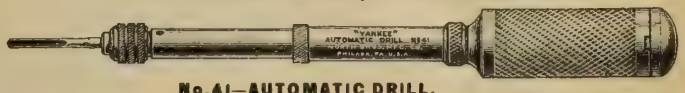
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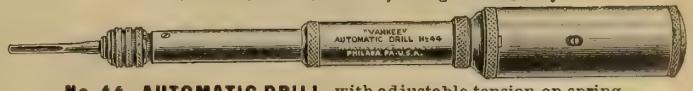
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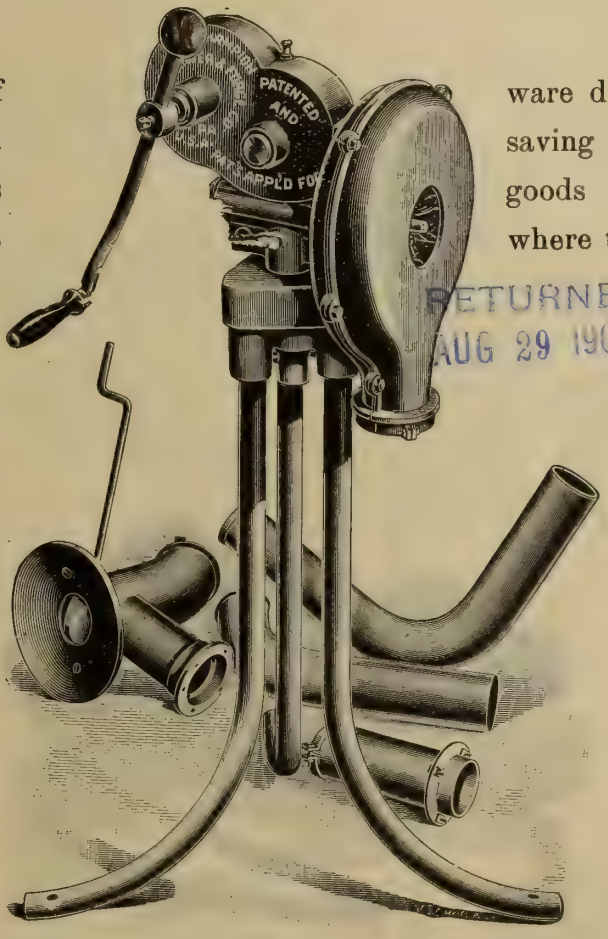
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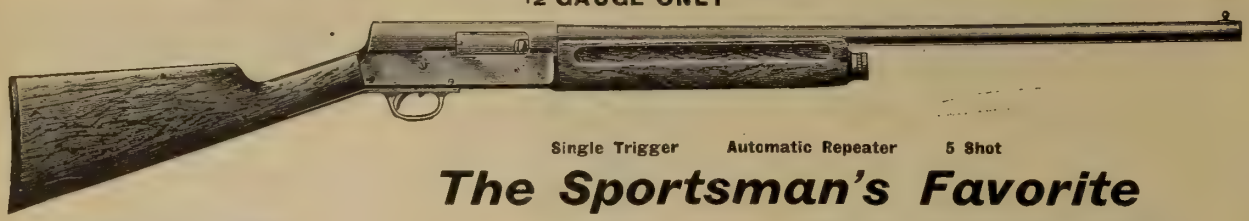
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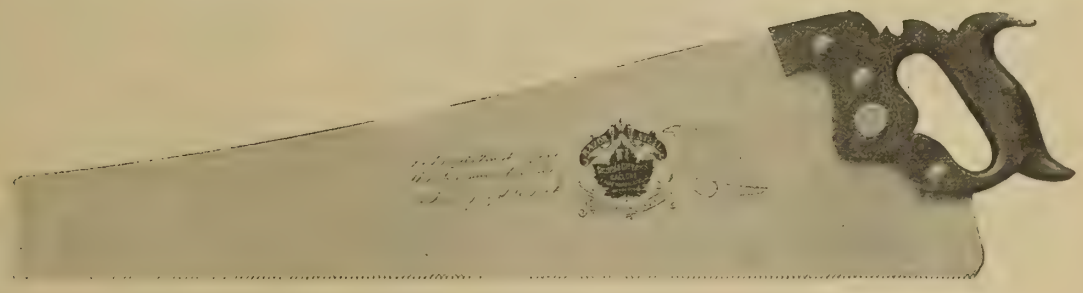
Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

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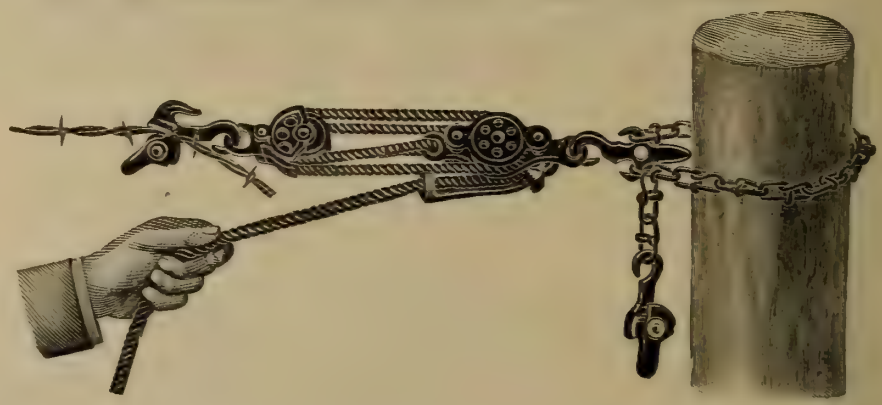
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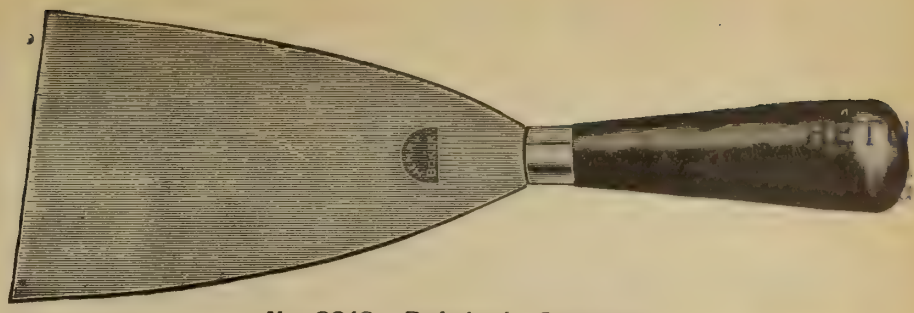
Agent: F. Hankin, Montreal

Painters' and Glaziers' Tools

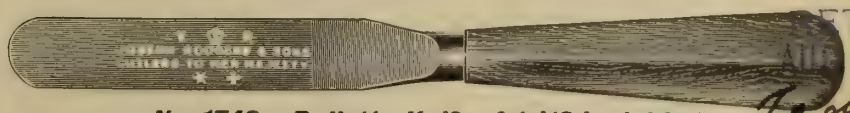
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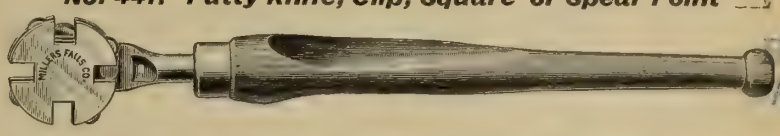
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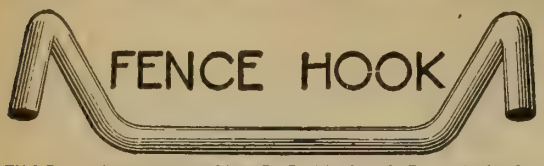
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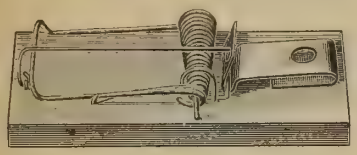
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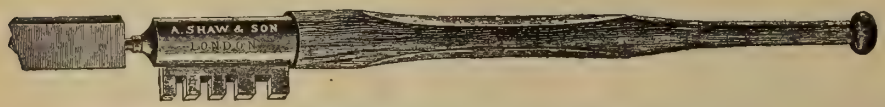
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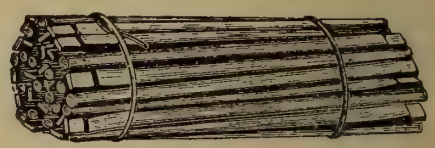
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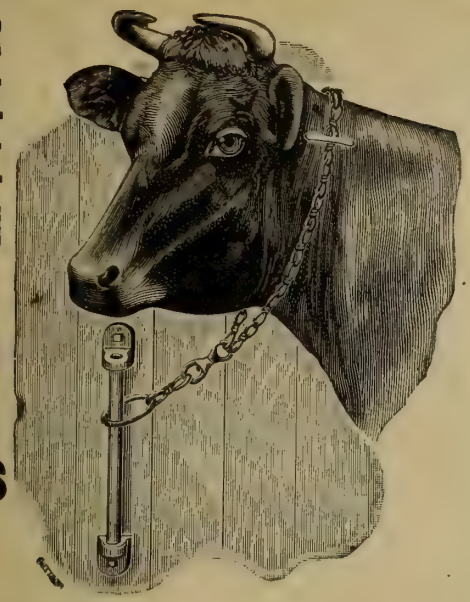
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WHERE

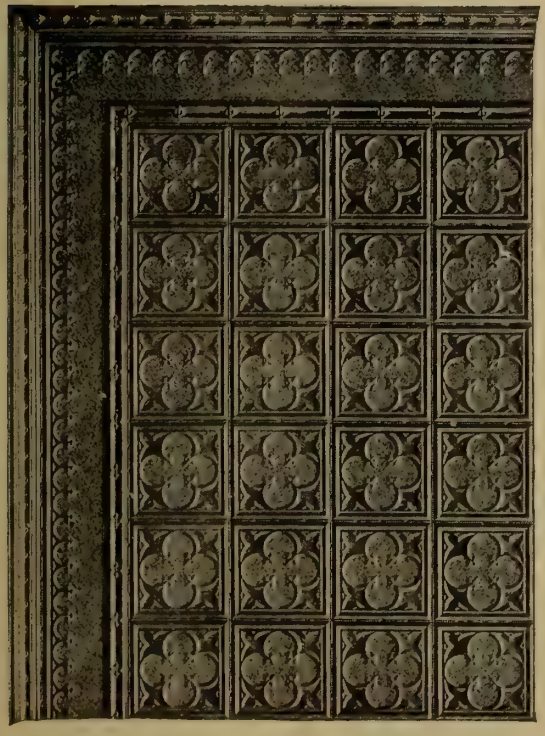
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is superior to all others and just WHERE it is superior. We will explain, in detail, what there is about the "Dillon" that merits success, how it brought down the prices of wire fencing in Canada, and ushered in what is called "Standard Quality." We will tell how Hardwaremen everywhere are selling the "Dillon" and why "others" could sell it. We want you to read every ad. because it will be IMPORTANT. We want you to open this paper each week with one thing firmly fixed on your mind—Dillon Hinge-Stay Fence.

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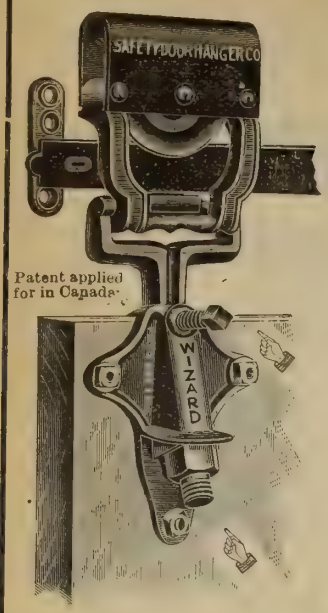
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Patent applied for in Canada

THE WIZARD
Adjustable, Flexible, Door Hanger

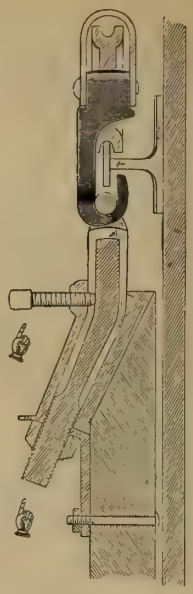
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Lateral Adjusting Screw.

Quick Sellers at Inviting Profits

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MANUFACTURERS OF
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H. & R. SINGLE GUN
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DOMINION WIRE MANUFACTURING CO.

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NOTICE!

We beg to advise our many customers that notwithstanding the **TRADE REPORT** in issue June 10th, page 37, we are in a position to **EXECUTE PROMPTLY** all orders for the following goods:

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Steel Wire Barrel Hoops

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Give that man a ***UNION PLANE*** when he asks you for a

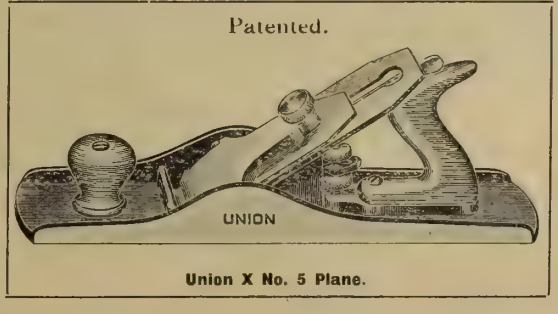
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They are FIRST-CLASS, and we GUARANTEE them. You can GUARANTEE them to your CUSTOMERS and your best tool Trade will appreciate them.

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The one with the Locking Lever adjustment and Solid Frog



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Enameled Preserving Kettles

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KEEP YOUR STOCK WELL ASSORTED.
PRICES QUOTED GLADLY.

KEMP MANUFACTURING CO., TORONTO

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KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

Manufacturing and Distributing Industries of the Maritime Provinces

THE interests of the Maritime Provinces are, generally speaking, the same; they have the same advantages and the same drawbacks. Climatic conditions are the same, each city being able to prove that it is free from fog. They were settled about the same time, and the early settlers were largely of one nationality. We would expect, therefore, that they would stand shoulder to shoulder, that here, at least, there would be no room for petty rivalries and jealousies.

While the Provinces have not yet reached that ideal state "where none was for the party but all were for the state," the tendency of the last few years has been towards union. Every citizen should be loyal to the interests of his own city, town, village or Province, but there is a larger patriotism than this, and at times local interest must be sacrificed for the good of the whole country. To take an example; in case the Maritime Provinces were united, would St. John be willing to make Halifax the capital, or would Halifax acquiesce in the capital being located in New Brunswick? There can be no unity of the Provinces, either geographically or in spirit, until each Province and each city is willing to give way at times to its sister Province or city.

In this connection, the Maritime Provinces can take a lesson from the west, and it might be worth while to contrast the eastern and western sections of Canada.

The most noticeable difference to a casual observer is the confidence or indifference manifested by so many business men in the east. There are, of course, many excepeions to this, but it is a fact that this lack of enthusiasm is causing many young men to leave for United States. The young men look on the west or the New England States as a very Utopia. One way to induce the young men to stay in their own Province is for the business men to be more optimistic, to lay more emphasis on the advantages which must accrue to the Maritime Provinces both from their natural resources and from their geographical position.

In population, the east has still the advantage. Nova Scotia has as large a population as Manitoba, British Columbia and Northwest Territories combined. Winnipeg and the west have received more free advertising than any other portion of the world. We have heard so often of the growth of this section of the Dominion that we have come to believe half the population of Canada lies west of the Great Lakes. We have placed the telescope horizontally across Canada, and have looked at the west through the small end, and at the east through the large end. As a matter of fact, the Maritime Provinces have a population of about 800,000. while Manitoba and the west have only 500,000.

There is a great difference, too, in the distributing trade. In the east it is seldom wholesalers have to ship goods farther than two hundred miles, and the bulk of the business is done within a much smaller radius. From both St. John and Halifax a great deal of the shipping is done by boat. In fact, this is so great a factor that wholesalers of Halifax do practically no business with Bay of Fundy ports, while St. John does very little with certain parts of the Nova Scotia coast line. The freight rates by water are very low, and as boats leave for these parts every day, wholesalers are able to give prompt delivery.

The Maritime Provinces have a great advantage in importing goods either from Great Britain, United States or West Indies. Both Halifax and St. John have open ports the year through, and so make a large saving by avoiding a high railroad freight. Moreover, they do not have to order so far ahead or keep such a large stock as do wholesalers in the west.

In the west the yield of wheat acts as a barometer for all lines of trade. In New Brunswick the lumbering business is the magic hand of the barometer. Inactivity in the lumber trade means poor business generally, and if extending over more than one year a number of failures is the inevitable result. This year the lumbering business has been very slow in opening up, and wholesalers, generally, are looking for the silver lining in what seems to be a very dark cloud. In Nova Scotia, fishing and mining are the dominating industries. Twenty or thirty years ago ship chandlery was the big line, not only in Nova Scotia, but also in New Brunswick; but this has generally diminished, although three large wholesale hardware firms in Halifax still devote a good deal of attention to ship chandlery.

A few years ago many wholesale grocery and provision firms handled considerable quantities of ship chandlery. This was probably due to the fact that they sold fishermen canned goods and food supplies and, having established a connection with these men, gradually came to sell sails, pulleys, rope, and the smaller fittings for wooden ships.

The days of the building of wooden ships are past, but there is no reason why at some future date the Maritime Provinces should not occupy the same proud and prominent place in building



The Beautiful City of St. John.

steel ships that they once held in building wooden ships. The Maritime Board of Trade took a very strong stand on this question and will send a delegation to Ottawa to urge the Government to offer some inducement in the way of bounty to induce firms to erect plants for the building of steel ships.

The general store business is an important factor in the Maritime Provinces as it is in the west. For this reason many of the wholesale hardware and metal firms carry a number of lines which would properly belong to the wholesale grocery trade. These general stores in many cases do a large business, some of them carrying over $20,000 stock.

With regard to manufacturing facilities, the Maritime Provinces are much better off than the west. Coal, which is usually one of the largest items of expense, may be had in either of the three Provinces almost direct from the mines. Raw material may be imported by water, thus securing low rates. However, a good deal of the raw material used in manufacturing is found right at home, and is as easily secured as the coal. Labor is cheaper than in the west, and there is no scarcity of skilled workmen in the Maritime Provinces. These advantages should more than make up for the handicap of the freight rates to either Ontario or the West. A few firms, however, are able to compete successfully with Ontario firms for western business, as the railway companies give a very low through rate.

Stoves, furnaces, enamel-ware, axes, nails, wire fencing and other lines are manufactured in the Maritime Provinces and shipped to the west in large quantities.

ST. JOHN.

For the last ten years St. John has carried on an energetic campaign for recognition as the Winter port of Canada. In 1895 the Canadian Parliament decided to subsidize lines of steamships to run between St. John and Liverpool, and to employ the existing service between St. John and London. Since that time the business men of St. John have not been idle and a large portion of the trade which had been carried on through United States ports has been diverted to a Canadian port. St. John has excellent railway connections with the western part of Canada. The Intercolonial Railway has entry into Montreal over its own rails, and connection is made there with the Grand Trunk system. St. John is the Atlantic terminus of the Canadian Pacific Railway, with its main line running direct to the Pacific Coast, and with its numerous branches and connections traversing the whole western and southern portion of the continent.

St. John, however is ambitious, and aims at carrying not only Canadian trade, but United States as well. The distance from Chicago to Liverpool is shorter vis St. John than via New York.

Through rates of freight via St. John are as low as any rival route. This, coupled with the fact that safe carriage and prompt despatch are assured, has attracted considerable trade to St. John in live stock, dressed meats, dairy produce and eggs.

It has been said dressed meats via St. John reach their destination in a more marketable condition than through any other port. This is due to the climatic condition which makes St. John more adaptable for transhipment of perishable goods than the ports farther south.

St. John is ideally situated for a manufacturing and distributing centre. It is not only able to import by water, but has the additional advantage of being able to ship by water to the majority of the retail trade.

In the pages that follow a detailed account is given of the leading wholesalers and manufacturers. In most cases the men at the head of these firms have built the business up themselves, and it is largely owing to their energy and foresight that St. John occupies the proud position she has to-day in the Maritime Provinces.

There are few large buildings in St. John such as are being erected in Winnipeg. The wholesalers in St. John started with a small building and just enough capital to keep their credit good. As their businesses grew they added a wing to the original building or else secured a warehouse nearby. In this way some of the larger firms have warehouses in all parts of the city. Considerable time must be lost by these firms and they must at times be considerably inconvenienced by this arrangement. No doubt in the near future a number of these firms will erect compact buildings. Emerson & Fisher have been the first to move and last year they erected a very fine building; a view of which is shown on another page. The most of the large wholesale grocers in St. John are young men. This is something we would hardly expect to find in a city as old as St. John. These men have been successful in accomplishing what in many cases takes a lifetime to achieve.

St. John is a great tea centre—in fact, the dealers in St. John will tell you it is destined to be the tea centre of Canada. Mr. McLean, manager of the Vim Tea Co., has the distinction of having put up the first "package tea" to be sent out of St. John. At that time, he related, he was employed by F. Hatheway & Co. He told Mr. Hatheway he thought a good trade could be worked up by selling tea in packages. Mr. Hatheway was somewhat skeptical at first, but agreed to give it a trial. Mr. McLean spent a week or so getting his stock ready and then started out to dispose of it. It proved to be a success, and the package tea business soon came to be an important item in the business of F. Hatheway & Co.

Flour is not as yet handled in paper bags in the Maritime Provinces, but is sold by the retail trade in barrels and half barrels. There is no doubt flour in paper bags would be as popular in the east as it is in Ontario and the west. The difficulty, however, is in the shipping. The most of the shipping out of St. John is done by water and the paper bags would not stand the rough usage to which they would be subjected in loading and unloading.

The package system, however, is as popular in the Maritime Provinces as in any part of Canada. This system, whether it be in connection with teas, cereals or flour, has come to stay, and we may expect each year to have articles which are now sold in bulk trade-marked and sold in packages. One wholesale grocer in Halifax made the sweeping statement that if he had money enough he would trade-mark everything he sold, as it would be a guarantee of cleanliness and quality. He did not probably mean this to be taken literally, but wished to express very strongly his approval of package and trade-marked goods.

It would almost seem to a casual observer that St. John had more wholesale houses and commission agents than necessary. For the population it serves it has more than any other city in Canada. Some of them do a small business, however, and one man who has been in business on the wharf for years, intimated quite seriously that he was not anxious to increase his business. He made, he said, about $1,500 per year from his business and he had only one man to look after. Why, then, should he wish to extend his business when he had enough to live on? He had no ambition to be rich, and an increase of business would mean an increase of trouble and worry to him. We mention this little incident as it is typical of a class of business men in the Maritime Provinces. True, only of a small class, for the men who are doing the large share of the trade have to exercise just as much foresight and energy as their conferes in the west. There is, however, in both St. John and Halifax a class of wholesale and commission agents who merely buy when the market is low, but who make no effort to do a steady business the year through. They have a few friends who send in their orders and this is the extent of their business. For it is a fact that friendship counts for more in the Maritime Provinces than it does in the west. A connection in the Maritime Provinces is hard to secure, but once obtained it is just as hard for your competitor to take it away.

Emerson & Fisher, Limited.

Expansion is the order of the day, east as well as west, and while unfortunately population in Eastern Canada progresses very slowly, yet that there is material growth in the Maritime Provinces is evident to those who are conversant with that important section of our Dominion.

Among the hardware trade of the east perhaps there is no name more familiar than that of the subjects of our sketch, Emerson & Fisher, St. John, N.B., whose fine new premises are illustrated herewith.

This firm, consisting of R. B. Emerson and W. S. Fisher, started business in a comparatively small way in 1878, in premises which, with gradual additions, they occupied for a period of 27 years, when, finding that more room was imperative in order to provide for their growing trade, they decided to build. The result is shown in the building illustrated, which is said to be the largest and finest in the Maritime Provinces devoted to the hardware business.

For some time the formation of a stock company had been under consideration, and with the entrance of the firm into the new building this was consummated, and Emerson & Fisher, Limited, took the place of the old firm, with Fred. R. Murray and Stanley L. Emerson additional partners.

As will be readily seen from the cut, the building is a most commanding one, standing six storeys in front and seven in the rear. The position on Germain street, a few doors from King, and right in the heart of the city, is ideal. It has a frontage of 60 feet by 100 feet in depth, with a driveway leading to a large yard in rear, where are situated the stables of the firm as well as additional warehouse space.

To attempt a detailed description of

YOUR CUSTOMER WANTS THE BEST

Since its introduction, the

Enterprise Monarch Steel Range

has proved itself easily ahead of anything in the Steel Range line yet made.

It will pay every dealer to investigate the merits of the **Monarch** before deciding upon his leading range for this season's trade.



RETURNED

To Dunn
our Book 45
page 95

It is equipped with every modern device to lighten labor and ease the burden of housekeeping.

Send for circulars with illustrations and descriptions of its many advantages and unique features, which leave nothing to be desired.

The detachable reservoir and broiling attachment are great selling points.

If no agency already established in your place write us.

Enterprise Foundry Co.

Manufacturers **Sackville, N.B.**

the interior of this establishment is beyond the writer, but he has the assurance of the firm that a cordial welcome awaits all who are sufficiently interested, when visiting St. John, to favor them with a call.

Emerson & Fisher report business very good, specially since removal to new premises, where they are much better able to handle it quickly and well, and with better results to both customers and themselves.

They represent a number of leading manufacturers, and with their connections, which completely cover every point in the Maritime Provinces, are in an excellent position to do justice to any line they take up.



Emerson & Fisher, St. John, N.B.

In addition to their jobbing lines they are interested in the Enterprise Foundry Co., Sackville, whose stoves are well known all over Eastern Canada. They also manufacture the celebrated brand of old-time heavy pieced tinware, and other sheet metal goods.

Portland Rolling Mills Co., Limited.

The history of this firm dates back to the year 1826, when James Harris & Co. erected a small plant for the manufacture of nail plates and ship knees. A little later bar iron and car axles were added, and a mill was put in for the purpose of making all sizes of bar iron.

About 13 years ago the Portland Rolling Mills Co., Limited, was formed, amalgamating James Harris & Co. and S. R. Foster & Sons, of St. John. A short time after this they commenced manufacturing railway spikes and horseshoes. Their business in bar iron increased rapidly, and they had to install another mill to supply the demand. About the same time they erected a large building for increasing their output in horseshoes and bolts.

At the present time they are manufacturing bar iron of all kinds, car axles, fish plates, angle bars, ship knees, and forgings of all kinds; horseshoes, railway spikes, ship spikes, mine spikes, nails, tacks, and bolts of all kinds.

Their "Monarch" brand horseshoes are sold in all parts of Canada and in the West Indies and Newfoundland.

They have five buildings in all, and four travelers look after their interests on the road. They employ in all about 250 men. The officers of the company are Wm. Bruckhof, manager; James Manchester, president; D. T. Purdy, vice-president; A. P. McIntyre, secretary.

The S. Hayward Co.

This firm commenced business in 1870 under the name of Warwick, Clark & Co. Mr. Weldon, the present manager, entered the employ of the firm one year after its organization. Mr. Warwick died in 1873, and the firm then became Clark & Hayward. Three years later Mr. Clark retired and the name was again changed to S. Hayward Co. Mr. Hayward died a few months ago.

The firm are exclusive wholesale dealers, in all probability the only wholesale hardware firm in the Maritime Provinces which has no retail department.

T. S. Sims & Co.

This firm commenced business in the year 1872 under the name of Murphy, Sims & Co. Two years later the name was changed to T. S. Sims & Co.

In 1902 they erected their new building, and installed a considerable amount of new machinery. They have now one of the most up-to-date and modern manufacturing plants in the Maritime Provinces.

Probably the one article of which Mr. Sims is most proud is the solid scrubbing brush. Mr. Sims got the idea from Germany, and intimated to the writer that they had been a great success in Canada.

They have three travelers, T. F. Anderson, St. John; Geo. West, Toronto, and T. S. Baker, St. John. They also have a representative in Port of Spain, Trinidad, Mr. T. Geddes Grant.

Walter Wilson & Sons.

This firm was established in 1845 by Mr. A. Richardson. Mr. Walter Wilson entered the business about 1864, and on the death of Mr. Richardson in 1877 became sole owner.

Mr. A. R. Wilson now carries on the business and manufactures a full line of saws, including circular, gang and crosscut saws. Mr. Wilson has been in the saw business all his life and understands it thoroughly. The firm have always been noted for the very high grade of goods which they manufacture. They use only the high-grade Sheffield steel, and guarantee all the goods they manufacture.

Estey & Co.

This firm was established in 1863, and for thirty-eight years were located on Prince William street. They moved a short time ago to their present premises at 49 Dock street.

They carry a full line of mill, foundry and steamboat supplies and import direct from all mercantile centres. These lines include steel in all forms, such as girders, channels, angles and plates for bridges, boilers, etc.; also iron pipe, sheet metal and in railway supplies, carwheels and axles, steel tires for steam and street railroads.

They are now making a specialty of nipple steel shafts for railroad use, and are prepared to quote for delivery to all parts of Canada. In foundry iron, they sell special southern brands, which are in demand by stove foundries for making special castings.

They also handle forgings of all kinds for mills and railways, and their rubber department includes everything for manufacturing and domestic purposes.

Kerr & Robertson.

About thirteen years ago this firm opened up a wholesale and retail hardware business in St. John. They carry a full line of shelf and heavy hardware, and make a specialty of cutlery and fittings for schooners. They keep three travelers on the road to look after their

CARSON'S
Original Anti-Corrosion PAINT

Specially prepared for protecting all kinds of

Outdoor Work

Surpasses all in

Cheapness and Durability

Suitable for

Iron, Wood, Stone, Brick.

All colors in stock.

Write for catalogue and prices

Agents:

W. H. THORNE & CO., LIMITED.

Market Square, - - ST. JOHN, N.B.

business in Nova Scotia and New Brunswick.

Mr. Kerr was formerly of the firm of Clark, Kerr & Thorne, which was established some thirty-five years ago. Mr. Robertson has also had considerable experience in the hardware line, being a traveler for the same house.

This firm has grown from year to year and now occupies a four-storey building, 41-47 Prince William street.

Maritime Nail Co., Limited.

This company, originally organized in 1904 for the manufacture of wire, wire nails and horse nails, has been steadily developing until to-day its products are distributed in all parts of the Dominion, and particularly marked has been the growth of the horse nail department which, starting in a very small way, occupies to-day a foremost position in the trade.

The company are operating under patents granted to Mr. Eben Perkins, who



Kerr & Robertson, Wholesale Hardware Merchants, St. John, N.B.

is general manager, and both the machinery and process are entirely different from any other in Canada, producing as they do a nail which is hammered cold, and which they claim is superior to hot forged brands. The value of the cold process is easily apparent to any one who has been accustomed to working "Swedish Steel," from which material all horse nails are now manufactured, for in working this hot the original tensile strength of the material is considerably reduced, whereas cold working increases it, so that relative results are 25 to 30 per cent. in favor of the cold made nails, and as the holding qualities of a nail depend almost entirely on the tensile strength of the material, any cold forged nail possesses a very marked advantage over those made by the hot process.

The growth and development of the horse nail business in the United States, where the last few years has seen the rapid displacement of hot forged nails by those produced by some cold process, has demonstrated, as far as supply and demand goes, the superiority of cold forged nails, and the further fact that those pioneer manufacturers and former strongest advocates of hot forged nails —the Putnam Nail Co. of Mass., and the Northwestern Horse Nail Co. of Chicago—have both adopted the cold process and are now as strongly advocating the advantages of cold forged nails, show the rapid displacement of an inferior for a superior article. The trade now demand a cold forged nail.

Three years ago this company inaugurated the premium system as applied to the sale of horse nails, coupons being placed in each five-pound box of "Peerless" horse nails, entitling the users to a selection of high-grade farrier's tools. This also has been instrumental in building up a trade which to-day taxes to the utmost the large factory of the company. As results in the United States may be considered a criterion of what may be expected in Canada, the outlook for this, the only cold forged nail now manufactured, is certainly promising, and the company looks forward to even larger premises and business in the near future.

Another line of manufacture lately added is that of wood screws, to make which the company has installed a new and modern plant, and as this is the only plant of this kind in the Maritime Provinces a ready market for the product is assured.

The factory, which has been entirely rebuilt since the fire of March, 1904, is situated directly on the harbor front, being served thus both by water shipments and rail, the C.P.R. track running on one side of the property. Both the plant and business are, therefore, so situated as to assure steady and prosperous growth.

McLean, Holt & Co., St. John. N.B.

About twenty-eight years ago this firm began business in St. John. At that time they manufactured railway, mine and mill castings. The railway business was then in its infancy. It was a "healthy baby" and has now reached such proportions that there are foundries in all parts of Canada kept busy supplying its ever increasing wants. McLean, Holt & Co. are now doing business with almost every railroad in Canada.

The proprietor, Mr. J. L. McAvity, is a son of Mr. Jas. H. McAvity, the senior member of T. McAvity & Sons, of St. John, N.B. For a number of years he represented this firm in Western Canada. The name McAvity is a name to conjure with in New Brunswick, and there is probably no family in St. John who have done more for the business interests of that city.

Increased business has made a new building imperative, and already plans have been drawn up. Men have been excavating and filling in for the past three months. The new plant will take up an entire block on Albion street, beween Hanover and Brunswick streets. Seven years ago the firm employed 18 men; to-day they have 55. Their present plant is situated 113-119 City Road, and 30 Stanley street. They have also a retail store at 155 Union street.

Glenwood Ranges.

The principal line sold at this store is the Glenwood range. A few of the outstanding features of the Glenwood are: Balanced baking damper which never warps or sticks; perfect working grates with four patterns which are interchangeable, large roomy oven, handy door handles, patent pedal opener, removable oven bottom and a dozen other things we have not space to mention. One unique point, however, is the nickel trimmings which are not bolted, but held by a patent spring latch, which one finger will unsnap when they are to be taken off.

About four years ago this Glenwood range was added to the lines manufactured by this firm and it has "made good." In speaking to the traveling representative, Mr. F. B. Whipple, the remark was made, "Is it not hard to introduce a new stove on a market that already seems to be overcrowded?" the answer was, "There is no trouble selling the Glenwood."

Jas. Pender & Co.

This firm was established in 1877, and for a number of years carried on business under the name of the St. John Horse Nail Works. Horse nails was their only line, and they had only one machine to manufacture these. In 1892 they commenced the manufacture of wire nails, and about seven years ago added another line—toe calks. They sell in all parts of Canada, but the bulk of their business is in the Maritime Provinces.

Josiah Fowler & Co., Limited.

This business was originally carried on under the name of Campbell & Fowler, these two men commencing business

The James Robertson Co'y Lt'd

Maritime Branch, ST. JOHN, N.B.

BRANCHES : Montreal, Toronto, Baltimore, U.S.A., Winnipeg, Rat Portage AND Vancouver

IMPORTERS AND DEALERS IN

Metals, Plumbers', Engineers', Steam-Fitters' and Mill Supplies, White Lead, Putty,

COLORS IN OIL AND LIQUID PAINTS.

Manufacturers of { Lead Pipe, Lead Traps, Shot and Babbitt Metal.

Kerr & Robertson

Wholesale Hardware Merchants

Importers and Dealers in

HEAVY AND SHELF HARDWARE,
CUTLERY, PAINTS, OILS,
GLASS, CEMENT, CORDAGE,
NAVAL STORES, ETC.

41, 43, 45, 47 Dock St., = St. John, N.B.

about 1865. About 20 years later the partnership was dissolved and Mr. Campbell started in business for himself. Mr. Fowler is still in charge of the business, and only last year made a trip to the Pacific Coast. Their axes are known and sold all over Canada. While the firm is probably best known as manufacturers of axes, they make in addition railway springs, both spiral and elliptical, chisels and heavy hammers.

Carritte-Patterson Mfg. Co.

are manufacturers of Kant-Tair 3-ply ready roofing. This roofing was first introduced in 1864. Building public received it with favor and from that date it has been a standard article, supplying the demand for a durable and easily applied roofing of reliable quality.

There are many brands of roofing manufactured similar to that of the C. P. Manufacturing Co.'s brand, but it can always be distinguished by the patent wire edge on which they lay special emphasis.

Among the good points claimed by this roofing are: It is adapted to any kind of a roof; it is not affected by gas or acids and cannot rust or corrode. The insurance companies recognize that it will resist fire as well as tin, slate or metal roofing, and it is insured at the same rate. It is easily applied and costs less than many other styles of roofing.

Carritte-Patterson Mfg. Co. had a large warehouse in Halifax, which, however, was burned down a few weeks ago. The firm have been making a great effort to supply the demand for their roofing without inconveniencing their customers.



W. H. Thorne & Co., St. John, N.B.

W. H. Thorne & Co.

The wholesale and retail hardware, iron and metal business now conducted by W. H. Thorne & Co., Limited, was founded by the present president of the company, Mr. W. H. Thorne, in 1867, and has continued thus in existence upwards of 38 years.

Commencing business at the corner of Dock street and Market square, the business originally conducted by Mr. Thorne rapidly grew. In 1875 the late Richard C. Scovil, formerly residing in Shediac and conducting a large lumber business there, entered into partnership with him. The retail and wholesale business was separated, and until the fire in 1877, the wholesale was conducted in Canterbury street in buildings on the site at present occupied by the S. Hayward Co. and built especially for their wholesale business, Mr. T. C. Lee taking charge of the retail business in the original stand, the corner of Market square and Dock street.

In 1877, when the great conflagration took place in St. John, both their stores were, unfortunately, destroyed by fire. Within ten days after the fire, having received a permit from the mayor of St. John, a large two-storey wooden structure for temporary purposes was erected on the Market square, which they occupied for upwards of a year, when they moved to their new premises, built especially for their large and increasing business, fronting on the Market square. Afterwards they acquired the adjoining property known as the McCullough Building and next adjoining their Market square building.

In 1884, Mr. Scovil, in consequence of ill health, retired from the business and in 1885 Mr. T. C. Lee and Mr. A. T. Thorne were admitted to partnership.

In 1895 a joint stock company was formed under the New Brunswick Act, and the business of W. H. Thorne & Co. was taken over by the new company, Mr. Thorne being president with other members of the late firm as directors. The business of the company is now the largest in the hardware trade in the Maritime Provinces.

As occasion demanded, new lines of goods have been added to their large and varied stock and the business is conducted, as far as possible, in different departments. There is shelf and heavy hardware; plate, window glass, paints and oils; mill supplies, belting, oils, etc.; fishing supplies, nets, cordage, etc.; guns, rifles, canoes, salmon and trout flies, baseball goods, and a fully-equipped sporting department, besides silverware, cutlery and fancy goods. In heavy goods they deal in iron, tin plates, cements, steel, nails; also a heavy line of woodenware.

Six commercial travelers are employed, covering New Brunswick, Nova Scotia and a portion of Quebec.

The buildings now occupied by them on Market square, where their wholesale and retail business in shelf goods is carried on, comprise 35,604 feet of floor space, while the warehouses on their wharves for heavy goods cover a floor space of 32,800 feet, besides the saw factory, which they control and in which are manufactured saws, fencing and "Eureka" fly killer, covers a floor space of 12,245 feet, a total of 80,649 feet of floor space.

Canadian Oil Co., Limited.

In March, 1904, this firm bought out the Sun Oil Co., and put in a complete stock of their "Sterling" paints and varnishes, lubricating oils, and their well-known Pennoline. They have large warehouses in St. John and Halifax, and in this way are able to fill orders in Maritime Provinces on short notice. Mr. R. M. Currie is the manager of this branch, and is strongly supported by five travelers: Mr. Neil Macdonald, Halifax; Mr. E. F. Weaver, city agent, Halifax; Mr. W. D. Gillies, southern part of New Brunswick; Mr. F. G. O'Reilly, south shore of Nova Scotia; Mr. H. T. Currie, north shore of New Brunswick.

The Jas. Robertson Co.

In addition to their complete lines of plumbers' supplies, the Jas. Robertson Co. handle metals, tinsmiths' and engineers' supplies, galvanized iron, black sheet iron, zinc, spelter, antimony, copper, tin sheets, ingot tin, etc.

They manufacture lead pipe and brass goods, and Mr. Keefe, the manager, stated they had better facilities for manufacturing lead pipe than any other firm in Canada.

They have secured the agency for the Naturo closet, which is being so extensively advertised in the leading magazines. All our readers will be familiar with the advantages of the Naturo closet through the regular page and half-page advertisements they have been running from week to week in Hardware and Metal. The Naturo closet bowl differs from the ordinary closet in that instead of the high horizontal seat so long in use it has a low seat sloping from front to rear, which makes a proper position at stool compulsory, yet far more comfortable than is possible

with the ordinary seat, and provides the only physiologically correct position possible.

The Jas. Robertson Co. was founded nearly fifty years ago. Mr. John Keefe, the manager at St. John, has been with the firm since 1883.

During the last year this firm published a plumbers' supplies catalogue, which is one of the most complete and elaborate catalogues ever issued either in Canada or the United States.

McClary Mfg. Co.

In 1901 this firm opened up a branch office and warehouse in St. John, with Mr. J. J. Foot in charge. Through Mr. Foot's efforts, or owing to the high quality of their goods, or possibly to a happy combination of both, the business has grown wonderfully. During the last year their business was just eight times as large as it was when the branch was opened. Although their goods are sold in nearly every hardware store, they deal directly with only the jobbers and large dealers.

Their building is located near the jobbing centre of St. John. It consists of five storeys and a basement, containing in all about 24,000 square feet of floor space. They have in addition to this a large railway warehouse.

RETURNED
AUG 29 1904



The McClary Manufacturing Co., St. John, N.B.

They employ a staff of 27 to look after the work in the territory formerly covered by one traveler.

By carrying a stock of stoves and furnaces, metals, tinners' trimmings, kitchen furnishings, etc., they are able to fill orders very quickly.

Campbell Bros.

Two years ago Campbell Bros. of St. John, N.B., introduced to the trade their now celebrated XXX chopper. The price was much higher than the ordinary axe they had been selling, but they believed lumbermen would willingly pay a higher price for an axe so carefully forged and tempered that it would hold its edge in the frostiest weather.

Enthusiasm is contagious, and for this reason Mr. Campbell should prove an excellent salesman. It was a pleasure to see him take down one of his axes, handling it with as much pride as a sculptor might handle his masterpiece.

CAMPBELL BROS.

CELEBRATED

XXX CHOPPERS



Single Bitt

$1.00

EACH

The price of XXX CHOPPERS is high, but it will pay you in the end to use them, as they will hold a keen cutting edge and stand in frosty weather, which cheaper axes fail to do.

Double Bitt

$1.50

EACH

We would advise you to order now as our output on this brand is limited and we have on order now two-thirds of all last year's sales. (In most cases repeat orders.) Price is no object when quality is considered. We guarantee our XXX CHOPPER to be the neatest and best axe on market.

Made from the very highest grade of Cast Steel and Charcoal Tempered. Guaranteed of extra quality. Try it!

Try XXX Choppers and you will always use them

Sold by all the Maritime Wholesale Hardware Firms, whose travellers will call on you with samples.

To him it was more than a mere axe, for it was the best obtainable result of years of close attention to the study of axe making.

The business of this firm was established by the late William Campbell in 1880, and he was succeeded by his sons in 1890. They manufacture axes and other edge tools, including ship carpenters' axes and adzes, bench, boys', and hunters' axes; hatchets, including claw and lathing, carpenters' slices, etc.; and carriage springs and axles.

Of their ship carpenters' axes and adzes, over two-thirds of the output is exported to the States, to over a dozen different places, in face of American competition and a 45 per cent. duty. Their goods are higher priced in the first place than American, and pay the duty besides. The difference in quality explains the demand for their goods in the face of these handicaps.

Speaking of their celebrated XXX chopper, which is much higher priced than the ordinary axes, Mr. G. Wilford Campbell said that two years ago when



Charles R. Campbell, St. John, N.B.

they placed it on the market he went to a leading wholesaler and unfolded his plan, stating the price at which they could sell the axe. The wholesaler expressed the opinion that an axe at that price would not sell. Mr. Campbell was not discouraged. He figured out that they ought to sell a certain number of dozens of XXX choppers the first year, and the samples went out in the hands of the travelers for wholesale houses. At the end of the year he found they had sold almost eight times the number he had figured on. The explanation, in view of the difficulty in introducing a new axe, was that the quality proved so satisfactory that repeat orders were received. This year the sales already show a large increase over last year. Out of all they have sold only 48 were returned, and only eight of these were really bad axes.

The firm sell to the wholesale trade, and the XXX chopper goes wherever the travelers of Maritime wholesale hardware houses go.

"We make this brand of axe," said Mr. Campbell, "for choppers who require a tool they can rely on to hold an edge in frosty weather when ordinary axes fail. Every axe is carefully forged and tempered, ground thin and true and highly finished. We make all patterns in single and double bitt, and all are inspected and guaranteed. This axe is the best obtainable result of years of close study and practical experience. We set out with the theory that price would not interfere with the sale of an article that possessed the quality and was kept up to the standard."

We take pleasure in presenting to our readers portraits of Messrs. G. Wilfred Campbell and Chas. R. Campbell.

New Brunswick Wire Fence Co., Moncton, N.B.

This firm was established in 1899 for the purpose of manufacturing wire fencing. At first they turned out a hand-made field fence.

Keeping abreast of the times, they installed in 1903 a wire coiling plant, also machines for manufacturing staples. They now make everything complete, and even supply either wooden or iron posts. In many cases a farmer or lumberman merely gives them the order for a certain number of rods of fencing and they erect the fence, attending to all details from the digging of the post holes to the painting of the posts, when such a luxury is desired.

Wire fences may appear to be all the same, but there is a good deal of difference in their staying powers. Owing to the proximity of Nova Scotia and New Brunswick to the ocean, ordinary galvanized wire has a tendency to rust after the first or second season. Mr. Chapman, the manager of the New Brunswick Wire Fence Co., explained that for this reason they had the wire they use specially galvanized. They use a high carbon wire which costs $5 per ton additional.

This company specially recommends a fence of a uniform gauge of wire, No. 9 being used in the lock, horizontal and upright.

Ornamental fences are also manufactured by this firm. No wood work is used in these fences. Steel posts, steel wire and steel clamps are used. The posts are set in stone and in this way a fence is made not for a year, but for a life time.

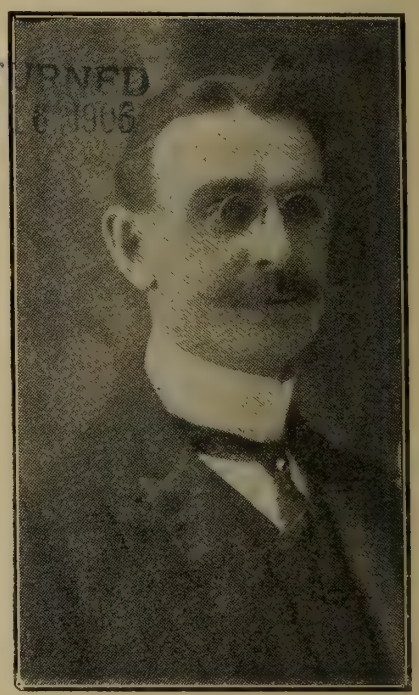
Record Foundry and Machine Co,, Moncton N.B.

This firm was established by the late C. B. Record. In 1853 it went under the name of Record & Scales. Mr. Scales, however, died in 1854, and Mr. Record carried on the business till 1882, when he sold the property and retired. On January 7, 1882, the Record Foundry and Machine Co. was organized, the directors being C. B. Record, A. E. Peters, H. T. Stevens, Joshua Peters, G. F. Atkinson. It would be useless to dwell on the success with which the firm have met. Their stoves are sold in every Province of Canada. In addition to their Moncton plant they have an extensive works at Montreal. They have 100 moulding floors in each place and employ about 400 men in each.

A unique feature about this firm is that most of the men are employed on the "piecework" system. In this way each man becomes a specialist and attains great skill in making some part of the stove. This system also enables workmen to obtain a wage commensurate with their skill and speed. The present board of directors are: Thos. Fish, Esq., Montreal; Hon. H. R. Emmerson, Dorchester; Joshua Peters, Moncton; Senator Josiah Wood, Sackville; A. E. Peters, Moncton; H. C. W. Robinson, Moncton; O. J. Peters, Moncton.

Amherst Foundry Co.

During the year 1904 the Maritime Provinces made considerable industrial advancement as a whole, but in no other part was this as noticeable as in the town of Amherst, where the Amherst Foundry Co., Limited, put in operation the second plant in Canada for the manufacture of cast iron porcelain enamelled



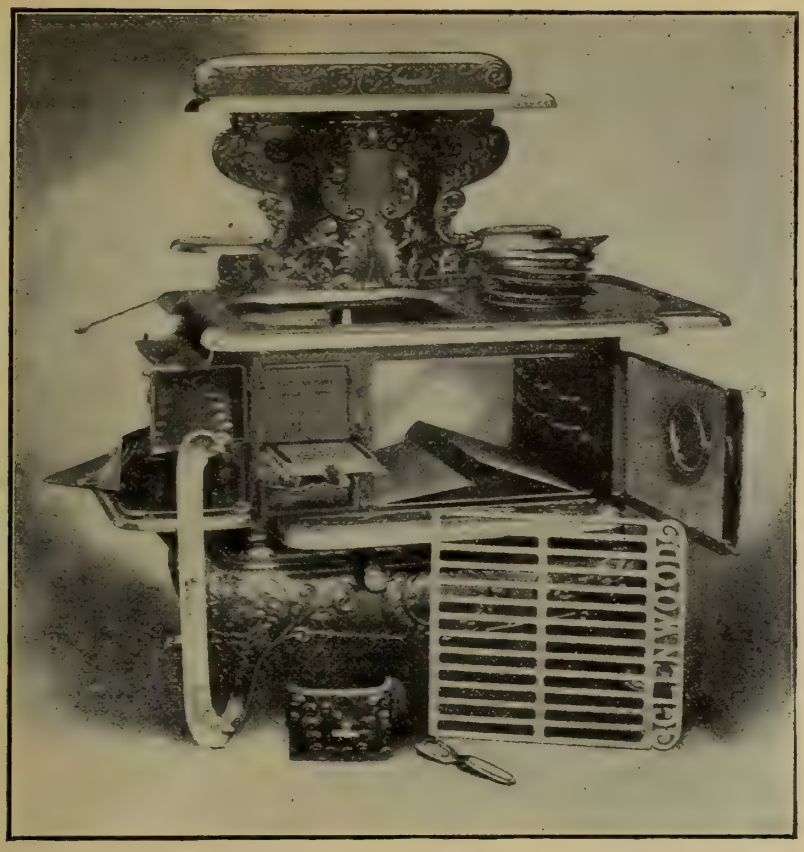
G. Wilfred Campbell, St. John, N.B.

baths, lavatories, sinks and other goods used in the plumbing trade.

The commencement of operations in the new department was a fitting climax to the formidable list of successes which have attended the operations of this company since the inception of its business some years ago.

In 1890, Messrs. J. A. Crossman and J. A. Lanes started in a small way to manufacture stoves, hot-air furnaces and sinks. At the same time Messrs. William Knight and J. Avard Black were carrying on a retail business in stoves, furnaces and tinware.

On January 1, 1895, the four above-named gentlemen, together with Mr. C. A. Lusby, entered into a partnership under the name of the Amherst Foundry and Heating Co., for the purpose of carrying on the amalgamated business of Crossman & Lanes and Knight & Black. They threw all their energy and business



GLENWOOD RANGES

The features are : Oscillating Oven Shelf, Oven Indicator, Balanced Baking Damper, Patent Pedal Door Opener, Removable Oven Bottom, Drop Broiler Door, Latched Nickel Trimmings, etc. All styles. Every stove a perfect baker.

Write for booklet and prices.

McLean, Holt & Co.

St John, N.B.

THE CELEBRATED C. P. MFG. CO. Brand

WIRE EDGE READY ROOFING

PATENTED

Adapted to any kind of Roof. Not affected by Gases or Acids.
Resists Fire better than Tin or Slate. Cannot Rust or Corrode.

Can be used on Roofs of any pitch. Is insured at same rate as Metal Roofs
Any ordinary Workman can apply it. Costs less than any other Roof.
Will Outwear all other Roofs.

THE CARRITTE-PATERSON MFG. CO.

ST. JOHN, N.B. — HALIFAX, N.S.

When You Want Anything

— MADE OF —

Iron, Steel, Brass, Copper, Aluminum, or Phosphor-Bronze, or Nickel Steel

WRITE US

Our line covers the whole range. We sell for the largest producers. When you want anything made of

RUBBER ***Belting, Packing, Hose, Clothing, Tubing,***

Druggists' Sundries, Sporting Outfits, etc., etc., write us.

ESTEY & CO., Selling Agents, 49 Dock St. **St. John, N.B.**

THE PORTLAND ROLLING MILLS Limited

ST. JOHN, N. B.

Manufacturers of Merchant Bar Iron and Steel.

LOCOMOTIVE AND CAR AXLES

No order is too large for us to handle and none too small not to receive our utmost attention.

RAILWAY FISH PLATES and ANGLE BARS, RAILWAY and SHIP SPIKES, SCREW AND WHARF BOLTS, CUT NAILS AND TACKS.

We are the largest Manufacturers in the Maritime Provinces of all goods named.

In our Horse Shoe department the sales are the witnessess of our make of shoes, being over oue hundred per cent. more this year than any previous. We only use the highest grade of stock ; our pattern is not excelled and the workmanship and finish are of the best.

Get our pri es on all goods manufactured, and our quotations on any odd lines you may require.

QUALITY OF GOODS FIRST AND LAST.

Wm. BRUCKHOF, Managing Director.

Established 1845

WALTER WILSON & SON

Manufacturers of Saws made only from the best grades of **steel**, by the best **process** and by the best **experienced workmen.**

WALTER WILSON & SON,

Manufacturers of Saws,

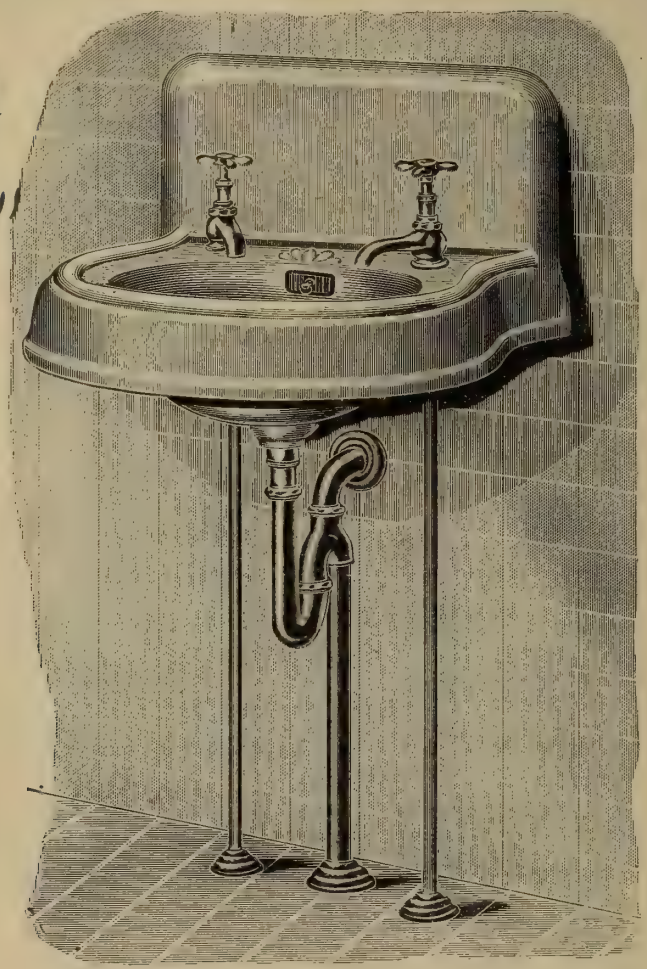
ST. JOHN, N. B.

ability into the business with the result that it continued to gain in volume, while the stoves, ranges and hot-air furnaces of their manufacture rapidly increased in popularity throughout the Maritime Provinces.

The old premises soon became too small to accommodate the increasing business, and it was decided to acquire other property and to erect more suitable buildings. Consequently a valuable and convenient site was acquired on Station street and the work of erecting more commodious workshops and offices was commenced.

The warerooms, offices and fitting shops were first constructed and then the moulding shop and enamelling building. These buildings are all of brick and stone and probably a more substantial, better lighted or better arranged foundry plant in every particular does not exist in Canada. The works are connected by a siding with the Intercolonial Railway and every facility exists for shipping goods and unloading the raw material. These thoroughly equipped works mark the crowning effort of the men who have been responsible for the upbuilding and successful guidance of the undertakings which have now become an important factor in the industrial life of Eastern Canada.

ETURNED
CT 4 1905



Eastern Beauty Lavatory made by Amhert Foundry Company.

About two years ago the members of the firm, together with Mr. C. C. Black, formed a joint stock company and became incorporated under the name of the Amherst Foundry Co., Limited. This firm manufactures an extensive line of stoves, ranges and hot-air furnaces, together with porcelain enamelled baths, lavatories, sinks, etc. All of these goods have a splendid reputation, but we might particularly mention the "Improved Cumberland" hot-air furnaces for wood, coal or wood and coal combined, which are known and spoken of throughout the country.

The enamelled goods, which are the latest production of this enterprising firm, are known as the "Beaver" brand, and their splendid appearance and excellent qualities are testified to by the great demand there is for them all over the Dominion of Canada. From Halifax to Vancouver they are being shipped in carload lots as fast as the factory can turn them out, although the enamelling furnaces are kept running night and day.

One specialty of the enamelling department is the "Eastern Beauty" lavatory, a cut of which is shown herewith. This lavatory has a heavy roll apron, high back, is made all in one piece, and is fast becoming a general favorite.

The Amherst Foundry Co., Limited, situated as it is in the wide awake and enterprising town of Amherst and under the skilled guidance of the men who conduct its affairs, will meet with the same success in the future which diligence and merit have won for it in the past and will continue to grow and flourish.

HALIFAX, N.S.

The wholesale business of Halifax is largely confined to Nova Scotia, New Brunswick, Prince Edward Island and Newfoundland. Some firms have extensive business connections in the West Indies and Bermuda. Trade with the West Indies has shown special progress during the last few years. The exports from Halifa and St. John show a large increase in agricultural products and manufactured goods. Canadian flour is growing more and more in favor with the West Indies, as well as other lines of mill products. Boots and shoes, corn brooms, box material, paper, paints and cordage are finding their way to the southern markets, and in return Canada is taking largely increased quantities of sugar, cocoanuts, cocoa, coffee, pimento, hides, etc.

All Canada is proud of Halifax harbor. Here the water is so deep that the largest vessel can come in close to shore, and the harbor is large enough to float the whole of the British fleet of warships. It would be hard to overestimate the commercial favor of such a harbor to any nation. Up to the present time the advantages have been purely commercial, but the time may come when the life and independence of the whole nation will depend on the fortification of Halifax.

The supremacy of England and Germany as the leading manufacturing countries of Europe has resulted in the possession of their extensive coal fields, and of a navy powerful enough to protect the interests of their trade vessels. The New England States still hold supremacy in manufacturing and distributing trade of the United States. We may therefore expect Halifax to be one of the best distributing points in Canada for sea-borne commerce.

Tendency for the last few years has been for many manufacturers either to sell direct to the retailer instead of through the jobber, or put their own trademark on the goods they manufacture. The argument is that the manufacturer must first interest the retailer in his goods before the jobber will handle them, and that when he has gone to the expense of making the goods known to the retailer he might as well have the profit instead of dividing it up with a middleman. There is much to be said for and against this argument, but the jobber must always be the medium through which imported goods are to be distributed. The manufacturer in Canada has his whole organization to look after his Canadian business. Moreover, he is familiar with the needs of the country and the idiosyncracies of the people to whom he must sell. The foreign manufacturers, on the other hand, must depend on some firm to look after their interests, aad the jobber, with his wide and extensive connections among the retail trade, is the one man available. Halifax, therefore, with its excellent harbor and its wide steamship connection, has the very best facilities for imported goods. It is for this reason we see more foreign goods in the wholesale warehouses in Halifax than in any other city in Canada.

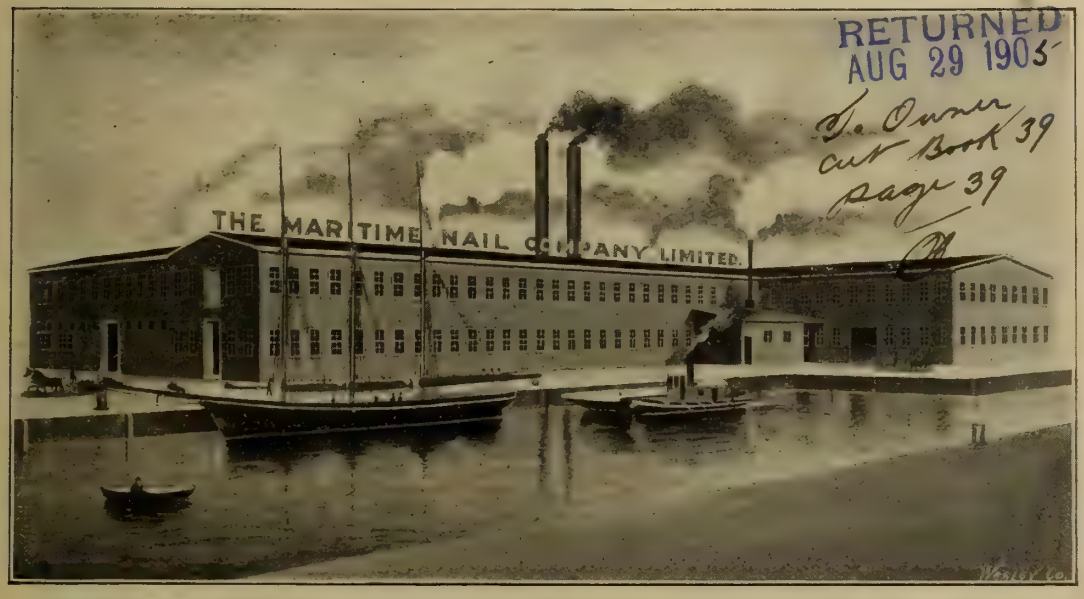
Many years ago ship chandlery was the line to which not only wholesale hardware but provision firms as well devoted most of their attention. Wooden ships built and rigged up in the Maritime Provinces were to be found all over the world. It is interesting to note how some of the firms, as the ship chandlery line decreased gradually, worked in other lines. The firm of Wm. Stairs, Son & Morrow have been established over one hundred years and have a number of pictures in their office of large vessels for which

PEERLESS HORSE NAILS

Only Cold Process Nails "Made in Canada"

Reinforced Point
Greatest Tensile Strength

Best Driving and Holding Nail Produced



RETURNED
AUG 29 1905
To Owner
Cut Book 39
Page 39

Coupons in every five-pound box give users selection of high-grade Farriers' Tools "Free of any Charge."

MARITIME NAIL COMPANY, LIMITED

ST. JOHN, N.B., - CANADA

they supplied all the necessary riggings, fittings, etc. As this line of their business has gradually decreased they have added such lines as plumbers' supplies, and at the present time keep two travelers on the road for this department alone.

Halifax has many advantages to offer manufacturers. There are from twelve to fifteen miles of waterfront yet not used, and suitable sites for manufacturing plants can be procured at very reasonable prices. The rate of taxation in Halifax is very low and the manufacturer improving his plant to the extent of say $30,000 or $40,000, will not be taxed one cent for the improved value. Halifax has excellent railroad and steamship connections. It is served by four different lines of railway, Intercolonial, Dominion Atlantic, Canadian Pacific and the Southern Railroad, which has just recently been built. Another line is to be built shortly to run along the eastern coast. There are also three large steamship lines plying between Halifax and distant points. The Allan line to Liverpool and Glasgow, Pickford & Black steamers for Bermuda and the West Indies, and the Plant line to Boston and New York. There is also a monthly steamship service direct to Havre, France.

Below we give short accounts of a number of the leading wholesale and manufacturing industries located in Halifax.

Wm. Stairs, Son & Morrow.

This is probably the oldest firm in Halifax, business being established over one hundred years ago. The firm was originally established by Kitson, of Glasgow, the great iron merchant, and was purchased from him by Mr. Wm. Stairs. It was at first merely a country store handling all lines.

About 1854, Mr. Morrow joined the firm. At that time ship chandlery was the chief line. As the country has developed they have come to handle a more varied line of goods, and in addition to their large general hardware business, they are to-day one of the largest jobbers of plumbers' supplies east of Montreal.

In 1893, about three years after they moved to Water street, they had a very disastrous fire, but rebuilt immediately. Their present building is 175 feet by 350 feet, consisting of four storeys and cellar. On the first floor are located the general offices and retail department; also in the rear the metals, iron, stoves and pulleys. On the second floor ship chandlery, galvanized sheets and steel;



Wm. Stairs, Son & Morrow, Halifax.

and on the third floor general hardware and plumbing supplies. They have a separate room for enamelled-ware, sinks, bath tubs, etc., also a separate packing room. Lighter goods are all kept on the top floor while paints, chains and heavy shipping goods are in the cellar.

The firm represent Imperial Duck Co., Hamilton; Muntz Metal Co., Birmingham; Gundry & Co., fish nets and lines, Bridgeport, England. Their interests on the road are looked after by five travelers, two of whom call only on the plumbers.

The accompanying cut shows a view of the front of their warehouse. This gives a very inadequate idea of the size of their building, which extends 350 feet to the rear.

Geo. E. Smith & Co.

This firm was established by Mr. Geo. E. Smith as a wholesale hardware business about thirty years ago. The original name of the firm was Irish & Smith. Mr. Irish retired after a short time and the business has gone on under the name of Geo. E. Smith & Co.

About eight years ago the firm moved from Water street aad bought the building they now occupy from P. Walsh Hardware Co. They carry a full line of shelf and heavy hardware, also a complete line of carriage stock and carriage furnishings. They are agents for Noble & Hoare's, varnish manufacturers, London, Eng.; Neverslip Mfg. Co., manufacturers of Neverslip horseshoes and horseshoe rubber pads, New Brunswick, N.J. They also make a specialty of Burrill's English white lead and ready mixed paints, and Masury's and Valentine's C.P. coach colors.

The firm was visited by fire a short time ago and their stock was damaged to the extent of $15,000. They are now in a position, however, to fill all orders. We show a cut of their present building fronting on Cheapside and Bedford Row. They have one of the most valuable sites in Halifax being bounded on the north by the Post Office, on the east by Customs House, and west by the Provincial Buildings. They keep three travelers to look after their business on the road.

The firm is now composed of Mr. Geo. E. Smith and Mr. A. W. Smith.

A. M. Bell & Co.

This firm commenced business April 1, 1875, as a wholesale and retail hardware firm. They started in a very small way, and for some years the bulk of the business was done through the retail department. They were first located on Water street, and remained there for ten years, when they moved to Upper Water street, at the head of Furness wharf, where they remained till the Spring of 1904. In April, 1904, they moved into a new building which they had erected on Granville street, and which is in many ways a model hardware store, although Mr. Bell claims that if he were building



Picturesque Old Halifax, Looking Across the City and Harbor from the Citadel.

WM. STAIRS, SON & MORROW, LIMITED

THE OLDEST AND LARGEST
MERCANTILE HOUSE
IN EASTERN CANADA
OVER 100 YEARS IN BUSINESS.

Heavy and Shelf Hardware, Boiler Plate, Boiler Tubes,
Metals of all kinds, Ship Chandlery.

Plumbers' and Steamfitters' Supplies.

Mechanics' Tools.

●

Agents for

The Allan Whyte & Co. Celebrated Wire Ropes,
Dodge Wood Split Pulley,
Imperial Cotton Duck.

●

Contractors for Mines and Railway Supplies

●

General Office and Warehouse:

174 to 190 Lower Water Street

Halifax, Nova Scotia

again he could make many improvements. The building is solid concrete running from Granville to Hollis streets, with a frontage of 40 feet on each street, and having in all about 30,000 square feet of floor space. An electric elevator



Geo. E. Smith & Co.'s Hardware Store.

onnects the various floors, and as teams an back in from the Hollis street entrance a great deal of labor is saved and o loading need be done outside. The ain entrance is probably perfect from n architectural point of view, but ould be much more attractive and rominent if the windows were set out little more and if the corners were ounded off instead of being square. The rontage, too, is rather narrow for the eight of the building, although mirors at the sides tend to make the buildng look larger.

The building is well lighted, which is ue to the fact that they have frontage nd windows on both Granville and ollis streets, and also to the prismatic lass, of which they have a great many quare feet.

Among the side lines carried by this rm are canoes, incubators and chicken eed, oiled clothing and Fairbanks cales.

The two men who have been most intrumental in building up this business re Mr. A. M. Bell and Mr. A. B. Wisell. Mr. Wiswell entered the firm's mploy as bookkeeper in 1879, and was aken into partnership in 1896.

Wm. Robertson & Son, 205 Lower Water Street.

This is one of the oldest firms in the holesale hardware business in Halifax. hey commenced business at the head of ommercial Wharf, and came to their resent site about twenty-five years ago. In addition to their full line of general ardware they specialize ship chandlery, shing and mining supplies. Their travers are: J. B. Wier, J. L. Crowell nd C. J. McKie.

The firm consists of Mr. Wm. Robertson and Mr. W. G. Robertson. Mr. Wm. Robertson is president of the Union ank.

Crowell Bros.

This firm was established in 1892 by Mr. M. O. Crowell, the senior partner of the firm, business from its inception showing a healthy growth. In 1897 the firm name was changed to Crowell Bros., Mr. L. H. Crowell entering the firm.

They give every attention to general hardware trade and have made a specialty of certain lines of vessel and steamship outfittings. They have the agency for such specialties as Mariner Dick's engine oils and composition paints. They have also the agency for the New Jersey and Sherwin-Williams copper and house paints. They cater to ship building trade, which has also been an important industry in Nova Scotia, and carry a heavy stock of bolt iron, rigging, sails, etc.

Their wholesale trade is looked after on the road by Mr. Harry Hill and Geo. S. Whiston, both of whom have been with the firm almost since its inception.

Before starting business on his own account, Mr. M. O. Crowell had eleven years' experience with another hardware house running on similar lines, and his brother, Mr. H. Crowell, had about the same length of time with Pickford & Black.

H. H. Fuller & Co.

The year 1905 marks the completion of fifty years' business life of the firm of H. H. Fuller & Co., dealers in general hardware and mining supplies.

The firm of H. H. Fuller & Co. was founded in 1855 by the late Hon. H. H. Fuller and since that date there have been several changes in its personnel, beginning with the demise of the founder, and subsequent death of other associates. Mr. Sterns, who is now the senior partner, has been identified with the business for many years, while Mr. Lawrence was admitted less than a year ago.

Hardware and hardware men usually considered practical, sometimes run into the picturesque, as will be noted by the reproduction of a Halifax pictorial postal card. The establishment of our friends, Cragg Bros. & Co., will be noted on the picture, corner Barrington and George streets.

Cragg Bros. & Co.,

Have been in business in Halifax for some seventeen years, the firm now being controlled by Mr. Frank J. Cragg, the sole surviving partner of the original firm. They devote their attention particularly to cutlery, higher grades of imported kitchenware and sporting goods. Besides these lines they carry a full assortment of builders' hardware, and, taking a lesson from some of their western confreres, pay particular attention to specialties and the ordering of goods from catalogues, their library of which they pay particular attention to.

Cragg's is an attractive store to visit. There is generally something new on demonstration, and visitors to their store are always cordially received.

Although Halifax has rather more than its proportion of hardware dealers, the subjects of this sketch seem to get their



Cragg Bros. Store, Halifax, N.S.

This is the store

Hardware

Builders' Supplies

Farming Tools

Kitchen and

Household Hardware

Mining Implements



where you buy

Ship - Chandlery

Anchors

Chains

Cordage

Lanterns, etc.

Galvanized Goods

SHERWIN-WILLIAMS PAINTS

AGENTS FOR

New Jersey Copper Paint

Dicks Marine Oils and Bottom Paints

Smooth-on Compounds

Iver-Johnson Bicycles and Fire Arms

CROWELL BROS., HALIFAX, N.S.

1875 1905

GEO. E. SMITH & CO.

IMPORTERS AND DEALERS IN

SHELF AND HEAVY HARDWARE

Corner Cheapside and Bedford Row,

HALIFAX, N.S.

Cutlery, Builders' Hardware, Lumbermen's Supplies, Bar Iron and Steel, Paints, Oils, etc.

Agents in Nova Scotia for

NOBLE & HOARE'S, London, Eng.

Manufacturers of High-grade Carriage and Household Varnish.

NEVERSLIP MFG. CO., New Brunswick, N.J.

Manufacturers of Neverslip Horse Shoes and Calks and Rubber Pads.

ull and fair share. Whilst Cragg's arry cutlery of the prominent makers, hey use their energies in the selling of heir own brands, so much so that an rticle with their own brand is looked n as being of high-grade.

Outside of the goods that might be lassified as hardware, Cragg Bros. & o. act as agents for showcases, sewing achines, refrigerators, police supplies, nd hardware shelf boxes.

.. J Grant & Co., 65 Upper Water Street.

Mr. Grant was originally in partnerhip with Geo. H. Smith, but about ighteen years ago started in business n himself.

They make a specialty of carriage ardware and fishing hardware. Their hief business is done with firms in ova Scotia and Cape Breton. They reort trade as very dull this year owing o the fact that the catches of fish have een very light.

E. K. Spinney. Yarmouth.

One of the best-known hardware jobers and importers in Nova Scotia is Ir. E. K. Spinney, who has been doing usiness in Yarmouth for a great numer of years, and has built up a very xtensive trade in the Maritimes. His lace of business is on Main street, his arehouse extending back to Water treet, where he keeps an extensive line f all kinds of hardware and ship supplies. Mr. Spinney, besides taking an ctive interest in the Maritime Hardare Association, has occupied the resident's chair for the Maritime Board f Trade for the past year.

MODERN EDGE-TOOL MAKING.

THE suppression of hand labor by mechanical processes in the old craft trades of Sheffield continues o make rapid progress, says the Irononger, and we are able to report a rther development of this tendency hich possesses peculiar interest, since relates to a branch of industry which as been regarded as quite outside the pplication of machinery. We refer to e making of edge and joiners' tools. he term covers a wide range of goods hich present many variations of shape, id are required to perform work which ecessitates the highest effectiveness and rability. Machinery, however, lends self more to straightforward work, and most valuable on repetition articles. ntil very recently, therefore, the opinn was stoutly and almost universally maintained by makers of edge and joiners' tools that whatever might happen in other industries it would be impossible to use machinery to any appreciable extent in their trade. That belief has now been completely shattered, and if the innovations carried out in one or two of the Sheffield works be followed generally, hand labor will play but a minor part in the production of the goods referred to in the near future.

A Sheffield toolworks in which machinery had been introduced presents more the appearance of an engineering establishment than the home of one of the oldest of the city's handicrafts. Nearly every kind of cutting-tool was being forged under power hammers, some of them of a special and ingenious design. Chisels, bits, and even plane-irons were included, the most awkward shapes being successfully formed. The familiar forger and striker with their anvil and hearth had been dispersed in wholesale fashion, the machines which rendered them unnecessary being tended by young fellows who had undergone but a brief training for the work. Milling machines were extensively employed in forming teeth and cutting parts of tools, and turning out grosses more quickly than dozens under the old system when such processes were done by men using a file. Special machines had been installed for performing several other minor processes and the effect of the whole innovation has been enormously to economize production, and to place the makers on more equal terms as regards cost with their rivals abroad, who have enjoyed the advantage of machinery for years. In other similar works in the city machinery is being gradually introduced, and skilled workmen are being sent adrift. It is unfortunate for these men that few of them are able to adapt themselves to the new conditions, the result being that the victims of the industrial revolution which is in progress are increasing. The employers are certainly doing their best to mitigate the hardships which progress imposes on the few, and it is a fact that scarcely any apprentices have come into the trades for a number of years. The change means a serious increase to the capital outlay of the firms concerned, and owing to the enormously increased output they will have to seek for a corresponding increase of turnover.

A similar and even more drastic revolution is proceeding in the razor trade on account of the introduction from Germany of machinery for grinding blades hollow. To grind hollow blades by hand is a slow and costly process, but the machine turns them out with marvellous rapidlity, and in such a condition that they can be quickly finished off by a trained youth. The blades are also forged by mechanical hammers. By these means the cost of producing razors has been greatly reduced, and already the firm possessing the plant we are referring to has been able to re-open accounts in the United States which had been closed for years in consequence of German underselling. More razors are bought per head of population in the United States than in any country in the world, and the Germans have captured a large slice of the trade with improved facilities for cheap production combined with high finish. Sheffield razors should soon regain their footing in that valuable market. Many razor grinders and forgers are earning very scanty wages or even nothing at all, and it is stated that some of them have punished themselves unnecessarily by refusing to follow the machines.

SUMMER REMINDERS.

Make a special effort to dispose of the balance of your hammocks and lawn tools. The season's getting late.

Advertise fruit jars and preserving kettles and make a display of fruit goods.

Machine oil will be in active demand during the Fall. Is your stock in good order.

Fencing of all kinds finds a ready sale in Summer and Fall. Push this line now.

A sale of five and ten cent graniteware articles is a good thing to advertise just now. It brings customers.

Are you getting your share of the trade in builder's hardware? If not, ask yourself the reason why.

Are you making the tinshop pay? At all seasons of the year it should be a paying branch of the business.

Why not have a demonstration of food choppers and bread mixers. These are articles which should be in every home throughout the country.

How about your lighting system? Now is the time to prepare to capture a big trade in the Fall on lighting fixtures. There are many new lines suitable for all sections. Choose a good system and get ready to push it actively.

CRAGG BROS. & CO.

THE CUTLERY HOUSE OF HALIFAX

Wholesale and Retail Cutlery, Hardware and Imported Kitchen Furnishings.

HALIFAX, N.S.

How Starr Skates are Made.

One of the most prominent skate factories in the world is located in Dartmouth, a thriving Nova Scotia town on the eastern side of Halifax harbor. We refer to the works of the Starr Manufacturing Co., Limited. These works were established away back in 1866, their chief purpose then being the production of a self-fastening skate, known as the "Acme," the principle of whose fastening is so good that it has been widely imitated.

No doubt these skates will interest many of our readers who indulge in pleasure skating quite as much as the splendid lines of hockey skates now produced at the Starr works. At the time it was invented, the "Acme" embodied all the good points of skates then produced, and the makers claim that it has not been excelled since. The fastenings are secure; the skates are easily adjusted, and when once adjusted remain so; the curvature of the blade is correct, which enables the user to perform all difficult movements with ease; there are no complex parts, so that the skate possesses durability and holding power and will not easily get out of order.

The engravings which accompany this article show parts of several departments of the factory and illustrate to a limited extent some of the processes of manufacture. Economy is secured at the start by the company's possession of cheap water power. They control a beautiful stream which, finding its source in the country back of Halifax, flows through a chain of picturesque lakes and empties into Halifax harbor through a channel which originally was a canal, but was totally abandoned with the advent of better transportation facilities. Some of the skilled hands in the factory to-day have been employed there for thirty years and over, and are experts in their several departments. The machines used for such processes as forging runners and making the various fine parts for their high-grade and other skates, are all the most up to date that the company could secure. The factory is never allowed to fall behind in equipment, but whatever is conducive to better and more economical production is quickly adopted.



An Interesting Process.



A Part of the Machine Shop.

It would be very difficult to do justice in describing the factory itself in an interesting way in the limited space at our disposal, therefore reference to the accompanying engravings must suffice. There the reader will see the machine shop, where various parts are constantly being made; the department where the runners and other parts are cut out of sheets of steel, tempered by the Starr Co.'s own special process to insure ex-

It was to manufacture the "Acme" that the Starr Manufacturing Co. were first brought into existence. The original works were very small, yet it was but a very short time before the skates became so well known that expansion was absolutely necessary. The sales grew and the skates became still more popular and more additions to the factory followed. Eventually the "Acme" commenced to get in demand all over the world, and in the face of competition this skate sells to-day in such distant markets as Great Britain, Germany, Russia, and even in the United States, into which country they gain admission in spite of the very high tariff.

Skates produced in this factory are made of the very best materials and put together by the most competent of workmen, going through sixty processes before they are completed and ready for the market. Then, before they are allowed to go out of the works, they are subjected to a searching test, so that no faulty or defective skate is allowed, if possible, to get into the hands of the buyers.



One View of the Polishing Room.

tra strength and stiffness; the polishing department, where the runners are polished and given the exact curvature and



Plating Room.

edge that make them so popular; the plating department, where the more expensive goods get their finish of gold and silver or nickel; the finishing department, where the parts are put together and the product tested, and finally the packing room, where the skates, done up in neat packages, are made ready to be sent forth to all parts of the world.

Nowadays the business of the Starr Co. is very much more extended and more complicated than a few years ago, because of the greater number of lines produced. While self-fastening skates are still used and found good and convenient by a large proportion of the skating public, there are many who consider them not so desirable as skates that fasten to the boot, for such purposes as hockey playing, racing, etc., and, as prosperity increases, there is a general tendency to buy skates of this character. Ever alert to changing conditions, the manufacturers have followed up the policy of finding out exactly what the



Assembling and Testing Room.



A Corner in the Packing Room.

skaters want and producing skates to suit them.

Hockey skates are now in large demand, and one of their leaders in this line is the "Micmac," which is made in five different styles, two of which have plain runners and two flanged, and one of each kind of runner having what is called a puck stop. The fifth style is called the "Featherweight Micmac," being made with a very thin plain runner, webbed to give it rigidity and prevent buckling. The "Micmac" (both standard and featherweight patterns) is very popular among leading hockey players in Canada and the United States, and its popularity is growing each year. Then there is the "Starr Hockey," which the makers call the "Standard of Canada." This is the lightest skate made, and is particularly strong, being capable of standing a breaking strain on the tops of 1,100 pounds. Along with the leaders is classed the "Regal," the most expensive hockey skate made by this company. The pattern of the "Regal" was approved by the leading hockey players before the skate was put on the market, and this fact, added to its appearance and evident high quality, encourages the confidence of dealers.

Another production of this factory is the "Micmac" hockey stick, for which is claimed the greatest durability obtainable. These sticks are not cut out of boards and then bent to the required shape, but close grained, tough woods are selected which have grown with the bend desired. In other words, "Micmac" hockey sticks grow in the Nova Scotia woods, and at the factory are only trimmed down and given the proper balance.

The Starr Manufacturing Co.'s skates have taken the highest awards wherever exhibited, at home, in the United States and in Europe; these awards covering a period of nearly thirty years.

In addition to manufacturing skates, the company are now large makers of bolts, nuts, rivets, washers, spikes and a full line of goods of a similar character. They have largely increased their plant for making these lines from time to time, and the factory now covers a space of several acres.

The British Columbia Electric Railway Co. are going to increase the capacity of their power plant in Vancouver by one-third. This will mean an addition of 3,000 h.p. and it will necessitate that the power house be increased in size. The company are also going to construct an electric tramway, light and power system at North Vancouver at an estimated cost of $20,000.

Eleventh Annual Convention of the Maritime Board of Trade

Yarmouth, N.S., August 16, 17 and 18, 1905

Special Report by Our Own Representative.

DESPITE wet weather at the outset and a somewhat small attendance of delegates, the eleventh annual convention of the Maritime Board of Trade at Yarmouth, N.S., will go down to history as one of the most valuable and satisfactory meetings ever held by this important commercial organization. A stage has at length been reached in the career of the board when its members have come to the conclusion that its functions should be more than deliberative. At the Yarmouth meeting, time and time again, speakers impressed on the board the need for action, and as a result, this year an important step has been taken by the board and a permanent committee has been appointed to follow up and take action on the various resolutions passed.

Prince Edward Island was prominently to the fore at the meeting and the presence of Rev. Father Burke contributed much to quicken the interest of the board in the efforts the Islanders are making to secure their pet project,—the tunnel. At the election of officers, another Prince Edward Island man, Captain Joseph Read, was honored by being appointed to the presidency.

Several important resolutions were put through. A fast Atlantic service, better train service throughout the Provinces, a legislative union of the Provinces, confederation with the West Indies, the cultivation of tourist travel, steel shipbuilding, the abolition of statute labor and the representation of incorporated towns in county councils, were among the subjects discussed.

The meetings were presided over by Past-President E. K. Spinney, of Yarmouth, who, together with Mayor Armstrong, the city council and the Yarmouth Board of Trade, did all in their power to make the visit of the delegates a pleasure. By way of entertainment they gave a drive about the city just prior to the Thursday afternoon session, while on Friday a most enjoyable trip to Barrington by rail and return by boat was provided.

As the place for next year's meeting, Amherst was selected, as being a central place and one to which many delegates could come.

The Convention Opens.

In a steady downpour of rain, which has lasted since the preceding afternoon, the convention opened in Boston Hall soon after ten o'clock on Wednesday morning. President E. K. Spinney occupied the chair, and with him on the platform were Vice-President Joseph Read, Secretary Creed and Father Burke of Alberton, P.E.I. About fifty members were present.

Before proceeding with the business of the convention the chairman called on Mayor Armstrong, of Yarmouth, and introduced him to the delegates.

The Mayor's Welcome.

Mayor Armstrong recalled having invited the board to come to Yarmouth last year at the meeting at Moncton. It was an additional pleasure for him to be privileged to welcome the delegates this year to Yarmouth. On behalf of the citizens of the town he extended a most hearty welcome to all those present and hoped that their sojourn in Yarmouth would be both pleasant and profitable.

Roll Call.

Secretary Creed then called the roll and the majority of the constituent boards were found to be represented. The list of delegates present was as follows:

Nova Scotia.

Amherst—E. B. Elderkin, C. Owen Thompson.

Annapolis—J. M. Owen, F. C. Whitman.

Beaver River—Herbert Rice.

Bennick—J. E. Woodworth.

YARMOUTH.

Historically, Yarmouth is one of the most interesting towns in the Dominion of Canada, as in point of time it is one of the oldest. While to-day it has lost much of its early splendor as a great shipping port, this deficiency has been somewhat compensated for by a greater attractiveness in its appearance, which bids fair to make it one of the most pleasing tourist centres in the Dominion. Situated near the western extremity of Nova Scotia, on an arm of the Bay of Fundy, it extends along a gentle slope for a considerable distance east and west. It has direct railway communication with Halifax by Dominion Atlantic Railway, while it can also be reached by boat from Boston and other points.

At one time Yarmouth could boast of possessing the second largest tonnage of any port in the world, having no less than 260,000 tons afloat at one time. It was then world-famous. To-day its maritime interests are comparatively small and its industries are not very important. It is, however, a beautiful residential town, possessing attractive homes, beautiful gardens, extensive hedges and excellent roads. Its leadtng hotel, the Grand, is one of the best appointed houses in the Provinces, and one where the tourists' lot is made extremely pleasant.

Canning—C. E. Starr.

Canso—J. B. Saunders.

Digby—Clarence Jamieson, E. F. L. Jenner, W. E. Van Blascom.

Halifax—J. E. DeWolf, A. Stephen, W. A. Major, A. M. Bell, Hon. W. Ross.

Kentville—M. G. DeWolfe, C. W. Webster, Robert Harrington, W. E. Potter, Wm. Yould, B. H. Dodge.

Kings Co.—J. A. Kinsman.

Lockport—Robert McDonald.

Parrsboro—James W. Day.

Windsor—W. H. Roach.

Wolfville—J. D. Chambers, R. W. Starr.

Yarmouth—E. K. Spinney, B. B. Law, E. N. Armstrong, Arthur W. Eakin, Seymour C. Baker, W. D. Ross, R. S. Crawford, Augustus Cann, Willard M. Kelly.

Sydney, C.B.—C. P. Moore, S. P. Challoner.

New Brunswick.

St. John—W. S. Fisher, E. A. Abbott, H. C. Tull, L. G. Crosby.

Chatham—W. S. Loggie, James Nichol.

St. Stephen—E. G. Vroom.

Prince Edward Island.

Alberton—Rev. A. E. Burke, John Agnew.

Summerside—Joseph Read, M. P. P., Neil Sinclair, W. A. Brennan.

Committee on Orders.

A committee to determine the order in which the various subjects proposed by the local boards should be discussed was named by the chairman and was composed of J. E. DeWolf, Halifax; F. C. Whitman, Annapolis; E. B. Elderkin, Amherst; C. Jamieson, Digby; B. H. Dodge, Kentville; J. Kinsman, Kings County; J. Day, Parrsboro; W. H. Roach, Windsor; R. Starr, Wolfville; W. Kelley, Yarmouth; S. P. Challoner, Sydney; L. G. Crosby, St. John; J. Read, Summerside; Father Burke, Alberton; E. G. Vroom, St. Stephen; C. P. Moore, Sydney.

While the committee were absent from the hall, Secretary Creed read letters of regret from R. L. Borden, W. S. Fielding, Hon. Senator Josiah Wood, Sackville; P. Gifkins, general manager D. A. R.; D. Pottinger, general manager I.C. R.; J. M. Lyons, general passenger agent, I.C.R.; Lieut.-Col. J. B. Maclean, Toronto; the secretaries of the Montreal, Ottawa, Toronto and Hamilton Boards of Trade and the Montreal Star and Toronto Globe.

Report of Committee on Resolutions.

After a protracted session the committee on resolutions presented their report, recommending the discussion of the following subjects:

1. Annapolis—The inspection of cooperage stock and a standard apple barrel.
2. Berwick—The necessity of an improved railway train service between Halifax and that portion of the Annapolis Valley west of Kentville.
3. Halifax—Fast Atlantic steam service.
4. Kentville—Should not incorporated towns have representation in the council of municipalities?
5. Kentville—Municipal ownership of electric light plants.
6. Wolfville—Preservation of historic grounds.
7. Kings County—Is it desirable that the young men of the Maritime Provinces between the ages of 16 and 21 should be obliged to perform three annual drills in the militia of Canada?
8. Sydney—The desirability of wider publication in Maritime press of reports of Canadian commercial agents abroad.
9. Halifax—Protection of inland fisheries.
10. West Prince—Subsidy for steam-

ship to ply between ports on the north side of P.E.I., Miramichi, Magdalene Islands and Sydney.

11. Parrsboro—Diversion of the Intercolonial by building a loop from Truro to Amherst, via Parrsboro.

12. Amherst—The advisability of uniting the three Maritime Provinces under one Government. Union of the Maritime Provinces.

13. Amherst—The question of the advisability of advertising by literature the advantages of the Maritime Provinces as a desirable place of settlement.

What can be done to investigate and make better known the resources of these Provinces?

Co-operative efforts on the part of the Governments of the Maritime Provinces to promote desirable immigration from Europe.

14. Bear River—The necessity of urging upon the Government the granting of adequate financial assistance to any company that will build a railroad from Caledonia in the County of Queens to a point on the D.A.R. at or near the mouth of Bear River or to Digby, as may be deemed advisable, thereby affording railway connection to that section of Nova Scotia which is entirely without railway communication, and placing the towns along the route of said railway upon equal terms with other parts of the Province.

15. Halifax—Is it advisable to place the Intercolonial under a commission?

16. St. John—Daily steamship service between New Brunswick and Nova Scotia via St. John and Digby.

17. Wolfville—Abolition of statute labor in Nova Scotia.

That the Maritime Board of Trade urge upon the Governments of New Brunswick, Nova Scotia and Prince Edward Island the importance of improvement in the common roads of the Provinces, and to take steps to diffuse information on the subject, especially by the distribution of literature and the appointing of an official who shall confer with the county councils and lecture on the subject in the various communities throughout his Province.

18. St. John—Recoinage by the Government of worn and mutilated Canadian silver coins.

19. Charlottetown, Southern Kings, Souris, Summerside and West Prince—Transportation between P. E. Island and the mainland.

Tunnel under the Northumberland Straits connecting P.E.I. with the mainland.

Better Winter communication between P.E.I. and the mainland.

The tunnel from P.E.I. to the mainland.

Daily Winter communication with the mainland.

20. Yarmouth—The advisability of the Government of the Maritime Provinces assisting local associations or boards of trade in promoting tourist travel.

21. Halifax—Steel shipbuilding.

22. St. John—Improvement in the London steamship service.

23. St. John—Prohibition of export of pulp logs.

24. Sydney—Night express train between Sydney and Halifax.

25.—Advisability of confederating the Dominion of Canada and British West Indies.

26. Yarmouth—The advisability of the Dominion Government taking over the railways of Western Nova Scotia and making them a part of the Intercolonial system.

WEDNESDAY MORNING.

Secretary's Report.

Amid applause the veteran secretary of the board, C. M. Creed, rose to present his report as follows:

To the President and Members of the Board of Trade:

Gentlemen,—Your secretary-treasurer begs herewith to hand you his report for the current year. All the resolutions and recommendations passed at the last annual meeting were forwarded to the Ministers of the various Departments of the Federal Government, those concerning the Local Governments were forwarded to the Premiers of same. Copies of The Canadian Grocer containing the proceedings of the annual meeting, were forwarded to all boards of trade in the Maritime Provinces, as also to the delegates to the meeting.



Members of the Maritime Board of Trade in Convention Assembled at Yarmouth, N.S.

On October 28, in order to keep the resolutions passed at the annual meeting before the boards, they were printed and copies forwarded to each board, with a circular letter impressing upon them the necessity of calling the attention of the members of both the Dominion and Local Parliaments in their counties to them.

On December 21, copies of all resolutions were forwarded to W. S. Loggie, M.P., Chatham, N.B.; J. J. Hughes, M.P., P.E.I.; Dr. J. B. Black, M.P., Windsor; H. J. Logan, M.P., Amherst, and B. M. Law, M.P., Yarmouth, in advance of the meeting of the Federal Parliament in order that they could become familiar with them. On January 23, shortly after the opening of the Federal Parliament, copies of all resolutions were forwarded to all the members from the Maritime Provinces and also to several of the Senators. The correspondence connected with the same, as also from

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Metals,

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and every description of modern High-class Hardware

Special attention given to Vessels, Outfits, Fishing and Cannery Supplies

ENQUIRIES FROM THE TRADE RESPECTFULLY SOLICITED

No order is too large for us to handle, and no order is too small to receive our best attentton.

the various boards, being too voluminous to read, are on the table for the inspection of the members.

Correspondence With the Board.

This has been conducted with vigor during the year. Some of the secretaries have promptly responded to notices and letters, but the majority of them have been slow in answering, while some have never answered. It is hoped, however, the secretaries will be more prompt the coming year.

The subjects for discussion, notices to boards of the annual meeting and railway arrangements for delegates, were mailed to the boards affiliated and unaffiliated.

The annual report was published as usual and forwarded to all the boards of trade in the Maritime Provinces, and circulated generally as occasion presented.

New Boards.

During the year two new boards have been formed in Nova Scotia, viz.: Lockeport and Bear River. I am also pleased to say that the Boards of Parrsboro and North Sydney have re-affiliated and are in fine working order.

Unaffiliated boards have had every attention paid them, they have been written to frequently asking them to affiliate, I also forwarded them copies of all resolutions passed at the annual meeting and copies of the annual report, and invited them to send delegates to the annual meeting.

Affiliated Boards.

The affiliated boards on the roll of membership are as follows: New Brunswick, 6 boards, Chatham, Moncton, Newcastle, Sackville, St. John, St. Stephen; Prince Edward Island, 5 boards, Charlottetown, Summerside, Souris, Montague, Alberton; Nova Scotia and Cape Breton, 23 boards, Annapolis, Amherst, Antigonish, Berwick, Bear River, Canning, Canso, Chester, Digby, Halifax, Kentville, Kings Co., Lockeport, New Glasgow, Pictou, Parrsboro, Truro, Windsor, Wolfville, Yarmouth, Louisburg, Sydney, North Sydney.

Unaffiliated Boards.

New Brunswick, 2 boards, Fredericton, Woodstock; Nova Scotia and Cape Breton, 10 boards, Bridgewater, Dartmouth, Hantsport, Lunenburg, Liverpool, Middleton, Pugwash, Stellarton, Westville, Glace Bay. Total membership of all boards 2,205.

Chambers of Commerce.

The sixth congress of Chambers of Commerce of the Empire will be held at London, G.B., in June, 1906. An invitation has been received from the secretary, Kenric B. Murray, Esq., asking this board to send delegates and subjects for discussion at said congress, to which a reply was sent thanking him for the invitation and informing him that it would be laid before the members at the annual meeting at Yarmouth, on August 16.

In conclusion, during the past year everything requisite has been done for the advancement of the board, at the same time doing all possible to assist your worthy president, and as usual the valuable assistance and advice of M. G. DeWolfe, Esq., of Kentville, has been given, and also the able assistance of E. H. Armstrong, Esq., of Yarmouth, the corresponding secretary.

Accounts for the Year.

The accounts for the year are all prepared, but as several boards will pay their per capita tax before the close of this day's meeting they will be presented to-morrow for your approval and audit.

All of which is respectfully submitted.

CHARLES M. CREED,
Permanent Sec'y-Treas.

On motion of Captain Read, seconded by C. Jamieson, the report was unanimously adopted.

President's Address.

The popular president of the Maritime Board, E. K. Spinney, was heartily received on rising to read his annual address.

Gentlemen of the Maritime Board of Trade :

Before proceeding to the subject of my address, I wish to avail myself of this, the first opportunity I have had, to express my thanks for the honor you have done me in electing me president of this most important body of commercial and professional men. I regret that this



Capt. Joseph Read, Summerside, P.E.I.
President Maritime Board of Trade 1905-06.

prominent position has not been placed in the hands of one more competent to discharge its duties, or who would have achieved greater results. I regard your generous act, however, as a compliment to the town of Yarmouth.

You will also permit me, on behalf of the Yarmouth Board of Trade to extend a most hearty welcome. I sincerely trust that the time spent here will be well freighted with pleasure to yourselves, and as a result of your deliberations a vast amount of good may be done to the Maritime Provinces in particular and to the Dominion of Canada generally.

The discussion of the very important matters which will come before you systematically and vigorously, following up decisions reached by determined effort, must result in needed reforms and increased prosperity.

The report of your secretary, Mr. C. M. Creed, whose efforts have been indefatigable in the interest of the boards of trade of the Maritime Provinces, has been placed before you.

While the growth and extension of these boards have not been so great as we could have wished, yet there has been much encouragement in the fact that two new boards have been established and two others have become affiliated with the Maritime Board in the past year, and which now represents within its fold thirty-seven boards with memberships aggregating nineteen hundred and eighty-five members.

We can look to the future with confidence in anticipating the great influence they may exert on all important questions, voicing as they do the carefully considered views of the leading commercial and professional element of the Maritime Provinces.

Canada's Growth.

I do not propose to take up much of your valuable time on this subject, but simply desire to draw your attention to the fact that immigration has increased our population during the past ten years by 443,661. Of this Europe supplied 284,096 and our neighbors to the south 159,565.

Nearly two-thirds of this particularly large increase to our population has taken place during the years 1903 and 1904, and statistics of immigration into Canadian ports during the present year give promise to exceed greatly that of the past two years.

The financial report of the exports in 1904 shows an increase over that of 1895 of $99,882,432, while the imports in comparison with similar dates show the enormous increase of $148,430,121.

Canadian Banks.

show a net increase from beginning of 1900 to June 30, 1905, of

In paid-up capital ... .$	15,975,357
Net increase in reserve	23,666,779
Increase in deposits	227,309.721
Increase in current loans ...	203,375,159
Increase in circulation	33,249,751

The above statement shows : First, that Canada is regarded favorably as a permanent home for reasons of climate, resources and broad educational facilities. Second, this fact has developed the enormous expansion of commerce. Third, the successful employment of capital is the natural outcome of commercial prosperity.

Transportation.

Since your last annual meeting that second great national transcontinental highway, the Grand Trunk Pacific. has made substantial progress. Corps of engineers have surveyed a great section of the route which this important road

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Prompt Shipment

The ONTARIO TACK CO.
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will traverse. It will only be a few months before the work of construction will begin, opening up a new field for the further expansion and development of this, the most important colony of the Mother Country.

While the greater benefits arising from the construction of this great national highway must necessarily accrue to the western Provinces, and while the transportation question is of supreme moment to the whole Dominion, its importance to Maritime Province interests, both for land and sea transit, cannot be overestimated.

Our coast line of 3,000 miles, dotted with commodious ports with rail connections, demand at our hands the imperative duty of unflinching vigilance to secure the material advantages to which our geographical position entitles us.

Rail connection is steadily increasing through the length and breadth of the Atlantic Provinces, and it is confidently anticipated that by the time the national transcontinental line is completed the internal arteries will supplement the great main trunk system with up-to-date branches in each of the three Provinces.

The Halifax & South Western Railway is already circling the western portion of Nova Scotia, and construction will be well under way by next season on the eastern side of that Province, giving alternate lines from Yarmouth to Sydney.

The heart of New Brunswick will be intersected by the N.T.R. and other connections between Quebec and Moncton. The long-desired and urgently-needed communication between New Brunswick and Prince Edward Island will round out the plan of twentieth century methods of transit to and from eligible trade centres at all seasons in this end of the Dominion. The coastal steam packet service gives evidence of continuous improvement. Substantially every harbor and connecting vantage point is being brought in regular touch with the principal supply centres of trade in the Maritime districts.

Business Interests.

In natural products the output throughout the Maritime Provinces has been fairly well maintained. The catch of fish has not been up to the ordinary average but higher prices have prevailed, compensating to some degree for the shortage.

An important paper was introduced at your last annual meeting discussing the importance of the Government taking active measures to preserve the lobster fisheries. While no action has yet been taken, I am informed the subject is under their careful consideration and doubtless some course will be adopted by them to further this very necessary end. Efforts should not be relaxed, as it is a matter of vital importance to those engaged in this lucrative industry.

The recommendations to establish freezing establishments and fertilizing plants for abating the ravages of the dog fish have had the attention of the Ottawa authorities, and a better condition in both cases is hoped for in the near future.

The depressed condition of the lumber trade in Great Britain has had the effect of restricting the output of lumber in sections catering to this branch of supply. The South American and West Indian markets, however, are well maintained, with the result that the mills operating in this class of product are actively and lucratively employed.

Coal mining progresses favorably, the large quantities now raised annually making it one of our leading industries. The gold from our gold fields shows a trifle lower result than the average of previous years, but with the introduction of new and up-to-date machinery much improvement is anticipated. In manufacturing industries steady advance is well sustained, the operations of several organizations assuming proportions entitling them to the front rank in comparison with similar enterprises in any part of the Dominion. The distributing business, the West Indies' trade, and different wholesale and retail trades have all enjoyed a profitable turnover, the imports and exports of the three Provinces giving in nearly every instance fair all round averages in comparison with former years.

Tourist Travel.

The volume of tourist business in the direction of the Maritime Provinces maintains satisfactory averages. Some idea of its magnitude can be gathered from the fact that the line of steamers plying between the United States and Yarmouth carried to and from these ports last season over sixty thousand passengers. Statistics for this year are not, of course, complete, but during the past month the number of passengers arriving at this port was increased by six hundred over the same month last year.

The scenic advantages and salubrious climate in our sea port Provinces are being gradually supplemented by hotels and Summer cottage accommodations in keeping with modern improvements, while entertainment and recreation show marked improvement with each successive season.

By systematic attention to advertising and furnishing concise guide books and data, the tourist business has become a recognized and welcome addition to the ordinary "between season" business of many localities.

The aggregate of tourist expenditure in the Maritime Provinces now runs into several millions of dollars annually, clearly illustrating the advantages to be derived from well directed effort. This important question will come up for your careful consideration during the present session.

Steel Ship Building.

The ardently-desired establishment of steel ship building at some point within the Maritime Provinces to replace the former flourishing industry of wooden ship building has not yet materialized, although strenuous efforts have been made to make a commencement at Halifax as an eligible locality. The post-



ponement of the granting of a bonus by the Dominion authorities at the recent session of Parliament is a source of regret to the persons undertaking this important national work, but further efforts will be made to secure its realization in the near future.

A modern steel ship building plant has been well described as the mother of nearly every other industry, and the expansion of population resulting has been marvelous, especially in the ship yards of Germany as the latest instance. The subject is doubtless an ambitious one to carry out, but the enterprise and determination of the live business men in these Maritime Provinces will surely solve the problem at no distant day.

Chamber of Commerce of the Empire.

The London Chamber of Commerce has notified the boards of trade and commercial bodies throughout the Empire that the sixth Colonial Congress will be held in London in June, 1906. The last congress assembled in Montreal in 1903, about five hundred delegates being in attendance. Numerous important subjects will come up for discussion, some of which may well come within the scope of this board.

Trade and tariff relations between the Mother Country and its dependencies —the vital question of Imperial defence, codification of the commercial laws and customs of the whole Empire in connection with bills of lading, consignment advances, etc., are among the subjects for discussion suggested by the London Chamber.

The beneficial results accruing from these colonial conferences fully justify systematic endeavor to assist in development of the movement to promote concentration of Imperial influence on twentieth century lines to meet the strenuous trade competition in evidence throughout the world.

The cordial reception of the Canadian Manufacturers' Association in England recently is an object lesson, illustrating the far reaching benefits to be achieved by thorough combination in efforts to impress business circles in Great Britain of the great strides of progress taking place in all sections of Canada from year to year.

Maritime Union.

The rapid expansion of the western portion of the Dominion of Canada, demonstrated by the creation and admission of the Provinces of Alberta and Saskatchewan, emphasizes the importance of safeguarding the status of the Atlantic Provinces on lines of co-operation, securing a due equilibrium of political influence. The prospect of a legislative union of the Maritime Provinces was one of the leading ideas submitted at the formation of the Maritime Board of Trade.

Economy in local administration and more substantial influence in the councils of the several Parliaments are as potent factors to-day as they were a decade ago.

In connection with this important question should also be considered the imperative necessity of our Federal Government arranging some basis by which Newfoundland can be brought into union with Canada. The benefits accruing from such a result would be of incalculable value.

Fast Atlantic Service.

A slight improvement in the Atlantic mail service between the Mother Country and Canada is claimed from the records of the two new turbine steamers placed on the route in March and April last.

The first voyages of the Victorian and Virginian from Moville to Halifax did not come up to expectations. But somewhat better speed was accomplished by the Cape Race course up the Gulf of St. Lawrence to Rimouski—the last trip of the latter having reduced the time between Moville and Rimouski to six days

A test was made in June of the chances of a more rapid and satisfactory Atlantic mail delivery by intercepting the Virginian off the port of North Sydney and rushing the mails by special trains from that point. The result was a considerable improvement in the deliveries to the Maritime Province trade centres, but the deliveries beyond Rimouski were somewhat disappointing.

The running time of the special train between North Sydney and Montreal established a record, conclusively demonstrating the great advantages to be secured through landing the mails at an Atlantic terminal by steamers of modern speed. The subject will doubtless be one of those nominated for your consideration, as in the case of each of the annual gatherings since the formation of the Maritime Board of Trade.

Insurance.

Excessive premium rates of fire and marine insurance have occupied the attention of the Maritime Board of Trade for several years past, but an all round satisfactory solution has not yet been reached.

An important paper was discussed before your board at one of your previous sessions urging upon the wholesale houses insisting upon their clients protecting themselves against losses by fire. It is to be regretted that no practical results have followed the resolutions passed at that time. The subject is worthy of your earnest attention.

In addition to the increased and necessary security to the system of credit, it would lead to such improvement to the physical hazard that lower rates of premium would unquestionably result.

Some improvement has taken place in the rates on marine risks, due to the additional care given to our seaboard by the several Governments in increasing and improving the light and buoy service.

The business of life insurance, which is of even still larger importance to the people as a whole, also represents phases suggesting careful inquiry as to the safety of the invested funds representing the hard-earned savings of nearly every family in the land.

The overwhelming necessity of absolutely faithful Government inspection applies to holders of policies in the Maritime Provinces as urgently as in other portions of the continent. On general public grounds it is beyond doubt a subject demanding a certain amount of watchful consideration by representative bodies.

Exhibition.

The Provincial and county exhibitions have been held throughout the Maritime Provinces as usual, resulting in healthy emulation and endeavor in the various localities.

Next year the Dominion Industrial Exhibition will be held in the Maritime Provinces, Halifax having been decided on as the location. To these fairs and

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Safety Automatic
Hammer, $5.00
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Extra length Barrels, 50c. per inch.
Pearl Stocks, $1.25 extra.

No Fear of Accidental Discharge if it's an



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Safety Automatic Revolver

because the revolver hammer never touches the firing pin. This *safety principle*, found *only* in the Iver Johnson is due to the fact that the lever which transmits the blow from the hammer to the firing pin is never in position to do so except *when the trigger is pulled all the way back.* All hardware and sporting goods dealers sell Iver Johnson Revolvers and can verify these facts if they will.

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exhibitions we are undoubtedly indebted for the establishment of the Agricultural College at Truro, by the Dominion Government, under the able superintendence of Professor Cummings.

In view of the establishment of a line of steamers between Canada and Mexico, opportunities are presented for trade in farm products and live stock in the West Indies, as well as in Mexico and South America.

The Maritime Stock Breeders' Association has already taken steps to develop its business by holding annual auction sales, duly advertised in these new markets.

Municipal Betterment.

A noticeable advance is taking place in many cities, towns and villages in the Maritime Provinces in the better shape of roads and the installment of asphalt pavements, the cultivation of lawns in front of residences and numerous other improvements designed to further higher ideals of utilizing the conveniences and comforts to modern social needs.

All of which is respectfully submitted.
E. K. SPINNEY, President.

Referred to a Committee.

When the applause evoked by the address had subsided, M. G. DeWolfe rose and expressed his appreciation of the president's report, which he termed one of the best he had ever heard during his eleven years' connection with the board. He moved that the address be referred to a committee consisting of J. M. Owen, Alex. Stephen and Father Burke, who would report at the evening session. The motion was seconded by J. E. DeWolf and carried.

The convention then proceeded to take up the subjects for discussion in the order suggested by the committee.

A Standard Barrel.

F. C. Whitman, of the Annapolis Board, introduced the subject of a standard apple barrel and the inspection of cooperage stock. He thought there should be a standard-sized barrel for the whole Dominion. In Ontario, where the barrels were made from seconds and flour barrel staves, the size was larger than in Nova Scotia and the apple shippers of the latter Province were consequently laboring under a disadvantage. Mr. Whitman explained that a committee from the Nova Scotia Fruit Growers' Association had gone to Ottawa, and they had been promised a general meeting next June, at which a standard barrel would be established.

At present, conditions in Nova Scotia were most unsatisfactory. A large number of barrels were unfit for use and all sizes were utilized. The remedy was legislation along the line of uniformity.

Father Burke, president of the P.E.I. Fruit Growers' Association, in seconding the resolution, suggested leaving the working out of details to the Government and resolving the resolution into the following form:

"That a uniform barrel be adopted for Canada and the material entering into its construction be placed under Government inspection."

Upon Mr. Whitman accepting Father Burke's revision of his original resolution, the motion was put to the meeting and carried unanimously.

WEDNESDAY AFTERNOON.

At 3.15 the convention was again called to order, when Chairman Spinney read a telegram from the Amherst Board inviting the Maritime Board to come to Amherst next year.

Improved Railroad Service

J. E. Woodworth, of the Berwick Board, in introducing the resolution from his board (No. 2), pointed out that his district was being discriminated against by the Dominion Atlantic Railway in their train schedule. People living east of Kentville could go to Halifax or Sydney, spend the day there and return the same day. Business men west of Kentville could only reach Halifax by an afternoon train and must spend the night there. Mr. Woodworth also pointed out that the small fruits from the Valley were at a great disadvantage in reaching the Halifax market. Correspondence with Halifax was also seriously handicapped by the lack of trains. Efforts to get the D.A.R. to remedy the trouble had so far been futile.

Mr. Woodworth moved the following resolution: "That in the opinion of this board, increased facilities for railway travel between Halifax and that portion of the Annapolis Valley lying west of Kentville should be provided."

This was seconded briefly by J. M. Owen. The discussion was continued by several of the members.

M. G. DeWolfe took exception to the resolution as a local one. He thought the board should only deal with broad and general subjects, and regretted that the present resolution had not been amalgamated with the general question raised by the Yarmouth Board on the subject of railway service, through the whole of Western Nova Scotia.

The chairman proposed deferring the settlement of the question until the Yarmouth resolution came up.

J. E. DeWolf saw no similarity between the two resolutions.

J. E. Woodworth claimed his resolution was not a local one, as the interests involved were not local by any means, but concerned the welfare of the whole Province.

The resolution was carried unanimously.

Fast Atlantic Service.

A. Stephen, of Halifax, found it difficult to introduce this subject in any new way, as it had been up before the board for many years. The question now was, where did the board stand after all the resolutions that had been passed since Confederation. He thought but little progress had been made and hoped that the series of resolutions, which he was about to make, would result in some definite good. The resolutions read as follows:

"Whereas the Atlantic mail service between the Mother Country and her possessions in British North America at the inception of Confederation was admittedly the shortest mail route between the continents of Europe and America, having been already in 1867 fully tested by the matured experience of over a quarter of a century;

"And whereas in the negotiations incident to merging the intended union of the Maritime Provinces into the larger compact between the two Canadian Provinces and their Atlantic neighbors a binding stipulation was agreed to in clause 145 B.N.A., to insure independent modern means of communication throughout the Dominion for obvious national considerations;

"And whereas this stipulation in clause 145 B.N.A. was the one thing needed to maintain the established ad-

vantages of the all-British mail route between Liverpool and Halifax through the construction of the railway between Halifax and Quebec, afterwards known as the I.C.R., or the people's road of Canada;

"And whereas immediately after the Act of Union the alteration of the Atlantic mail route at first to Portland, Maine, and subsequently to an unsatisfactory divided Summer and Winter route has resulted in the transfer of the greater portion of the Canadian Atlantic mails through distant foreign avenues of communication, the Postmaster-General of Canada having stated in Parliament that 564,000 pounds of Canada's Atlantic mail matter had been conveyed via New York in 1903, while only 147,000 pounds (largely parcel post) had been conveyed by the subsidized Canadian mail steamers, notwithstanding our great geographical advantages;

"And whereas the rapid expansion of Canada's cereal areas in the Western Provinces forecasts an immense development of transportation interest by land as well as by sea towards both hemispheres, which transportation interest will be largely dependent on the control of national avenues of transit for mails, passengers and freight equipped on the most modern lines;

"And whereas the opportunity to control the shortest and quickest ocean communication between Europe and America, which was within the grasp of the Dominion, has been unaccountably neglected by the governing powers in Canada, to the amazement of successive viceroys and prominent statesmen and visitors from abroad, who find themselves practically compelled to avoid Canada's direct subsidized mail and passenger service, and seek the better transportation afforded by foreign ports;

"And whereas the recent I.C.R. speed tests between Sydney and Montreal confirm and emphasize the certainty of regaining control of the shortest and quickest mail and passenger route between Europe and America as soon as modern steamers connect;

"Therefore, resolved that the Maritime Board of Trade emphatically urges upon the Dominion Government the paramount importance of stipulating in future Atlantic mail contracts that steamers capable of competing with the swiftest liners on the Atlantic should be the only vessels eligible for mail service and that Canada's expanding revenue justifies the appropriation of adequate subsidies for that purpose.

"And further resolved that the arrival and departure of the Canadian mails for Europe shall be, as far as the Dominion of Canada is responsible, at one Canadian port on the Atlantic coast line, accessible all the year round, in order that the mails between London and Montreal shall be delivered in from 120 to 150 hours, with reasonable regularity at all seasons of the year.

"And further resolved that while it may be inexpedient to enforce binding stipulations as to the transatlantic course for mail steamers, the Maritime Board of Trade once more unreservedly endorses the chart of Capt. C. O. Allen, submitted and approved at the annual meeting held at Sydney, Cape Breton, Aug. 20, 1902, as not only the shortest, but also the safest and most reliable sea route, year in and year out, for subsidized Canadian Atlantic mail steamers."

Mr. Stephen felt that the board was not active enough in this matter, and that resolutions were useless. Delegations received attention from the Government, while resolutions were pigeonholed. He hoped the board would send two or three well-informed men as far as the Pacific Ocean to address the leading Canadian boards and secure their support. He pointed out that much attention was being given to securing quick communication with the west, while the connection with the Old Country was being neglected.

"What is the cause of the delay in the establishment of a fast mail service ?" asked Mr. Stephen. "It is not a matter of such enormous expense. The Allans stand in the way, endeavoring to keep things as they are. They are getting big subsidies for freight boats. How long is this condition to last ? I think it has lasted long enough. Let us subsidize a service which will give us the quickest and best service."

Captain Read, in seconding the resolution, pointed out that it was not the



E. K. Spinney, Yarmouth, N.S.
Retiring President Maritime Board of Trade.

present kind of boats that were required, but boats equal in speed to the best that come into New York harbor. The Government were trying to placate Canadians with small morsels now and then, but Canadians required the best. They should stand on their rights, and when they asked for a fast Atlantic service show that they meant what they said.

S. P. Challoner, Sydney, referred to the fact that Sydney was the nearest point to Europe. Why should steamers go to Halifax, two hundred miles farther west ? In the recent experiment in landing mails at Sydney, Sir Wm. Mulock selected that port because it was nearest to Liverpool. When the mails were landed at Sydney they reached Halifax in 10 hours. Later, when landed at Rimouski, they were 24 hours on the way. He put in a plea for Sydney as the landing place for the mails, and thought that the resolution was restricting the Atlantic port to Halifax.

J. E. DeWolf denied there was any localism in the resolution, and held it should remain as it was.

A. Stephen said it was time to stop the antediluvian method of carrying mails up the Gulf. If they were carried there Sydney was all right, but there were considerable periods when Sydney was not accessible. The board stands on record as favoring the best all round route.

The resolution was carried unanimously.

Towns and County Councils.

M. G. DeWolfe introduced the subject (No. 4) showing how the incorporated towns paid more taxes in proportion than the rest of the county. It was a case of taxation without representation. He moved, seconded by Robert Harrington :

"That in the opinion of the Maritime Board of Trade incorporated towns should have representation in the councils of the municipalities."

Municipal Ownership.

J. W. Day of Parrsboro brought up subject No. 5.—the municipal ownership of electric light plants. He stated that Parrsboro was the first town in Nova Scotia to install its own electric light plant. It was now running 150 sixteen candle power lights on the streets of the town, as well as giving private service to the citizens. The revenue derived from the latter was at present only a little behind the total expense of running the plant, which was a very complete one valued at $17,000. Mr. Day referred to the difficulty other towns encountered in taking over lighting plants from private ownership and then moved:

"That municipal ownership of electric light plants would be beneficial and in the best interests of the towns in the Maritime Provinces."

The resolution was seconded by Captain Read.

W. S. Fisher, St. John, inquired of Mr. Day what provision was made at Parrsboro for wear and tear, and how they paid interest on their investment.

In reply, Mr. Day stated that they were able to pay about $125 for new equipment last year out of current revenue and the interest on their loan was also charged up to current expenses.

The resolution on being put to the meeting was carried unanimously.

Commercial Reports.

In speaking on this subject (No. 8) C. P. Moore of Sydney explained that even though the Government supplied weekly reports from agents in all parts of the world, yet these were never made prominent in the local press. He would request the press to give a wider publicity to these matters. The people were a little slow in advertising, and should be educated up to it.

He moved :

"Whereas, in the opinion of this Maritime Board of Trade the reports of Canadian commercial agents abroad, as published by the Department of Trade and Commerce, contain much information of value to Canadian manufacturers, to Canadian shippers and dealers in produce; and whereas, these reports constantly present opportunities looking to the advancement of the export trade of the Dominion :

"Resolved, that this Maritime Board of Trade do, and does hereby, request of the Maritime Province press that they publish each week such information as these trade reports may contain relative to Canadian trade and commerce, and that a copy of this resolution be sent to

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Did you ever stop to think what it is to use a Horse Nail that is cheap—therefore of doubtful quality? It means the same as if the tailor were to use a "cheap" or poor quality of thread to sew clothes with—the work would rip and shortly become a "botch," no matter how good the cloth was.

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If there was much difference in the price between the best "C" brand Horse Nails, and the cheapest, you might say, "you couldn't afford to pay the price for the best." Let us set you right on this point. A Farrier will use thirty-two nails to shoe a horse. These nails will weigh, taking the average size (number 8), only one-third of a pound. **It would therefore require a difference of three cents a pound, or 75c a box, to affect the result, by reducing the cost of the nails used, one cent! Can't you afford it?**

If you sell Horse Nails at all, sell the best; you can do all your trade with the "C" brand and have satisfied customers always.

The "C" brand commands the largest sale in Canada, and is of one uniform quality and price. Your preference in ordering solicited.

We shall be pleased to execute your orders, if you cannot obtain our "C" brand from your regular dealer on application.

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each and every newspaper in the Maritime Provinces."

The motion was seconded by W. S. Fisher and carried unanimously, whereupon the convention adjourned until 8 o'clock.

WEDNESDAY EVENING SESSION.

When the delegates reassembled at 8.15 a good attendance of members was present, quite encouraging the hearts of the officers. J. M. Owen, on behalf of the committee, appointed to draft a vote of thanks to the president for his address, read a resolution which the committee had prepared. This was, on motion, adopted by the meeting. President Spinney replied briefly, thanking the delegates for their appreciation.

Steel Ship-building.

This important subject was introduced by J. E. DeWolf, of Halifax. In 1904 the difficulty had been to get a uniform opinion as to what should be the necessary protection, builders above the canals requiring more than those below. At a meeting last March, however, a resolution was drawn up and presented to the Government. Unfortunately the Government had not dealt with the matter. Mr. DeWolf simply desired to reaffirm last year's resolution and to lend the board's support to the memorial presented to the Government. Extracts from the memorial were read by Mr. DeWolf, who expressed a hope that the Government would yet take some action in the matter. He moved:

"That the Maritime Board of Trade reaffirms its resolution of Aug. 18, 1904, in favor of Government assistance to steel shipbuilding, and regrets that the Federal Government did not deal with this important matter during the last session of Parliament.

"Further resolved that this board approves of the memorial presented to the Government at Ottawa, March 23, 1905, by those now engaged or interested in steel shipbuilding and urges that early action be taken by the Government to grant the measure of assistance necessary to secure the resumption of work in the shipyards now idle, and to establish other steel shipbuilding plants in Canada. Also resolved that copies of this resolution attached to copies of resolution of 1904, be sent to all members of the Cabinet, as well as to all Maritime Province members of Parliament, and that each board here represented solicit the support of its representatives at Ottawa toward securing the necessary Government aid."

C. P. Moore, Sydney, seconded the resolution, remarking that Sydney was deeply interested in the question.

E. B. Elderkin, Amherst, said it was not a subject to be passed over lightly, as Canada needed the industry. He held that it was on just such a subject as this that the board should take energetic action. Pressure should be applied and pressure was needed to secure prompt action on the part of the Government. He did not see why the Provinces should not take the same position in steel shipbuilding as they used to in wooden shipbuilding.

J. E. DeWolf thanked Mr. Elderkin for his support and said that the Halifax Board did not intend to let the matter drop until it was settled.

Senator Ross felt that with unanimity and pressure the matter would receive better attention at next session. The Ministers had many weighty matters to consider at last session.

Father Burke recalled seeing Mr. Fielding at Ottawa soon after the delegation of manufacturers interviewed the Government and at that time the Minister was strongly in favor of helping the industry. Possibly it was for the reason given by the Senator that no action was taken.

Speaking for St. John, W. S. Fisher, explained what that city had done in helping on the matter. He believed much of the work of the board was useless, because it was never followed up, and advocated the sending of delegations to the capital. He admitted difficulties in making up delegations, but felt that obstacles were not insuperable. He felt that the time was now most opportune for the men of the Provinces to make demands for those things they needed for their development.



W. S. Fisher, St. John, N.B.
1st Vice-President Maritime Board of Trade, 1905-06.

M. G. DeWolfe said that with such speakers as Mr. Fisher on a delegation success would be undoubted. But the Provinces had many champions at Ottawa, and yet why was it necessary to reaffirm year after year resolutions on vital matters. He could not understand it, and believed a good strong delegation might do some good.

Captain Read pictured conditions today and contrasted them with conditions a few years ago.

W. H. Roach of Windsor feared the resolution would be side-tracked again, and hoped that a delegation would be sent to Ottawa who would present such resolutions as were deemed important enough. He advocated a committee of three, one from each Province, who would deal with these questions.

E. B. Elderkin thought the matter should be crystallized immediately and a determined lobby be begun at Ottawa.

The resolution was then put to the meeting and carried unanimously.

P. E. I. Transportation.

Father Burke introduced the vital question of communication between Prince Edward Island and the mainland. After thanking the board for the opportunity of presenting the subject, Father Burke proceeded to discuss the proposed tunnel. The question of communication was constantly to the fore. The people of Prince Edward Island would not desert the project until it was accomplished. Support was being received from many boards of trade in Canada.

Father Burke pointed out that Confederation was discussed in Prince Edward Island as early as 1864. The Province, however, did not enter Confederation in 1867, holding off until conditions should be made favorable for them. Efforts were made time and again to get Prince Edward Island into Confederation. Sir George Cartier finally made a promise to give the Island adequate communication, and the Island Province joined the Dominion. The terms of Confederation called for a daily steam communication with the mainland. These terms have never been carried out, and it now became the duty of all Canadians to see that they should be. Father Burke trusted the Maritime Board would lend its support to the agitation.

He traced the methods of communication since Confederation, all of which have been inadequate. Last Winter the Island was cut off for 59 days, and in other years for even longer periods the Island had been isolated. Some other means than navigation must be adopted. No one believed that continuous communication could be kept up by navigation. One permanent system of communication must be secuced, and that could only be secured by a tunnel under Northumberland Straits.

The project was not impossible. The distance was only 6½ miles, and conditions were such as to make the work of construction very easy. This project of a tunnel had been before the people for twenty years. Famous geologists had found the strata under the straits most favorable for tunneling. Shale and clay existed there, and there would be little percolation of water. The tunnel, said Father Burke, could be built in five years at a cost not exceeding $10,000,000. M. J. Haney of Toronto had offered to undertake the work for that price and to hand over the complete tunnel in 6 years. American contractors were eager to build the tunnel as a private venture.

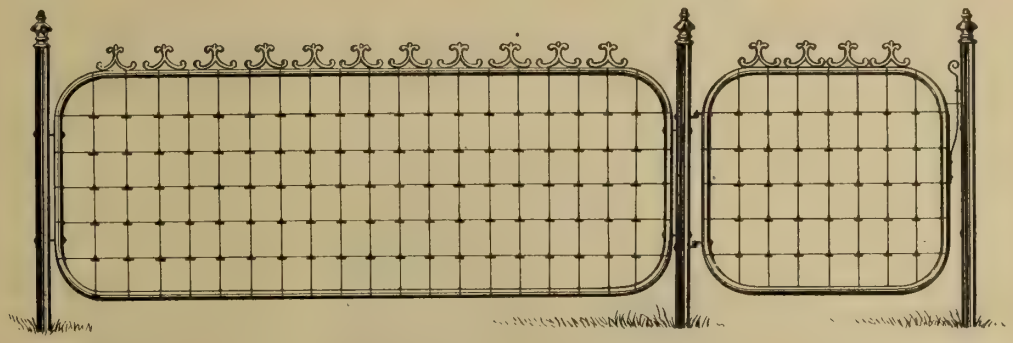
Father Burke believed the payment of $300,000 a year interest would more than be justified in comparison with the present expenditure on ships. These cost annually $100,000 for depreciation, $100,000 for insurance, and the Prince Edward Island Railway lost $100,000 of business every year because it lacked a connection with the mainland. Accordingly Father Burke moved:

"Whereas, the Province of Prince Edward Island entered the Canadian Confederation under specific terms as to continuous communication; and, whereas, such communication has not to this day been accorded to her; and, whereas,

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much loss and very great hardship is occasioned to her yearly in the Winter season especially, owing to the want of permanent communication, her natural progress and the extension of interprovincial trade being thereby greatly hampered and handicapped; and, whereas, no Province of Canada, irrespective of size or population, should be without at least one permanent and efficient system of communication, provided it can be afforded by the reasonable expenditure of public money, since such system is essential to the intercourse of the the different parts of the Federation and lends greatly to up-build and consolidate them; therefore,

"Resolved, that this Maritime Board of Trade in annual convention assembled request, and does hereby urgently request, the Federal Government to complete the terms of Confederation with Prince Edward Island by the construction and operation as soon as possible of a railway tunnel under the Straits of Northumberland, the only sure, permanent and adequate system of communication available; and, further resolved, that the system of navigation in vogue, pending the construction of the tunnel, be made as perfect as may be, the new ice-breaking steamer to be built being equipped with all the modern improvements for such vessels, and by employing one of the fleet of ice-breakers on what is known as the western route."

Captain Read, in seconding the motion, gave some practical information about tunnels, referring to tunnels in London, railway tunnels under rivers, where ferries used to run, and tunnels where bridges stood. He pointed out the heavy freight rates between the Island and Halifax, and the frequent handling of freight. If direct rail communication could be secured, values in the Island would go up immensely. Then, too, the tunnel was as necessary in Summer as in Winter.

The resolution, on being put to the meeting, was carried unanimously.

THURSDAY MORNING SESSION.

A. M. Bell brought up the subject referred to on the preceding day—the neglect to follow up resolutions by the board—and introduced the following motion:

"That on the request of any board of trade in the Maritime Provinces, the president, or in his absence one of the vice-presidents, may appoint one or more delegates to represent the Maritime Board in any matter which has been favorably passed on by this board at any of its meetings, provided that if such delegate should not be immediately interested in the matter to be presented, his expenses shall be paid by the local board making the request."

Father Burke believed there should be a permanent committee to follow up resolutions. He suggested three men from each Province.

E. B. Elderkin seconded the resolution but believed a standing committee of one man from each Province, one of

whom should be the president of the board, would be a good arrangement.

W. S. Fisher outlined a plan for a permanent committee, consisting of three men from each Province. The president and the two vice-presidents would be the senior members of the committee, and would be supported by two men from each Province.

The discussion was continued by M. G. DeWolfe, Senator Ross, and several other members.

Alex. Stephen considered a committee of three too small. He advocated a larger deputation, who would convince the Government that the Maritime Board meant business. He thought the delegation should be appointed immediately.

Father Burke, having consulted with Mr. Bell, introduced a revised resolution covering both suggestions. The following prefix was added to the original resolution :

"That a permanent committee on resolutions, composed of three members from each Maritime Province, the three presidents being members ex officio, be appointed to carry on resolutions to the sources affected and further resolved."

W. S. Fisher objected to the sending of local delegations.

J. M. Owen explained how cases would arise when local matters would have to be considered and local boards would have to take action. He believed the resolution was satisfactory.

A. M. Bell considered that the resolution should be made as elastic as possible.

The revised resolution, being put to the meeting, was now carried unanimously.

Steamship Service.

On behalf of the West Prince Board, John Agnew introduced the subject of a steamship service for the northern ports of Prince Edward Island. At present a few schooners do the trade, but a good steamship would be most beneficial. He moved :

"That the resolution passed at Moncton last yaer, with reference to steamship communication between Sydney, north ports of Prince Edward Island and the Magdalen Islands and Miramichi, be, and is hereby, reaffirmed."

S. P. Challoner seconded the motion on behalf of Sydney Board, believing such a service would be of considerable advantage to Cape Breton Island.

James Nichol, speaking for the Miramichi District, pointed out the advantages his section would derive from this service.

The question was put and carried.

Maritime Union.

W. S. Fisher regretted that the St. John member, who had proposed the subject, was unable to be present.

Speaking for Amherst, E. B. Elderkin said he was in much the same position as Mr. Fisher. He had no resolution to offer.

J. E. DeWolf suggested a large committee to draft a resolution, as the matter was most important.

M. G. DeWolfe saw no reason for putting off the settlement of the question. It had been put off at Moncton, and should not be put off again. He read the 1303 resolution introduced at Charlottetown, and suggested passing it this year.

A. M. Bell moved that the consideration of the question be deferred, and a committee of three be appointed to draft a resolution.

Mr. Fisher seconded the motion which was carried. A committee consisting of W. E. Porter, Captain Read and W. S. Fisher was appointed.

I. C. R. Diversion.

In the absence of Mr. Day, of Parrsboro, E. B. Elderkin introduced the resolution of the Parrsboro Board. At present the road from Moncton to Truro was over-taxed. A loop by Parrsboro would be only slightly longer and the grades less steep. Either the present road would have to be double-tracked or a new loop be built. The former alternative was not a wise one. He accordingly moved :

"That this board press upon the Government of Canada the importance of constructing a loop on the I.C.R. between Amherst and Athol to a point on the I.C.R. at or near Truro, and urge the said Government to immediately hold a survey of the proposed route to locate a line with a view to constructing the same."



A. M. Bell,
2nd Vice-President Maritime Board of Trade.

Inland Fisheries.

A. M. Bell brought forward a resolution on this subject as follows:

"Resolved, that the Government of Canada be requested to ascertain by scientific investigation what measures are necessary to restore and protect our inland fisheries. That having obtained this report, it should be published and distributed as widely as possible, to the end that public opinion regarding this question may universally be aroused; and that subsequently such measures may be adopted as may be found to be desirable and practical in the light of the report and the discussion which may follow its circulation."

Mr. Bell, continuing, said the matter was not sectional, nor should it be approached from the sportsman's standpoint. He believed Nova Scotia was the natural nursery for fish, being one-fifth covered with water. He understood the Government had appointed a large number of inspectors at small salaries, who did not do their work properly. There should be proper protection. If the fisheries were only protected, sportsmen would come to the Province and spend their money there.

J. M. Owen seconded the resolution. He believed the game wardens were not paid enough. He cited instances of infractions of the law and explained how the Nova Scotia fisheries were being destroyed. He advocated a permanent commission, believing the present system quite inadequate.

Senator Ross pointed out that there were laws, but they were not enforced. Complaints were made, but the culprits were never prosecuted. He thought if outsiders were appointed inspectors, there might be some improvement.

J. E. DeWolf asked why culprits were not interfered with,—simply because the game warden didn't like to accuse his neighbors and for political reasons. Even the wardens broke the law. He thought the resolution did not go far enough.

Several other speakers discussed the question, which was unanimously carried.

Chairman Spinney appointed the following committee: W. S. Fisher, E. H. Armstrong, Father Burke, Alex. Stehpen and M. G. DeWolfe, to nominate the officers and select a place of meeting for next year.

Better Steamship Service.

W. S. Fisher introduced the subject (No. 16). He thought there was no doubt there should be a better service across the Bay, to give access to the west. He moved:

"That this board reaffirm its position with reference to the desirability of securing a daily steamship service between New Brunswick and Nova Scoria via St. John and Digby, and that the incoming executive be requested to again bring the matter before the Federal Government with an urgent request that this service be provided at the earliest possible date."

Continuing, he remarked that some doubts had been expressed on the possibility of keeping up a daily service. He felt, however, that there might be considerable improvement.

The resolution was seconded by C. Jamieson, who said the difficulty was to get the company to give a better service for a larger subsidy.

J. M. Owen considered the resolution did not go far enough and thought a service to Annapolis could be instituted as well. He desired to have Annapolis added to the resolution.

President Spinney believed he was the originator of the movement. From the business standpoint, freight service to Western Nova Scotia was very inadequate in Winter. The matter had been discussed at Ottawa with the Minister of Commerce and should be prosecuted until it was an accomplished fact.

The question was put and carried.

THURSDAY AFTERNOON SESSION.

A Pleasant Drive.

No sooner had luncheon been disposed of than the delegates were taken in hand by the Yarmouth Board and given a drive of an hour's duration about the town. The perfect weather, the smart turnouts and the genial hosts made the drive an ideal one, and on every hand exclamations of admiration were heard at the beauties of Yarmouth. The residences in the town are of substantial build and attractive architecture and are surrounded with broad lawns, gardens

and hedges. The latter are the pride of the citizens of Yarmouth, and well deserve all the encomiums that were bestowed on them.

About 3.30 the convention reassembled and business was resumed.

Abolition of Statute Labor.

R. W. Starr, of Wolfville, introduced the subject. He explained that he was not the member selected to take up this matter and consequently had no resolution to offer. However, he believed it to be a subject worthy of discussion. He contended that it was better to employ skilled labor than to force every man to perform his share. It was an antiquated law and required amendment. So far as good roads were concerned everybody wanted them, but few knew how to get them. He thought that the money now being laid out on statute labor could be employed to much better advantage in securing good roads.

Captain Read suggested framing a resolution from the words of the subject on the programme, which was accepted by Mr. Starr. The latter accordingly moved:

"That the Maritime Board of Trade urge upon the Governments of New Brunswick, Nova Scotia and Prince Edward Island the importance of improvement in the common roads of the Provinces and to take steps to diffuse information on the subject, especially by the distribution of literature and the appointing of an official who shall confer with the county councils and lecture on the subject in the various communities throughout his Province; and further, that statute labor in Nova Scotia be abolished."

Captain Read seconded the resolution, explaining conditions in Prince Edward Island, where statute labor was abolished five years ago. A poll tax was now in force to make up for the deficiency. Under the present conditions, it did not take any more money out of the treasury now than when statute labor was in force. He explained the system in force at some length. With regard to advocating good roads, he referred to the literature issued by the good roads associations in Ontario.

The resolution was put to the meeting and carried.

Recoinage.

H. C. Tilley, St. John, introduced the following resolution:

"That in the opinion of the Maritime Board of Trade, Canadian worn silver coins should be redeemed by the Government, because,

"(1) The Government have received full face value for the coins; have made a very large profit out of their issue (on present issues the profit being about one hundred per cent.), and can reproduce from worn coins, coins of full weight at a comparatively slight expense;

"(2) Coins pass from the current to the uncurrent stage imperceptibly, and the circulation of worn coins, when not redeemable, induces a large amount of small deceit in the passing of the coins and lowers the public opinion of Governmental management;

"(3) Great Britain and the United States redeem at the face and recoin their worn silver coins."

Speaking on this resolution, Mr. Tilley felt that there was a great deal of deception practised, which should not be allowed. He cited instances where coins were passed off for higher values than they were worth.

The motion was seconded by W. S. Fisher, St. John, in a brief speech. The St. John Board had recently passed a resolution on the subject at the instance of the Toronto Board. The proposition was a very fair one and should be adopted by the Government.

C. Jamieson brought up the resolution of the Digby Board on the subject of deporting Newfoundland 20-cent pieces and asked that it be added to the resolution before the meeting. This resolution read: "Resolved, that in the opinion of this board, the Government of Canada should deport alien silver specie of the denomination of 20 cents and call in the present Confederation silver of that denomination."

This was agreed to by Mr. Tilley and the question was put and carried.

Maritime Union.

W. S. Fisher reported for the committee appointed at the morning session, and introduced a resolution to the effect,

"That in the opinion of this board the time has arrived for a union of the three Provinces of New Brunswick, Nova Scotia and Prince Edward Island, and that a memorial to this effect be forwarded to each of the Governments and that they be urged to arrange for a meeting of representatives from each Government at an early date."



C. M. Creed, Halifax, N.S.
Secretary Maritime Board of Trade.

One idea brought forward by Mr Fisher was the growing power of the west, compared with the small growth of the Maritime Provinces. The question was what should be done to maintain the balance of power. The Provinces had helped in the development of the west and were now waiting for some share in the benefit. So far they had been somewhat disappointed. The great need was summed up in the one word "transportation." Better facilities for exporting the products of the west were needed. To nationalize the ports, to make them easy of access, and to improve means of traffic were the objects to be aimed at. When it was realized that for six months of the year the Provinces were the sole exits for Canadian goods, the position was stronger than was thought. In union there was strength, and possibly in a union there would be greater possibilities for securing what the Provinces needed.

A. M. Bell seconded the resolution. He felt that the matter would be fully discussed and believed an economy in government would be secured by a union.

Senator Ross considered the matter of supreme importance. What was needed was to educate public opinion. He thought the three Premiers and their Attorney-Generals should come together and formulate a plan of union, which might be put before the people.

Speaking for the Island, Captain Read was sure the people would need education before they would come into a union, though the feeling would be different if the tunnel were built.

E. B. Elderkin felt the matter was impracticable. The Provinces could not be brought together. He referred to the fact that in Prince Edward Island the tax rate was 2 mills. In uniting with Nova Scotia they would be subject to a far higher tax. He did not see how a union would give greater influence. It would reduce the number of members at Ottawa. He felt that the three Governments with all their machinery had more power and that the Provinces were fairly well treated.

Jas. Nichol realized how foolish it was to have three Parliaments for a population of 800,000, but failed to see how a union could be arranged. Some years ago it would have been easier, before the Parliament Buildings at Fredericton were built. On behalf of the people of New Brunswick, he invited the Nova Scotians to come to Fredericton and make it the capital of the united Provinces.

M. G. DeWolfe produced and read a number of newspaper clippings illustrating public opinion on the question and showing how desirable union was. He believed that the young men of the Provinces would feel prouder if they belonged to a larger portion of the Dominion and would be inclined to remain in the country.

Mayor Armstrong felt that the day for a union of the Provinces was passed in 1867, and that the difficulties were now almost insurmountable. He held that moral suasion should be employed now and later on something might be done. He did not see how there would be any more influence exerted at Ottawa if there were a union than if there were not. More good would be done by a union of the business men of the Provinces in such business unions as the Maritime Board than by legislative unions.

Captain Read deprecated the idea that there would be no greater influence at Ottawa if there were a union. At present the members from the Island exert little influence, but as members from a Maritime Province they would have a still greater influence.

In reply, Mayor Armstrong said that on all general questions the members from the Matitime Provinces stood together.

The resolution was carried with a few dissenting voices, and the meeting adjourned.

THURSDAY EVENING SESSION.

At 8.15 the chairman called the meeting to order and J. E. DeWolf presented a resolution to the effect that the Maritime Board of Trade memorialize the Government to appoint a third member

on the Dominion Transportation Commission from the Maritime Provinces.

E. B. Elderkin seconded the motion, commenting on the lack of energy in the Provinces in pressing their claims. The motion was put and carried.

Sydney and Halifax Service.

S. P. Challoner of Sydney introduced the subject of a night service from Sydney to Halifax. It was not a local question as some might suppose. Sydney was a great mining and industrial proposition, with several most important industries. It had consequently a direct interest for all the towns and cities of the Provinces. At present there are two trains out of Sydney, leaving at 7 o'clock and 1 o'clock, one of which was not satisfactory for mails or for travel because of poor connections.

Mr. Challoner outlined how mails go and come from Sydney, showing the length of time consumed. Sydney and its neighboring towns did not ask for a third train, but wanted the one o'clock train removed and a night train substituted. Such a night train would facilitate travel immensely in all directions, and give an improved mail and passenger service.

The resolution presented by Mr. Challoner read that :

"Whereas, the inaugurating of a night express train service between Sydney and Halifax must prove of very great advantage to the business men of the Maritime Provinces, and a benefit to interprovincial trade interests generally ;

"And, whereas, such a service would admit of the best possible through connection by rail and water for all points west of Truro, Halifax and Yarmouth ;

"And, whereas, a night express train between these points would mean a great saving of time to travelers going both east and west ;

"And, whereas, such a service would stimulate tourist traffic to this Province :

"Therefore, resolved that this Maritime Board of Trade do urge upon the Department of Railways that a night express train service between Sydney and Halifax be put into operation at the earliest possible moment, and that a copy of this resolution be sent to all of the Federal representatives for the Maritime Provinces, to the Minister of Railways, and to the several civic corporations throughout these Provinces."

The resolution was seconded by Alex. Stephens of Halifax. It was simply a question of justice to Cape Breton. Today the island was in a position to demand such a concession. Sydney had all the elements to make a great city and it was being built up rapidly. In the district other cities were growing up, and the place was entitled to consideration.

The resolution was passed without further discussion.

Federation With West Indies.

The subject was introduced by E. B. Elderkin of Amherst, who claimed the matter was of the utmost importance to the Maritime Provinces and the whole Dominion. The day must be looked forward to when Canada would be a mighty nation, and it was time to round off Canada with possessions which would supply wants not to be supplied inside the Dominion. He believed the British West Indies would be willing to enter a confederacy with Canada. Neither Canada nor the Indies produced similar products, and an interchange of products would be of mutual advantage. If Canada did not take in the Indies, the opportunity would pass and the latter would join the United States. By taking in the Indies the importance of the Maritime Provinces would be increased. The ports of the Provinces would be the gateways for the passage of all Canadian products for the West Indian Islands. He moved that :

"The Maritime Board of Trade at Yarmouth in annual session convened, respectfully ask the Federal Government to take such action in the premises as will lead to the entrance of the British West India Islands into the Canadian Confederation ;

"Further resolved, the secretary be, and is hereby, instructed to forward this resolution to the members of the Federal Government, and to the members of the Senate and the House of Commons."

The resolution was seconded by W. S. Fisher of St. John. There was a strong desire among the islands to trade with



M. G. DeWolfe, Kentville, N.S.
Auditor Maritime Board of Trade.

Canada, but they had better connections with United States ports. The time was opportune to do something, as they would soon be united with some larger country, and this larger country should be Canada.

W. D. Taunton, Halifax, corroborated the statements made about union sentiment in the islands. Since the adoption of the preferential tariff, the situation had been greatly strengthened. The system of Government was bad and was a heavy tax on the people, so that they would welcome relief by joining the Dominion.

J. E. DeWolf pointed out that the United States were monopolizing trade between the Philippines and their home ports, and between their West Indian Islands and home ports, and he indicated that trade between Canada and the Indies would be of advantage to the Canadian marine and to Canadian shipbuilding.

The resolution was carried unanimously.

A committee comprising Messrs. Fisher, Elderkin, Taunton and Read, was appointed to draft a memorial along these lines to be presented to the Government. The same committee was empowered to take steps to interest the people of the islands in the subject.

Advertising the Provinces.

Captain Read moved that the board reaffirm the resolution of last year and reappoint the committees then appointed, asking them to make a report at the next meeting of the board.

J. E. DeWolf seconded the motion, which was carcied.

Tourist Travel.

A. W. Eakins of Yarmouth introduced the subject. For several years he had much to do with advertising his part of the Province. He felt that the work was of sufficient importance to merit attention from the Government. Provided 10,000 tourists visited Yarmouth and spent at least $50 each, the benefit to the town would total $500,000. He felt that the most effective plan which the Government could adopt would be to employ two or three experts to write up illustrated accounts of the Provinces to be inserted in the leading American magazines. He accordingly moved :

"That in the opinion of this, the Maritime Board of Trade, the several Legislatures of the Maritime Provinces should take into consideration the expediency of appropriating some reasonably large sum of money and expending it in a comprehensive and systematic plan of publicity in the direction mentioned, or in assisting the several local associations which are organized for the purpose of promoting tourist travel."

The motion was seconded by M. G. DeWolfe, who realized that the local efforts made by the various boards of trade were inadequate and should be supplemented by Government aid. He further hoped that better hotels and boarding houses would be opened, better conveyances provided, and no overcharging indulged in. He read a letter from a gentleman in Dublin, in reply to his article in the 1905 Export Number of The Canadian Grocer, showing how little the Provinces were known. Advertising was the great remedy for this defect.

The discussion was continued by Senator Ross, W. S. Fisher, John Agnew, S. P. Challoner, and some others, and the resolution was passed unanimously.

New Officers.

Father Burke reported for the nominating committee, naming the following officers :

President—Capt. Read, Summerside.
1st Vice-President—W. S. Fisher, St. John.
2nd Vice-President—A. M. Bell, Halifax.
Per. Sec'y.—C. M. Creed, Halifax.
Auditor—M. G. DeWolfe, Kentville.
Cor. Sec'y.—D. K. Currie, Summerside.

On motion the report was adopted and the chairman introduced the new president to the meeting.

In a brief speech Captain Read thanked the convention for the honor conferred upon him.

Financial Statement.

C. M. Creed now read the financial statement of the association.

Yarmouth, N.S., August 17, 1905.
The Maritime Board of Trade.
In account with Charles M. Creed.
Secretary-Treasurer.

To general expenses, 1905.....		$191 47	
Secretary's salary, 1905.....		175 06	
			$316 47
Credit.			
By Balance on hand, 1904.....		$156 04	
Per captia tax collected, 1905.....	$210 00		
Per captia tax uncollected, 1905....	63 20	273 20	429 24
Balance.....			$112 77

Examined and found correct.
M. G. DeWolfe,
Yarmouth, N.S., August 16, 1905. Auditor.

On motion the report was adopted.

Place of Meeting.

John Agnew invited the board to visit Summerside next year, and moved that Summerside be the next place of meeting. The motion was seconded by Father Burke.

J. E. DeWolf moved that the invitation from the Amherst Board be accepted, on the ground that Amherst was a more central point. The motion was seconded by J. Nichol.

Upon a standing vote being taken, Amherst was selected as the next place of meeting. and E. B. Elderkin thanked the board for their acceptance of the Amherst Board's invitation.

Father Burke moved that the thanks of the board be extended to the retiring president of the board, to the officers of the Yarmouth Board, and to all others who had assisted in making the present meeting a success, including the press and the mayor and council of Yarmouth.

The motion was seconded by Senator Ross and carried unanimously.

Speeches followed from E. K. Spinney, who replied both for himself and the press and Mayor Armstrong, after which President Read announced the names of the permanent committee to act as a delegation for the board when necessary, as follows: E. K. Spinney, Yarmouth; W. M. Jarvis, St. John; Father Burke, Alberton; J. E. DeWolf, Halifax; J. Nichol, Chatham; S. N. Rattenbury, Charlottetown; G. A. R. Rollings, Sydney; J. Robinson, Moncton; A. P. Prouse, Murray Harbor.

The meeting concluded with the singing of the "National Anthem."

SOME YARMOUTH CHICKENS.

Room 109 !

* * *

Who said Yarmouth was a dry town ?

* * *

B. H. Dodge, M.P.P., kept the fun going every time he rose to speak.

* * *

Past President Spinney is a capital entertainer, and he had everything just right—except the rain.

* * *

References to the presence of the representatives of the MacLean Publishing Co. were greeted with applause. Thanks!

* * *

There's a nice Whist Club in Yarmouth, and through President Spinney's kindness some of the delegates were entertained there.

* * *

Secretary Creed was given a splendid opportunity to sing a song for the crowd at the opening session, but he failed to rise to the occasion.

* * *

"May I ask the mover of the resolution," said Captain Read, "if he means three drills a year for the boys or a drill for three years ?" (Laughter).

* * *

"I'm the old man yet," said "Charlev" Creed amid wild applause as he thanked the convention for re-appointing him to the secretaryship.

* * *

M. G. DeWolfe was rather taken back when his remark that the members at Ottawa didn't get much of a reward for their services was greeted with laughter.

Senator Ross told with great glee about his present of a 20-year-old bottle of Scotch last Christmas. He kept it until March 24. when he celebrated his golden wedding with it.

* * *

Father Burke is Witty.

"When it comes to advertising this tunnel we may be accused of being like the fussy man who was traveling some distance on the railroad. He had a trunk in the baggage car, and every stop the train made he would rush into the car to see that the trunk was there. Finally the irritated baggage-man called out to him, 'I wish you were an elephant instead of an ass, and then you'd always have your trunk with you.' "



Headquarters of Pickford & Black Steamship Line, Halifax.

Senator Ross was an apologist for the Government whenever an accusation of neglect came up. His expression, "wearied with their long labors at Ottawa," evoked much comment.

* * *

Special thanks were tendered the MacLean Publishing Co. for the attention they paid to the proceedings of the board. The company had three representatives this year at Yarmouth.

* * *

The Grand Hotel came in for many compliments. M. G. DeWolfe said it only lacked an elevator and elevators. Another delegate claimed it was the best hotel in the Provinces.

Senator Ross' Sympathy.

"The way I feel towards Prince Edward Island is something like the way the Irish M.P. felt in London, when he encountered one night a big man lying in a gutter. 'My man,' said he, 'I wish I could help you up, but I can't; so I'll just lie down beside you and keep you company.' "

Captain Read Tells One.

"Tunnels are so common in England that people there wonder there are so few in Canada. Why, when they were building the C.P.R. across the prairie, an Englishman came along and on seeing the work of construction exclaimed: 'I don't see how you can ever put this railway through; there won't be any tunnels !' "

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RETURNED
SEP 20 1905
To Owner
Cut Book 40
page 53

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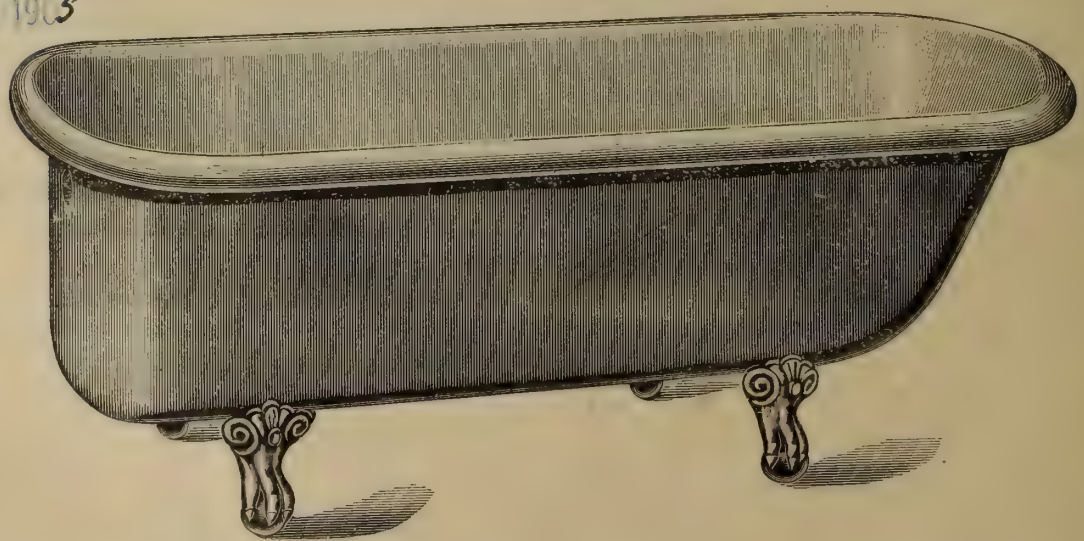
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SUGGESTED BY CONVENTION.

THE Maritime Board of Trade, whose proceedings are fully reported in this issue of The Canadian Grocer, is a unique organization, a business man's voluntary parliament, where matters of interest, local, Provincial and National, are discussed with a refreshing frankness, and to which the student of current thought may turn with confidence for a trustworthy index of Maritime opinion.

The impression is received from attending the meetings of the board that the members are very much in earnest, and a laudable enthusiasm for the advancement of the interests of the east is everywhere apparent. If open to criticism upon any point it is on a perhaps natural tendency to consider matters of purely local interest of greater National importance than their sister Provinces may be disposed to admit, and a desire to shoulder the financing of these local projects upon the Federal Government.

These matters are, however, incidental and the questions of larger interest were handled in a manner that would have reflected credit upon a parliament whose members were under the fine stimulus of an adequate indemnity.

* * *

A fast mail service is one of the questions discussed of general interest. It is, indeed, little creditable that in spite of our present subsidies, 564,000 pounds of Canada's Atlantic mail matter had been conveyed in 1903 via New York, while only 147,000 pounds, largely parcel post, via Canadian ports. The demand for first-class service in return for future subsidies was well advised.

* * *

The proposition for a union of the three Eastern Provinces, endorsed by the convention, was a step in the right direction, and if local interests can be overcome the east would gain in strength and solidarity. Economies of administration and a better choice of public men could be secured.

* * *

The resolution dealing with the placing of the Intercolonial Railway under a commission was, unfortunately, not discussed. There are many in Central Canada who are of the opinion that such a move would result in placing the Intercolonial on a paying basis. The views of those most directly concerned would be interesting.

* * *

The resolution passed a year ago, calling on the Government to afford protection necessary to encourage the building of steel ships, was reaffirmed, and it is to be hoped that in the tariff revision, so long promised, this important matter will receive due and sympathetic consideration.

* * *

The rounding off of Confederation by the inclusion of Newfoundland and the West Indies, endorsed by the convention, affords food for thought. As to Newfoundland there is little question in the minds of Canadians generally and the Government could increase its prestige in no more signal manner than by the realization of this project. The inclusion of the West Indies is a matter that has been given less thought. The idea is almost Imperial in its scope, and is extremely seductive. The fact that our Maritime friends, who are best acquainted with the conditions in the Island, have so enthusiastically endorsed the idea argues for its feasibility. May the day hasten when we can speak of our Canadian Dominions beyond the sea.

BRITISH REPRESENTATION BEFORE TARIFF COMMISSION?

ADDITIONAL interest is lent to the approaching sessions of the Dominion Tariff Commission by the possibility of British chambers of commerce sending representatives to secure a hearing before the commissioners.

This plan has been suggested by Mr. Edward Porritt, who recently toured Canada as a special correspondent of Commercial Intelligence. His first letter on his return to England referred to this point and justified the idea, treating the Canadian Manufacturers' excursion as a kind of precedent for British participation in fashioning the commercial policy of Canada.

COMMERCIAL TRAVELERS PROTEST.

AT a meeting held in the Windsor Hotel, Montreal, last week, delegates representing the various Commercial Travelers' Associations in Canada passed a series of resolutions condemning the $300 tax imposed by the Quebec Government on non-resident commercial travelers representing foreign houses.

The subject was discussed at great length, and a rerolution, moved by Mr. John Horne, president of the Northwest Commercial Travelers' Association, and seconded by Mr. J. L. Hetherington, president of the Maritime Commercial Travelers' Association, was unanimously carried by the meeting. The resolution, copies of which will be sent to Sir Richard Cartwright, Minister of Trade and Commerce, and to Sir Wilfrid Laurier, was as follows:

"This meeting of the representatives of the Commercial Travelers' Associations of Canada unanimously resolves that the legislation enacted by three of the Provinces placing a tax on commercial travelers is detrimental to the large commercial interests which they represent. The legislation also appears to us contrary to the spirit of Confederation, it being in restraint of that freedom of trade and commerce which is so essential between the various Provinces of our Dominion. We would, therefore, at this joint meeting, again place ourselves on record as decidedly opposed to this legislation, and in the continued hope and expectation that his Majesty's Government of the Dominion will not permit such legislation to remain on the statute book of any of the Provinces."

Other business transacted by the delegates included a discussion, with members of the Eastern Passenger Association, of existing arrangements, and possible changes. It was mutually agreed that no immediate changes should be made.

The associations represented at the conference included the Dominion Commercial Travelers' Association, Commercial Travelers' Association of Canada, Maritime Commercial Travelers' Association, Western Ontario Commercial Travelers' Association, and Northwest Commercial Travelers' Association.

As a result of this and other protests, notably those from British chambers of commerce, it is now understood that the Federal Government will take up the

matter and probably exercise its prerogative to quash, or at any rate, to modify the obnoxious bill.

CANADIAN NICKEL FOR INDIAN COINS.

IT has often been asserted that Canadians never awaken to their own possibilities until they have been aroused by some other nation stepping in to take advantage of them. In this way, American syndicates have developed many of our best resources; and now, again, another country is reminding Canadians of a use for one of our most typical products.

Col. Geoffrey M. Porter, master of the mint at Calcutta, India, has for some time been touring North America, visiting its mineral mines and money-manufacturing institutions. His visit has been brought about by the decision of the Indian authorities to adopt a more sanitary coinage, as it has been found that the hot climate of that country soon corrodes the copper and renders it dirty and unsanitary. Accordingly, India recently authorized the adoption of pure nickel for coins of small value, both for sanitary reasons and for the fact that the brightness of the new coinage will catch the fancy of the native population. Col. Porter has been visiting the nickel mines of Sudbury to make sure of a reasonable rate on the metal for years to come. Canadian nickel will now be extensively used in coining the Indian anna—which is worth about a penny.

In connection with Col. Porter's visit to our country, some interesting facts have developed. Few Canadians knew before that the Sudbury district turns out fully one-half of the world's nickel product; yet such is the case. It has also been learned that some European countries are already using the pure nickel coins, among them being France, Italy, Austria-Hungary, and Switzerland.

The question now arises, why Canada should not coin her cents in pure nickel? There are few who will admire the appearance of our clumsy "coppers," and they are notoriously unpopular freight, even in a poor man's pocket. In the light of the paramount position which Canada holds among the nickel-producing countries of the world, it would seem very proper to nationalize our currency, by following the example of India, and replacing our "coppers" with pure nickel coins.

DO WE WANT THE METRIC SYSTEM ?

AS matters now stand, despite the bitter opposition on the part of those opposed to it, the adoption of the metric system in the United Kingdom seems assured. For some years a strenuous warfare has been carried on between the Decimal Association, who have been making every effort to educate people as to the merits of the decimal system and to make it compulsory by law, and the British Association of Weights and Measures, whose aim and object is the preservation of the present standards. Whole volumes were written by both parties with arguments for and against. The Decimal Association and its supporters, with Lord Kelvin as one of its most active workers, has got well in the lead. A bill to render the metric system compulsory in Great Britain has passed the House of Lords and is now before the Commons. A circular issued by the Decimal Association states that more than 330 members are pledged to its support and every effort will be made to carry the bill through.

While we believe that the metric system possesses advantages above the present standards sufficient to warrant its general acceptance, and that it is merely a matter of a few years before its use will become almost universal, the change will involve an enormous expenditure of time and money.

A SPECIAL INVITATION.

We extend to our readers a hearty invitation to visit our Toronto offices and make themselves at home during the National Exposition. Our staff will be entirely at your disposal and will be glad to give you any information desired. Remember, we are always

AT YOUR SERVICE.

Such a change would affect the manufacturers of machinery and machine tools more than any other class, necessitating the re-designing of all tools and a large amount of the apparatus at present employed. We would like to hear an expression of opinion from some of our Canadian manufacturers as to whether or not you would like to see the metric system adopted in Canada, and if so, how long before you would be in a position to put it into operation.

A CANADIAN COPPER REFINERY.

MOST Canadians think that the products of their numerous copper mines, after going through the smelters, must go abroad to be refined; but this is only partially true. There is one refinery in Canada, operated by the Montreal Copper Co., which is associated with the Syracuse Smelting Works of Montreal. This company now have a ten-ton-a-day plant in operation and, although still in their infancy, they have already been able to compete with the United States copper trust.

To a Hardware and Metal representative, Mr. Louis Sapery, the manager, explained that the company are refining all kinds of copper-bearing material into ingot casting copper. As yet, however, the plant is insufficient to extract gold and silver from the higher grades of the virgin metal, and the only copper matte refined is that which contains merely a small percentage of the metals named.

It is interesting to note that the company have recently shipped 100,000 lbs. of copper to Hong Kong, where it will be used in making Chinese coins. Another 50,000 lbs. are being shipped to Antwerp, Belgium, where they will be transferred to Germany. Early next week, an order of 100,000 lbs. will be sent forward to Watertown, N.Y., to be used by the New York Air Brake Co.

When asked his opinion of the existing scarcity in copper, Mr. Sapery replied that he thought the situation was due to a healthy demand, and that manipulation had little to do with it. If copper goes too high, he predicts that it will be to a great extent superseded by aluminum, which makes an excellent substitute, for electrical purposes, being used by several telegraph lines. The main objection to aluminum, is that it is hard to solder. At present, aluminum is about a half cent higher than copper.

The Montreal Copper Co. have felt the boom in copper, and are working their plant to the fullest capacity. Some large orders have been refused, of late, and there is every evidence that a great deal more will be heard of this company in the future.

PURIFYING DRINKING WATER BY ELECTRICITY.

THE Frankfort News states that it is probable that electric purification of drinking water will soon be introduced into the home. This method, already used by a number of municipal waterworks, is based upon the germ-killing effects of ozone, which is cheaply engendered by electricity. If an electric discharge takes place between two glass tubes, one inside the other, whose surfaces facing each other are coated with metal, ozone is developed in the space between the tubes.

Electricians have tried in recent years to simplify the means of electric ozone development for purifying water. The ideal apparatus would be one which every housekeeper could put up in the kitchen, and by utilizing the electric current of the common electric light wires purify every glass of drinking water. According to the Frankfurter Umschau, such an apparatus seems to

have been successfully made by a French engineer, Mr. Otto.

This apparatus is of very simple construction and takes up little space. It consists principally of a small, closed box, the metal cover of which is made conductory with the bottom. In the box is an ozone developer, an interrupter, and a tin tube. Through the latter the ozone, which first has to pass through a cotton stopper to free it from dust and germs contained in the air, is conducted into the water and mixed therewith. If much ozone has been absorbed, the water becomes phosphorescent in the dark. The most important part of the apparatus is the "mixer," action of which can be interrupted at will. The apparatus is capable of purifying about 60 gallons of water an hour, and the cost per hour is about the same as that of an ordinary electric incandescent light.—U. S. Consular Report, Frankfort, Germany.

IRON ORE IN NOVA SCOTIA.

FOR some time past an interesting discussion has been going on in the Nova Scotia papers as to the existence of large and valuable bodies of iron ore in that Province and the possibilities of still further developing the mining industry. It would seem a peculiar policy for the Government to continue to aid the iron and steel mills in Nova Scotia to produce goods from imported metals if rich ore beds are lying undeveloped within easy reach of the mills. In discussing the question, the Halifax Chronicle says:

"We cannot understand why the very existence of iron ore in commercially productive quantities should be denied in order that an argument against the payment of a bounty should be manufactured. The truth is it is no answer, and the further truth is we have many known deposits abundant in quantity and excellent in quality. Emphasis is laid on the alleged fact that the existing iron manufacturers have searched for ore and found it not. What value can be given to the argument even if it were based on a fact when we reflect that these searches were made on properties owned by others, which the companies named probably could not buy at their own price. At the best, the reports of the iron manufactures could not be considered disinterested under such circumstances.

"As to Torbrook, we have quoted a high authority to prove that ore exists there in very large quantity.

"The Pictou ore fields mentioned belong to the Nova Scotia Steel Co., from which that company for a long time drew their chief supply, and, as we before pointed out, thought them important enough to make them, among other properties, the basis of a security for a bond issue.

"The Londonderry deposits have always been regarded as of the best quality. The aged among us remember that our school books informed us that the iron made from Londonderry ore was equal to the best Swedish iron. Thousands of tons of Londonderry iron have been sold in Canada and elsewhere in competition with the best, and for every purpose for which iron is used. This ore is being mined to-day and the highest quality of iron is being produced."

EMPLOYES' OUTING.

HEREWITH is a photograph of two of the eight street cars furnished by the United Brass Mfg. Co., Cleveland, better known as United-Cleveland, to their employes on July 15th, attending outing given in their behalf, and which outing was a most pleasant affair in every way. Those participating in the outing numbered 700.



United Brass Co.'s Outing.

Various contests were indulged in and at least twenty handsome prizes distributed. Another and also interesting feature attending the outing was the display of bells which have become known throughout the plumbing fraternity as one of the United Brass Mfg. Co.'s unique methods of advertising, and it is needless to say that they attracted considerable attention. Each person also bore a handsome white cap inscribed with the words, "United-Cleveland."

It is a pleasure to know that the most friendly feelings exist between employers and employes, and it is to be hoped that each succeeding event will be marked and attended with as great success as this one.

The bells referred to were exactly the same as those distributed at the recent Atlanta conventon and this company will be glad to send one to any one taking the time and pains of writing for it. It is a souvenir worth having.

DON'T NEGLECT CORRESPONDENCE.

IT would seem as if business correspondence were a thing to be played ducks and drakes with, if one is to judge from the persistent practice of certain Canadian firms of answering trade inquiries when it suits their convenience. It is hard to believe that there are business men in Canada to-day who date their letters twenty or thirty days back regularly for the simple reason that they attend to their correspondence only once a month. Fortunately such extremes are rare, and yet it is to be regretted that our average business man is not above reproach in this regard. Complaints are received continually on the ground that it is practically impossible to communicate with certain Canadian business houses. Whether it is negligence or because such firms feel that they control the situation, and have a right to subject patrons to a maximum of inconvenience, the fact remains that it is short-sighted business policy.

The human element is bound to crop up in all commercial transactions sooner or later, and it is only natural for a man who wants to do business, or to secure trade information, to feel offended when his queries are persistently ignored or shelved until such time as an answer is no longer of service. The disaffection is sure to spread from man to the community, and it is only a matter of time until its reflex action is noticed in a falling off in trade. Not even the poor business man can afford to invite such a catastrophe.

"DOMINION BRAND" TARRED FELT
(THE OLD RELIABLE QUICK SELLER)

ROOFING PITCH
COAL - TAR

WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

CONSULT THE WELL-KNOWN MANUFACTURERS

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ATKINS HIGH-GRADE, CROSS-CUT SAWS ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



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CANADIAN BRANCH : 56 King St. E., Toronto, Canada.

LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

Write for Catalogue and Prices.



GURNEY CYLINDER LOCKS

We shall be delighted to send a detailed statement to any hardware dealer setting forth the reasons for our belief in ***Gurney Cylinder Locks.***

These locks are quite the equal of the high-priced locks of United States manufacture. They are made in Canada, are sold at a much lower price and are ***as good as, if not better than,*** any other locks known to the trade. Send for Catalogue No. 7 and Supplements. In it you will find ***Gurney Cylinder Locks*** and also numerous designs in artistic trimmings.

THE GURNEY, TILDEN CO., Limited

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

HAMILTON

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

BUILDING NOTES.

F. G. England is building a new jewelry store in Regina.

Wm. Bailey will erect a large dwelling on Keith road, Vancouver.

Adams Bros. are going to build a business block in Moosomin.

A $50,000 public school will be erected in the south end of Calgary.

The new factory of H. K. Wampole & Co., Toronto, is progressing well.

Wm. Hendrie, Hamilton, is building a concrete block residence in Hamilton.

Extensive improvements are to be made to the Russell House in Ottawa.

The steel work on the new bridge at Ferry Point, N.W.T., is now completed.

A new railway station is to be built at Charlottetown, P.E.I., for the I.C.R.

Work has been commenced on the new $40,000 normal school at Killarney, Ont.

Work on the $12,000 C.P.R. freight sheds in Moose Jaw has been commenced.

The Brackman -Ker Milling Co. are erecting a large grain tank at Strathcona.

The Canada Permanent Mortgage Co. are going to erect a business block in Regina.

J. M. Griffin & Co. are building a new warehouse on Railway street, St. Thomas.

Work has been commenced on F. M. Griffin & Co.'s new office building in St. Thomas.

The Estevan Grain Co., Estevan, Man., are erecting a new 30,000-bushel elevator.

The new rails on the Pere Marquette have been laid from Cedar Springs to Kemptville.

John McRobert will build a brick dwelling on King street, Hamilton, to cost $1,800.

The contract for the Merchants Bank Building, Brampton, has been let to Mason & Hill.

Wm. Lyal is contemplating the erection of a ten-storey hotel in Winnipeg to cost $750,000.

C. W. Yocum will build a cement block house on Minto avenue, Hamilton, to cost $1,000.

The development of Regina is shown by the great number of new buildings going up there.

Mr. Simpson, contractor, is building a large flat dwelling block on Joseph street, Fort Rouge.

J. H. Harris & Co., Moncton, N.B., are erecting a large new concrete construction warehouse.

The Point Douglas avenue Presbyterian church, Winnipeg, are erecting a new stone and brick church.

Aikins & Pepler are erecting a combined business and apartment block on Osborne street, Winnipeg.

A. F. Anderson & Co., implement dealers, Winnipeg, are erecting a track warehouse on Henry avenue.

R. & J. Poug will erect a $2,000 residence on Robert and Mary streets, Hamilton, for R. Mathewinan.

The contract for the erection of the wholesale fish warehouse of W. J. Guest, Winnipeg, has now been let.

A block of stores and living apartments is to be erected on Logan avenue, Winnipeg, by W. B. Oakley.

E. H. Briggs & Co., broom manufacturers, Winnipeg, will erect a large factory on Henry street this year.

Plans have been prepared for a new G.T.R. station at Brampton. The building will be granite and red brick.

Mr. Kirk Fletcher is having a large cement block residence erected on his farm southwest of Saskatoon, N.W.T.

Plans are under way for the erection of buildings for the construction and repair of cars for the I.C.R. at Moncton.

The Western Commercial Co. have commenced building operations on their property on 20th street in Riversdale, N.W.T.

The following houses are going up in Peterboro, all on Hunter street: E. R. Wood, Dr. Morrison, W. G. Morrow and Robt. Neill.

TORONTO BUILDING PERMITS.

E. Woods, dwelling, Woodburn avenue, $1,000.

John Lester, stable, Spadina avenue, $1,000.

J. T. Deacon, store and dwelling, $1,000.

S. Hindmarsh, dwelling, Follis avenue, $1,100.

W. Marks, dwelling, Ossington avenue, $3,000.

G. A. Newman, residence, South Drive, $7,000.

H. George, dwelling, Macdonell avenue, $2,500.

B. Magee, dwelling, Yarmouth road, $1,000.

M. J. Kelly, residence, Dale avenue, $7,500.

G. E. Key, dwelling, Garnet avenue, $3,000.

H. I. Milligan, dwelling, Perth avenue, $2,200.

S. Austin, dwelling, Dovercourt road, $1,800.

G. S. Bell, dwelling, Emerson avenue, $1,800.

J. Simmons, dwellings, Yonge street, $1,800.

L. Firth, dwelling, Crawford street, $1,000.

J. Luter, dwelling, Melville avenue, $1,000.

Jas. Nash, dwelling, Woolfrey avenue, $1,050.

E. F. Phillips, dwelling, Bain avenue, $1,200.

M. Ryan, dwelling, Bloor street west, $10,000.

J. Graydon, 16 Spadina road, dwelling, $5,000.

Chas. Landy, dwelling, Preston avenue, $1,100.

H. Durke, dwelling, Palmerston boulevard, $5,000.

Geo. Peacock, dwelling, Van Horne street, $1,200.

C. Selwood, dwelling, Van Horne street, $1,500.

J. E. Bottrel, dwelling, Crawford street, $1,000.

Wm. E. Weale, dwelling, St. Clarens avenue, $2,000.

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.
Water Proof Floors for Malt Houses, Breweries, Slaughter Houses Cheese Factories, Cellar, Stable Floors, etc.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables—"Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

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HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application. Prompt shipments.

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INVINCIBLE FLOOR SPRINGS
Combine all the qualities desirable in a Door Closer. They work silently and effectually, and never get out of order. In use in many of the public buildings throughout Great Britain and the Colonies.
MADE SOLELY BY
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WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO. LIMITED.
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Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

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the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

It's the special combination of Lenses and Prisms which makes

MAXimum LIGHT GLASS

luminous, and the absence of that "special" combination which frustrates the attempts of other systems to be luminous—on all occasions. The realization of these facts in one city alone led to the placing of eight thousand three hundred

MAXIMUM LIGHT GLASS

windows in office buildings. At the end of the year the glass had **paid** for itself in the saving of artificial illumination **alone,** and—**what about health?** Can you regard this with indifference? Can you close your eyes to the opportunity before you to-day—gone to-morrow? A postcard secures samples and Booklet. Send one—now.

Sole Canadian Agents:

The Hobbs Manufacturing Co., Limited, - London, Ont.

Glass Importers and Manufacturers

J. S. Montgomery, dwelling, Bathurst street, $7,000.
H. E. Hayhoe & Co., factory, Dufferin street, $1,000.
Taylor & Nesbitt, residence, Dufferin street, $2,000.
J. R. Fullerton, dwelling, Balmoral avenue, $3,000.
J. & G. Paul, dwelling, Ossington avenue, $1,200.
J. A. Mathewson, dwelling, Deleware avenue, $3,000.
E. L. Kingsley, dwelling, Hawthorne avenue, $6,000.
A. F. Saunders, dwelling, Concord avenue, $2,000.
John Lambert, dwelling, Ossington avenue, $1,600.
J. Craig, dwelling, Wells and Howland streets, $9,000.
J. A. Aberdeen, dwelling, Broadview avenue, $12,000.
F. W. Cox, store, Pape and Dagmar avenues, $2,200.
M. J. Maloney, residence, Palmerston boulevard, $4,000.
W. D. Michall, residence, Palmerston boulevard, $4,000.
L. Deacon, three dwellings, 1928 Queen street east, $5,400.
Wm. Stark and W. Black, dwellings, Walmer road, $7,000.
J. Graydon, pair dwellings, St. George street, $8,000.
W. J. McIlmurray, dwelling, 241 Logan avenue, $2,000.
H. & J. Raine, dwelling altered, Cumberland street, $1,500.
J. S. Van Camp & Son, dwelling, Howland road, $3,000.
Traders Bank of Canada, King and Spadina avenue, $5,000.
J. D. Willson, pair dwellings, St. Clarens avenue, $5,000.
W. E. Redway, dwelling, Broadview and Smith streets, $4,500.
Stauntons Limited, factory, steel and concrete, Yonge street, $50,000.
Taylor-Forbes Co., Limited, storage building, King street west, $4,500.
College street Methodist Church, Sunday school, Sheridan avenue, $20,000.
Dunlop Tire Co., storage building, Booth avenue and Natalie street, $1,000.
Copland Brewing Co., addition to hotel, King and Sherborne streets, $8,000.
The Traders Bank of Canada, 15-storey office building, Yonge and Colborne streets, $600,000.

MONTREAL BUILDING PERMITS.

E. Major, Breboeuf street, Duvernay ward, dwelling, $1,800.
Henry Gatehouse, rear 875 Dorchester street, stables, $5,000.
Western Hospital, Tupper street, St. Andrew ward, $40,000.
E. Gagnon, Aylevin street, Hochelaga ward, dwellings, $2,600.
C. Lecaratier, 1091 Huntly street, street, dwellings, $1,800.
O. Groleau, Davidson street, Hochelaga ward, dwellings, $3,000.
F. G. Denault, Forsyth street, Hochelaga ward, dwellings, $2,000.
M. Caisse, Rivard street, St. Jean Baptiste ward, dwellings, $2,205.
D. Fileois, Hotel de Ville street, St. Jean Baptiste ward, dwellings, $1,500.
E. Bernier, Ste. Catherine street, Hochelaga ward, dwellings and store, $4,000.
Sta. Poizeau, 1184 St. Lawrence street, alterations to dwellings and store, $3,000.



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GOOD WORKING-UP QUALITY, ASK
RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND,
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Arrow Brand Asphalt Ready Roofing
Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.
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There can be Trade without much BUSINESS about it.
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The Manufacturers List Co., - - - Toronto.

When Your Customer Says :

"I want you to put in for me a heating plant that will be first-class in every respect," this reply will meet all the demands of the situation :

"Then I will use the

PEASE ECONOMY"

From your standpoint the installing of a Heating Apparatus presents two desirable opportunities—first, to add to your profits and, second, to please your customer and thus gain a permanent hold on his trade. How much easier to accomplish this when you use a Heater that is time-tested and sure—one that the great majority of our people know to be the best !

We can supply your every need in Heating Apparatus and we invite your inquiries.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

THE James Smart Mfg. Co., Brockville, are installing the Kelsey warm air generators in the following schools : Public School at Elknorn, Man.; Public School at Wawanesa, Man., and the Caroline Street School, Hamilton.

The Ingersoll Nut Co. are building a new factory in Ingersoll.

The large grain elevator of Green Bros., at Harrow, Ont., has been burned.

The Dominion Copper Co., Vancouver, will blow in another idle smelter in a few weeks.

The machinery is being installed in the plant of the Brantford Gas Co., Brantford.

W. A. Inglis has installed a new Gyrator system in his flouring mills at Owen Sound.

The large saw mill at Fay Settlement, N.B., owned by S. McNutt, has been destroyed by fire.

A granite cutting industry has been established at Rock Island, Quebec, by John C. Lacasse.

Sample goods have been turned out by the Brass Foundry at Wallaceburg, and are apparently very satisfactory.

The Nova Scotia Steel & Coal Co., Sydney, N.S., have their blast furnace and open hearth plant in full operation.

Heavy shipments of freight consigned by eastern factories to agents and firms in the Yukon are passing through Winnipeg at present.

Tests are now being made in Victoria, B.C., by Prof. T. S. Lowe, to ascertain whether the Vancouver Island coal is suitable for coke making.

The Canadian Sand and Lime Brick Co., Toronto Junction, have installed their large new engine and boilers in the new works on Syme's road.

The building for the Acheson Graphite Works in Welland is rapidly assuming shape. It is expected the machinery will arrive the first part of October, when operations will soon begin.

A large aerated water factory has just been completed for the Gooderham firm at York Mills, and the installation of the machinery is in progress. It is expected that manufacturing will begin in a few weeks.

The Dominion Government has placed an order with the Dominion Iron and Steel Co. for the supply of 25,000 tons of 80-pound steel rails for use by the Intercolonial Railway. The contract calls for immediate delivery.

The box factory of the British Columbia Box and Lumber Co., Vancouver, has been purchased by J. Hanbury, a prominent Brandon lumberman. Mr. Hanbury is also contemplating the establishing of flour mills and elevators in Vancouver.

J. S. Longhead & Son, Sarnia, Ont., manufacturers of bent woodwork for carriages, sleighs, etc., are adding materially to the handling capacity of their plant. They are erecting new buildings aggregating 800 feet in length for storage purposes for both the raw material and the finished product.

The Canadian Tunnel Co. and the Michigan Tunnel Co., the two companies chartered to build the tunnel under the Detroit River, have combined under the name of the Detroit River Tunnel Co. The new company is capitalized at three millions, a merely nominal one, as the work will cost not less than ten million dollars.

The Brandon Binder Twine Co., Limited, Brandon, have gone out of business, and before the end of September the entire plant will be advertised for sale by tender. The cause of this is the directors not wishing to raise more capital, which would be necessary for the carrying on of the business, because of the forced condition of the binder twine trade.

Companies Incorporated.

The Burns Co., Limited, Oshawa; capital, $20,000; purpose, to manufacture and sell general merchandise; directors, W. J. Burns, A. E. Burns, and F. N. Burns, all of Oshawa.

Ault Bros., Limited, Aultsville; capital, $40,000; purpose, to manufacture and deal in goods, wares and merchandise; directors, C. S. Ault, A. W. Ault and A. E. Ault, all of Aultsville.

The Power and Gas Machine Co., Limited, Galt; capital, $100,000; purpose, to manufacture and deal in gas generators, etc.; directors, W. H. Cone of Berlin, and F. E. Brown and W. Foster of Galt.

The Bates Mfg. Co., Limited, Toronto; capital, $100,000; purpose, to manufacture and deal in wares, goods and merchandise; directors, T. Bates, R. T. Duffy and A. G. Brown, all of Toronto.

The Algonquin Co., Limited, Toronto; capital, $300,000; purpose, to operate timber limits, saw mills, etc.; directors, T. Minton, F. Sinclair, W. Bullock, J. Creighton and G. T. Bullock, all of Toronto.

The Atlantic Soap Co., Limited, Toronto; capital, $40,000; purpose, to manufacture, refine and deal in soaps, oils, chemicals, etc.; directors, F. N. Vanzant, S. Jardine and D. G. Buchanan, all of Toronto.

The Pembroke Rink Co., Limited, Pembroke; capital, $20,000; purpose, to erect and maintain a hockey and skating rink; directors, A. Millar, J. S. Fraser, R. W. Gordon, W. H. Bromley, E. Behan and A. Morris.

The Gore Bay Brick & Tile Mfg. Co., Limited, Gore Bay; capital, $3,000; purpose, to manufacture brick and tile; directors, R. R. McKessock, R. J. Porter,

J. W. Jackson, R. J. Armstrong and W. Burns, all of Gore Bay.

The Linton Realty Co., Limited, of Montreal; capital, $45,000; purpose, to erect, construct and alter houses, buildings, etc.; directors, W. G. Ross, H. P. Douglas, C. Archer, J. E. Perrault, R. G. LeBarre, all of Montreal.

The Plumbing & Heating Supply Co., Limited, Toronto; capital, $100,000; purpose, to manufacture and deal in all kinds of plumbers', steamfitters' and heating supplies, etc.; directors, F. Armstrong, W. Mansell and D. Fasken.

The D. M. Steward Mfg. Co. of Canada, Limited, Toronto; capital, $40,000; purpose, to manufacture and deal in gas burners, insulators, etc.; directors, C. S. Steward of Chattanooga, Tenn, W. H. Frazier and S. L. Ezell of Toronto.

The Eclipse Umbrella Co., Limited, Montreal; capital, $100,000; purpose, to manufacture umbrellas, suspenders, haberdashery, etc.; directors, J. R. Gordon, F. Worden, G. W. Shewan, R. A. Sunton, D. Patterson, all of Montreal.

The New Ontario Ore Refining Co., Limited, Toronto; capital, $500,000; purpose, to carry on the business of a mining, milling, reduction and development company; directors, T. H. Barton, O. F. Taylor and A. W. Barton, all of Toronto.

St. Lawrence Supply Co., Limited, Montreal; capital, $20,000; purpose, to carry on a business as machinists and engineers; directors, W. A. McKay, J. G. Veith, A. R. Oughtred, and M. A. Phelan, of Montreal, and E. G. Place of Westmount.

The Wallaceburg Brass & Iron Mfg. Co., Limited, Wallaceburg; capital, $40,000; purpose, to manufacture brass and iron goods; directors, D. A. Gordon, A. LaCourse, H. W. Burgess, H. J. McDougall and J. F. McDougall, all of Wallaceburg.

N. J. Holden Co., Limited, of Montreal; capital, $200,000; purpose, to manufacture and deal in any kind of apparatus used in the transportation of persons or property; directors, L. Johnson, W. Palmer, A. L. DeGuire, P. A. Masse and C. Bethell, all of Montreal.

Kerr Lake Mining Co., Limited, Toronto; capital, $40,000; purpose, to carry on the business of a mining, milling, reduction and development company; directors, E. Steindler, D. M. Steindler, J. J. Steindler, W. J. White, all of New York, and J. A. Jacobs of Montreal.

The Randolph Macdonald Co., Limited, Three Rivers, Que.; capital, $100,000; purpose, to take over the business of contractor now carried on by Randolph Macdonald at Toronto; directors, R. Macdonald of Toronto, W. R. Macdonald and W. H. Marrow of Three Rivers, A. Stephen of Collingwood, and M. McAndrew of St. Catharines.

The Windsor & Cobalt Mining Co., Limited, Windsor; capital, $150,000; purpose, to carry on in all its branches the operations of a mining, milling, reduction and development company; directors, John Scott of Windsor; J. S. Austin, J. W. Kerr and M. Price, of the township of Maidstone, in the county of Essex, and G. A. Wintemute and J. F. Millen of Sandwich.



No. 18. OSHAWA, ONT. August 26, 1905

TO OUR FRIENDS

Owing to our being unprecedentedly rushed this season we cannot be at the Toronto Fair Grounds, but extend to our patrons and friends a cordial invitation to visit our warerooms at 50 Yonge St., Toronto, where they will be cordially welcomed by our local manager.

TO THE TRADE

We now manufacture: "Pedlar's" Perfect Lathing, "Pedlar's" Perfect Rubber Roofing, "Pedlar's" Corrugated Iron, "Pedlar's" Steel Shingles, "Pedlar's" Oshawa Shingles, "Pedlar's" Diamond Tiles, "Pedlar's" Spanish Tiles, "Pedlar's" Hexagon Tiles, "Pedlar's" Square Nose Tiles, "Pedlar's" Brick Sidings, "Pedlar's" Stone Sidings, "Pedlar's" Brick and Stone Corners, "Pedlar's" Victoria Steel Shingles, "Pedlar's" E. Troughs, "Pedlar's" Corrugated and Plain Conductors, "Pedlar's" Gal. Iron Cornices, "Pedlar's" Steel Ceilings, "Pedlar's" Steel Sidewalls, "Pedlar's" V-Crimped Roofings, "Pedlar's" Standing Seam Roofings, "Pedlar's" Stamped Ornaments, Elbows, Shoes, T's., Hangers, Letters, Finials, Terminals, Ridges, Ornaments, etc., etc. In fact, anything and everything in sheet-metal building materials. If we don't make it, it is because the public does not want it.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

PAINT, OIL AND BRUSH TRADES

A COAT OF PAINT.

THERE is nothing that will put the finishing touches upon a piece of work, whether it be new or old, like a coat of paint. We see a new building under course of erection. We admire its outlines, its architectural design, so to speak, but there is something lacking. A little later we pass by the same building and lo ! and behold all is changed. The building is complete to every little detail and all because of a coat of paint. It is this same coat of paint that gives a building its picture effect and makes it stand out from those that surround it. It also permits of a harmony between building and site. In fact, the color scheme of a building exterior is just as much a part of an architect's work as the walls or partitions, and in many cases his skill in laying out and planning this color scheme is the secret of his success. Interior no less than exterior decoration plays a very large part in a building. We take a large barren room, that is cheerless and without life so to speak, and the experienced decorator can, with a few strokes of a brush, and the proper tints, change the aspect of the room entirely. It makes room just where room is apparently needed and makes the dark corners smaller or drives them away entirely.

But apart from the picturespue and artistic, paint is an indispensable preservative. In fact this is the primary object of its use. A house built of new lumber, if left exposed to the elements for any length of time without being painted, soon becomes blackened and seamed, and thousands of little water basins are formed that immediately pave the way for decay. On the other hand, if the house receives a coat of paint, the mineral constituents of that preservative immediately enter the grain of the wood, and while enough color is left on the outside to give the desired color effect to the building, by far the larger part of the paint is to be found beneath the surface, enveloping as it were every little destructible particle and prolonging its life tenfold.

The farmer is a large user of paint. His red barn and tasty house adds much to the rural beauty of his community and at the same time brands his farmstead with the insignia of prosperity. When driving through the country, if a house and barn are seen which though large and well built show signs that they have ever been strangers to paint, we generally place the owner in one of two classes : he is either lazy and shiftless or is on the verge of bankruptcy and doesn't care. On the other hand the buildings may be small, but if they are nicely painted the owner is at once branded as being careful and industrious and we have a desire to stop and make his acquaintance.

Don't build without paint. It matters not whether wood or steel is used it should be covered with a good brand of this preserving liquid, as it is a money saver and hence a money maker. Buy a reliable brand and of a kind that is adapted to your needs.

TURPENTINE MADE IN ONTARIO.

ACCORDING to the Alexandria News Mr. Robert Sibbitt, of Carleton Place, has formed a company to manufacture turpentine and by-products out of pine stumps. The capital stock is $500,000, and with Mr. Sibbitt in the enterprise are associated several prominent American financiers. Mr. Sibbitt has now at Barry's Bay on the Canada Atlantic an experimental plant that cost him $10,000 and has already manufactured turpentine. The new company have acquired all the pine stumps in the upper regions of the Ottawa, from farmers and lumbermen and will locate about thirty or forty turpentine stills in different places. Norway or red pine is what is used; white pine is of no value. The manufacture of turpentine is a process of distillation. The pine stumps are placed in a large retort 10 feet high by 6 feet in diameter; this receptacle is lined with sheet iron. Around it, but not in close proximity to it, a wall of brick, and then steam is turned into this vacant jacket. The retort is heated by the steam and the tar thus obtained is conveyed in pipes to a drill where it is boiled. The vapor arising runs through a worm, with cold water running into it and runs out turpentine. Mr. Sibbitt has manufactured 20 gallons of turpentine from a cord of old pine stumps, besides a large number of by-products, such as creosete, charcoal, oil of tar and ten others. Samples have been analyzed by a Government analyist and pronounced of a very high order.

STRAY THOUGHTS.

Every man has a hobby and it doesn't take a wise drummer long to find out what his customer's is.

Make hay when the sun shines, but don't take a rest when the skies are cloudy. Gather the hay then.

Don't use the sidewalk to display your goods if it detracts from your window. Familiarity breeds contempt. The window, properly looked after, will pay the merchant's rent.



When you are visiting the Exhibition at Toronto, we will be glad to have you call at our exhibit near the centre of the Main Building.

They wear on the job— not off.



The Imperial Varnish & Color Co. Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.

Ivorine Black Enamel

A very durable and elastic black enamel, for Fenders, Fire Fronts, Grates, Blowers, Screens, Mantels, Refrigerators, Sewing Machines and anything requiring a quick-drying, jet black, brilliant varnish, gloss finish. It is invaluable for preserving stove-pipes, etc., from rust and decay; can be applied by any one. You should have a quantity of this on hand. Write for particulars.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.

"The Tool Holder People"

Armstrong Bros. Tool Company

Manufacturers of Armstrong Patent Lathe and Plan Tools and other machine shop specialties.

617-621 Austin Ave., CHICAGO, ILL.

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OIL AND COLOURMAN'S JOURNAL

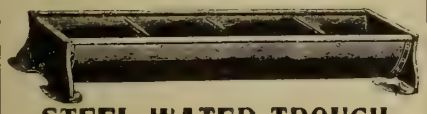
for news of the British Oil, Paint, Soap, Varnish Chemical and Drysaltery Trades.

Subscription for Canada, $2.00 per year from date, post free. Sample for 10 cents.

SCOTT, GREENWOOD & CO.

19 LUDGATE HILL - LONDON, ENG

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.** *TWEED, Ontario* Limited

McCaskill, Dougall & Co.

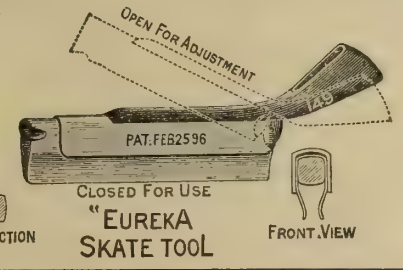
Manufacturers

RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

GLUES of every kind, and for every purpose. Our glues enjoy large sales in almost all countries of the world, and our brands are generally to be seen amongst good stocks o glues. We believe we are giving better value than any other manufacturer, and we want to submit our lines to the Canadian test. Samples gladly sent in reply to enquiries.

GROVE CHEMICAL CO. Ltd, Appley Bridge, Lancashire, Eng.



EUREKA SKATE SHARPENERS

Simple, Quickly Adjusted and Accurate. Will sharpen any Skates.

Place your Orders Now, Before the Rush

Ask your Dealer or Jobber or write for Green Book.

SMITH & HEMENWAY CO.

296 Broadway, New York *Dept. 149*

Canadian Sample Room,

215 Coristine Bldg., Montreal, Can.



WITHOUT A DOUBT

ISLAND CITY brand of ready mixed paints for houses and floors is without an equal. **Fall is approaching and with it the FALL rush.**

Easy to put on.
Dries in eight hours

and when dry gives the house or floor an **elegant appearance.**

P. D. DODS & CO., Toronto, Winnipeg, Vancouver, Montreal.

Beaucoup dans Peu



FROM "LIFE"

Multum in Parvo
Beaucoup dans Peu

Ceci defini bien les peintures, diter, **Elephant genuine** et **Decorators' Pure White Lead.** Manufacturer par la **Canada Paint Co., Limited.**

Ces deux marques, **Elephant** et **Decorators' Pure** de la **C. P. Co, Limited,** sont, sans contredit, les marques les plus populaires sur le marche.

Chaque paquet porte la garantie de l'association des fabricanti de Blance de plomb, ce qui est une preuve de sa haute qualite.

De plus, le fait seul, d'etre fabriques et recommandis par la **C. P. Co., Limited,** est une garantie pour l'acheteur, que ces marques n'out pas de rivaler sur le marche.

"ELEPHANT" GENUINE DECORATORS' PURE WHITE LEAD.

NOTE.—This advertisement is repeated in French at the special request of a number of our French-Canadian friends who wish to demonstrate to their customers the "BODY" which is in the CANADA PAINT COMPANY'S White Lead.

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, August 25, 1905.

MID-SUMMER quietness still exists, although manufacturers claim to be well employed for the season. Sorting-up orders, while not heavy, show that all lines of goods are in demand.

White lead is a much better feature than during the last week. Orders are being received in good volume, showing that dealers feel current prices to be right. The demand is greatly improved, but quotations are unchanged.

Linseed oil is steady at last week's prices, but turpentine is very strong, and indications are that a still further advance will be noted in the very near future.

The continued hot weather naturally limits the demand for petroleum as even the best oil has a tendency to shrink, under existing conditions. A heavy Fall trade is expected.

Turpentine—Commands the greatest interest in the market at present, another advance being expected soon. Our quotations are as follows: Single barrels, 89c. per gallon. Two barrels or over, 88c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Conditions are much steadier than at our last report, and there is no probability of a further drop. Current prices are as follows: Raw, one to four barrels, 49c.; five to nine barrels, 48c.; boiled, one to four barrels, 52c.; five to nine barrels, 51c. f.o.b. Montreal. Net 30 days.

Ground White Lead—A decided awakening in trade has been experienced this week. The stiffening of the demand has made prices stronger. though they are, as yet unchanged. We quote as follows: Best brands Government standards, $5.35 to $5.50; No. 1, $5.10 to $5.25; No. 2, $4.75 to $5.00; No. 3, $4.50 to $4.75, all f.o.b. Montreal.

Dry White Zinc—Last week's strength condition of the ground article. Our prices are as follows: Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—Last week's strength is still noticeable. We quote: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)—Great activity is still manifest, but there has been no change in prices. We quote: Pure 25-lb. irons 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—No change is chronicled, either in prices or in market conditions. Prices are: Pure linseed oil, $1.75 to $1.85; Bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral—The following prices are generally quoted: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c;. smaller quantities, 8 1-2c.

Red Lead—Trade is good for the season. We quote: Genuine red lead in casks $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—The market continues strong, with no special feature. Our quotations are as follows: Pure white in barrels $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—Business is unexpectedly brisk, and the outlook for Fall is brighter than ever. We quote from $1.20 to $1.40 per gallon.

Castor Oil—A decidedly stronger market is reported this week. Producers have raised their prices, but jobbers are still quoting as follows: 8c. to 9c. in wholesale lots, and 1-2c. additional for small lots.

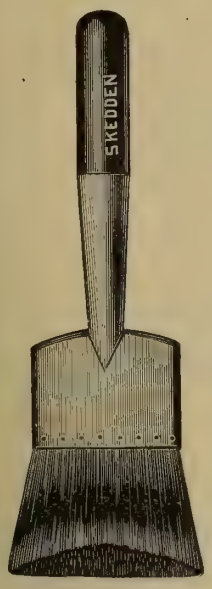
Litharge—We give prices: Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum— Hot weather makes dealers unwilling to risk the probable loss on large orders, so that only a normal business is being done. The first touch of Fall coolness will no doubt awaken the trade and it is expected that the revival in business will be followed by a sharp advance in prices.

WINDOW GLASS—MONTREAL.

Shipments are still very light, and the situation is very disappointing to the trade. Enough glass is coming in to supply small hand-to-mouth orders, and prices are already so high that jobbers cannot raise them. Otherwise, condition would warrant a sharp advance. We quote as follows: First break, 50ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

WORKMANSHIP



is the watchword in making

Skedden Brushes

and the fruits of that watchword are seen on every brush stamped "Skedden." Write for Catalogue to-day so you can get a supply of Skedden Brushes.

The Skedden Brush Co., Limited, Hamilton, Ont.

Toronto Office—57 Queen Street East.

Phone Main 3431 F. W. KNIGHT, Agent.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.

Please mention HARDWARE AND METAL when writing.

BRANT-LAC

A varnish and stain in one coat unequalled for quality and service. Furniture looks as good as new when



Brant-Lac

has been applied. It is just as efficient for woodwork, floors, etc. In all colors and quantities—just the varnish for a steady trade.

SEND FOR PRICES.

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

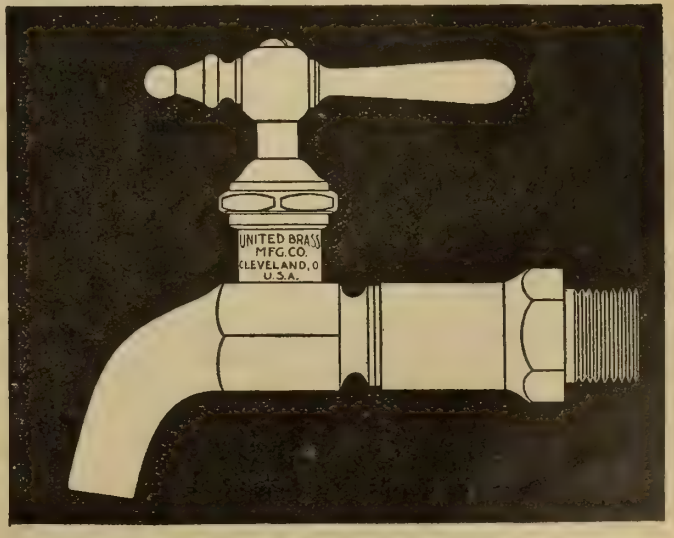
BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**

Tried and Tested—Always Satisfactory

United Fuller Work used by Leading Plumbers Everywhere

Unite with United Brass Goods
The Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.

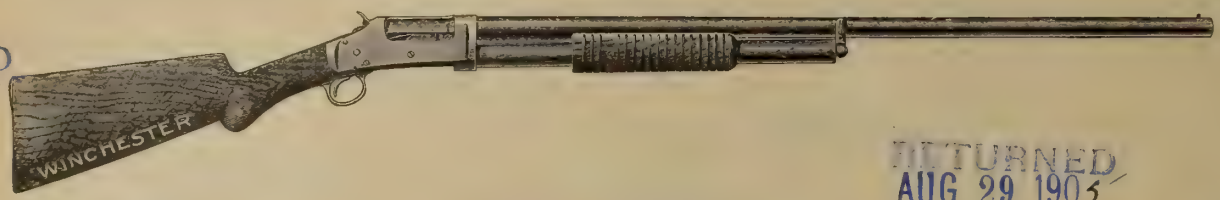
H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

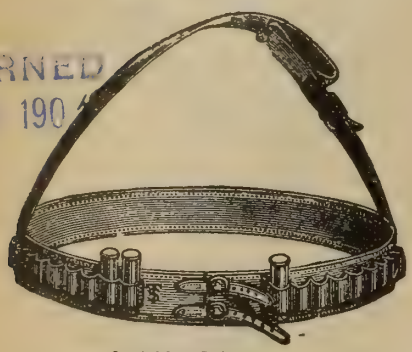
Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only



"Winchester" Repeating Shot Guns



Cartridge Belts

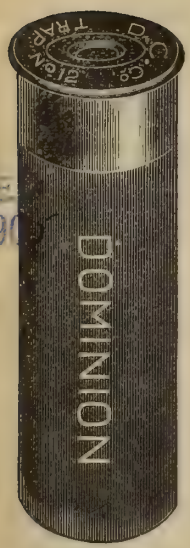


Eley's Empty Shells



Cartridge Bags

Loaded Shells



Trap Empty Shells

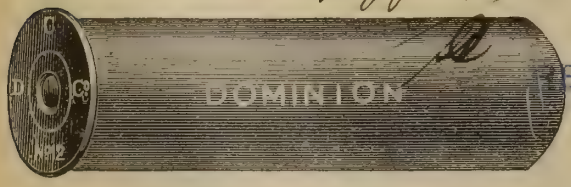


"Dominion" Trap Loaded Shells
"Eley's" Loaded Shells, Black Powder
"Eley's" Loaded Shells, Smokeless

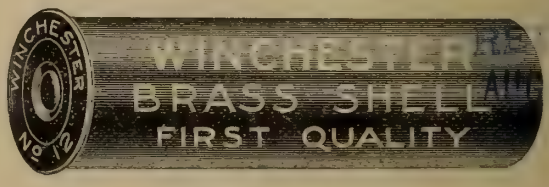


"Vulcan" Empty Shells

Brass Shells



"Dominion" Brass Shells



"Winchester" Brass Shells

FOR GUNS, RIFLES, REVOLVERS AND AMMUNITION, SEE OUR HARDWARE CATALOGUE.

H. S. HOWLAND, SONS & CO., LIMITED

We Ship Promptly.

GRAHAM NAILS ARE THE BEST.

Factory: Dufferin Street, Toronto, Ontario.

Our prices are right

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, Aug. 25, 1905.

A VERY bright and active market is reported this week for paints and white lead. The large amount of building being done warrants a good demand, and dealers say that the demand is much larger than it usually is at this time of the year.

White lead is firm and it is possible there may be an advance in the near future. Window glass is very firm at existing prices and because of the scarcity of both English and Belgian glass there is an advance looked for.

Turpentine is away up in price this week, it being quoted 4c. in advance of last week's prices.

Linseed oil is somewhat easier on the local market, there being a drop on the English market. It is, however, not expected to influence the local market to the extent of a reduction. The Canadian crop of seed is now being harvested, and will soon be on the market at a price which will allow crushing in Canada. Within two or three weeks Canadian oil will be on the market.

White Lead—Ex Toronto, pure white $5.40; No. 1, $5.02 1-2; No. 2, $4.65; No. 3, $4.40; No. 4, $4.15 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 93c.; 2 to 4 barrels, 92c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—As usual at this season, there is little activity. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass— Glass is very firm at present prices (see current market quotations), and an advance is expected, caused by the scarcity because of the strikes in England and Belgium.

SHERWIN-WILLIAMS PICNIC.

THE employes of the Sherwin-Williams Canadian division, located at Montreal, held their sixth annual picnic at Bont de e'Ile, August 18. The four hundred employes of the company, accompanied by their friends, took advantage of the outing to enjoy themselves at this beautiful spot. There was a good programme of sports, with the following results :

100 yards dash—1st, J. L. Vallee; 2nd, F. Bissnett; 3rd, H. Gordon.

50 yards dash (ladies)—1st, Miss C. Possnett; 2nd, Miss E. Vallee; 3rd, Miss L. Mullins.

50 yards dash (boys under 12) — 1st, J. Mildam; 2nd, W. Mills; 3rd, B. Clements.

Hop, step and jump—1st, J. Ellard ; 2nd, F. Bissnett; 3rd, J. L. Vallee.

Egg rolling race (ladies)—1st, Miss A. Vallee; 2nd, Miss K. Gordon; 3rd, Miss E. Whitehead.

Sorting boots—1st, W. Tetreault; 2nd, T. Larin; 3rd, J. L. Vallee.

Three-legged race—1st, J. L. Vallee and T. Larin; 2nd, W. Tetrault and A. McBride; 3rd, J. Quinn and H. Nolan.

Tossing tournament—1st, J. Ellard; 2nd, J. Quinn; 3rd, J. L. Vallee.

Sack race—1st, R. Wilson, 2nd, A. McBride; 3rd, J. D. Barker.

Tug-of-war — Won by Mr. Ellard's team.

NOVEL ADVERTISING.

A LARGE eastern paint manufacturing concern has adopted a novel way in which to advertise its products. Heretofore for a number of years the firm has been doing indiscriminate advertising; sending out thousands of circulars annually to lists of names secured in various ways. A large percentage of people in these lists had no intention of doing any painting and, therefore, the most of the money spent was wasted, but a new idea has been hit upon. The local dealer handling the paint manufactured by the firm is requested to keep his ears and eyes open, and when he hears of anyone that contemplates painting he sends the name to the paint concern on a post card, furnished for that purpose. The paint manufacturers do the rest. Now here is a good tip for every dealer who sells any sort of building material, paints or any thing else that consumers talk of using, says an exchange. When the building season, for instance, arrives, keep a list of the names of persons who are talking of building, and keep after them constantly until they have bought their supplies. Write letters and interview personally whenever you have time and the opportunity offers. In this way much of the energy put forth in trying to reach everybody is saved. The same system can be applied to all lines of goods that people talk of using before they actually buy.

OIL ON THE ROADS.

ROAD-BUILDERS throughout the country are experimenting with oil for laying the dust on roads, and in many places it has been used with good results, especially in California. The tracks where motor-car racing is held are being similarly treated and the experiment is being awaited with interest, for the only disagreeable feature about automobiling is the dust. To show the good use to which oil has been put for dust-laying, the California Promotion Committee has given out some data received from the State Department of Highways, which shows that California has now almost 3,000 miles of roads which have been converted from dusty, and frequently impassable highways, into excellent avenues by the use of crude petroleum oil as a road dressing. Out of the fifty-seven counties of California, at least forty counties now have oiled roads. Of 2,776 miles of oiled roads in California 552½ consist of city streets. In addition there are 1,099 miles of oiled railway roadbed in the State. The first experiment in oiling roads was 1898. It was found that when oil was applied it immediately began to bind together all the loose particles and formed a stratum resembling asphalt. One of the most convincing illustrations of the proof of the efficacy of oil was provided on the road to the Belmont Park races. Where the road was oiled there was no dust.

THE TAXATION OF WINDOWS.

IN the Gentleman's Magazine Mr. W. A. Atkinson gives some curious and interesting particulars as to the taxation of windows. The tax, which was first imposed in the seventeenth century, was always very unpopular, and repeated attempts were made to abolish it. In 1850 Lord Duncan moved, not for the first time, the total repeal of the duties, and, remarkable to relate, even at that time of day the Government opposed the motion, and it was rejected by a majority of 3 in a House of 157 members. The repeal was, however, effected in the following year, on July 24, 1851, and a duty upon inhabited houses was imposed in its stead. The duties themselves were by no means light. In or about 1775, for instance, a house containing eight windows would be charged three shillings yearly for inhabited house duty, and sixpence for each window. In 1805 it would be charged £1 10s. for window duties simply; and in 1838, after the reduction of 1823, the duty would be 16s. 6d. In the same way a house of twelve windows would in 1775 be taxed three shillings house-tax and 1s, 2d each window—seventeen shillings in all; in 1805, £4; in 1838, £2 4s. 9d. The revenue derived from the taxation of windows in 1838 may be put down at about one and a quarter millions sterling. In 1850 it was £1,832,684.

STOVES AND TINWARE

EVOLUTION IN STOVE TRADE.

LET us look at what the evolution of things has meant to this country. Let us look for a moment at the wonderful development that has been made in the production of fruits by grafting and specialty farming. Let us go a step farther and contemplate for a moment the wonderful changes that have taken place in the production of vegetables for daily consumption of the American people. A step farther and we find that the seasons have been practically annihilated by the rapid transit of vegetables and fruits in refrigerator cars from and to the very utmost parts of this country. From the farmer's standpoint let us contemplate for a moment the marvelous results that have been obtained through the intelligent breeding of stock and the tremendous profits that are made by specialty stock raising. Let us go a step farther and contemplate the results obtained by the methods of packing houses. These results were described in a very facetious way by one of the great packers of this country when he said that every particle of the pig was now utilized except his squeal. This is equally true of all food animals. Only a few years ago the value of crude oil was entirely unknown. To-day the by-products of crude oil are in the hands of the people of the world even to the utmost borders of civilization, and the matter of farming implements, those of us who can remember the crude manner in which the implements of farming were made during the years immediately following the Civil War stand amazed to-day at the wonderful improvements and facilities that have been given to the farmer through the ingenuity of the manufacturers. The same thing may be said of the cereals of our country. In the years immediately following the war, the farmer in remote sections had no means of marketing his grain. To-day the grain of America is not only distributed from one side of the country to the other, but is sent out all over the world, it being taken by the transportation company from the very stubble field in which it was grown and carried by rail and water to the most remote parts of the world. In the same direction we find products of our grain, flour, meal, whisky, beer, breakfast foods, etc., also distributed to the ends of the earth, all of which means a profit to the American people from the tiller of the land to the artisan in the workshop.

Should Appeal to Retailers.

All of these things should therefore appeal to the retail merchants throughout the country and do so appeal to them, that is to say, that where a successful merchant is found, we always find that he is a man that is well read and who is well versed as to the progress, improvements and developments which are taking place almost daily, and that he has entirely abandoned the old time methods of merchandising.

Now to apply this proposition to the subject of this paper, "The Evolution of the Stove Business," what do we find? We find that the merchant who is selling stoves, if he is joined to his idols, if he does not know the Civil War is over, if he is going to market with corn in one end of his sack and a stone in the other, you will find such a man buying old time goods, cheap and inferior stoves and putting in the best part of his time in trying to find out how cheap he can buy and how cheap he can sell his goods. There is nothing but failure confronting such business methods in this up-to-date American business world.

To illustrate another feature of the human mind I recall an incident that occurred a few years ago within my knowledge, where a certain farmer and his wife went into town to buy a cook stove. Fortunately they drifted in to the store of an up-to-date progressive merchant. The farmer made known the fact that he wanted to buy a cook stove and that it must be cheap, etc. The fact soon developed that the merchant had no cook stove cheap enough to meet the views of the prospective buyer. Then the merchant through some adroit questioning developed the fact that his wife was a typical farmer's wife; that is to say, that she was a very much overworked woman, the mother and nurse of several children, the household drudge, and her appearance gave evidence of the fact that she was a drudge pure and simple and in no sense a wife and mother, whereupon the merchant inquired in a blunt way of the farmer as to whether or not he loved his wife. The farmer finally admitted that he did. The merchant then said you have a very poor way of showing it, and for example, he asked the farmer why it was that he had bought one of the best wagons that was made and why he had bought a fine set of harness, and why he was driving two splendid farm horses and why he purchased the highest grade plows that could be found, and why it was he had bought other up-to-date farming implements. The man replied it was necessary to have these things in order to successfully conduct his farm. This was the very answer the merchant expected to get. He then said if these things were necessary for the farm why was it not reasonable that the farmer should put into his kitchen an up-to-date range with hot water attachments that could be kept full by the hired men, with warming closet and all other up-to-date facilities that would lessen the drudgery of the wife. It is needless to say that the wife got some consideration and a high-grade up-to-date cooking apparatus for her kitchen. This incident only shows that if farmers and working men must have good tools, the family should also have good cooking utensils and cooking apparatus, good furniture and the comforts of a home. This incident also shows that the merchant who is trying to buy cheaply made and shoddy goods with the expectation of building up a profitable trade is confronted surely with failure. On the other hand the merchant who is wise to see the difference between the shoddy and the good, who is progressive enough and thoughtful enough to feel the pulse of the American people is the man whose store you will always find high-grade, up-to-date goods, and what is better still, a successful merchant.—F. G. Blackwell.

GURNEY INVITATION

The Gurney Foundry Co., Limited, King street, Toronto, are sending out very neatly gotten up cards containing the following:

"The officials and traveling staff of this company will be 'At Home,' either at the offices and works of the company, No. 500 King street west, or at their exhibit in the northwest corner of the Stove Building on the Exhibition Grounds, August 26 to September 11 (Canadian National Exhibition), where a cordial reception will be extended to you and your friends."

STOVE ITEMS.

If the competition of range pedlar is felt, the local merchant should advertise now to head off the harvest the pedlar will endeavor to gather as soon as the farmer has money to spend in the Fall. Advertise in the local paper and show the advantage of doing business with a dealer who is handy all the year round to make any necessary repairs or changes. But unless the goods are sold at a fair margin all the advertising and hard work will fail to draw and hold the business.

Every hardware merchant who sells stoves should have a competent man in his employ to do furnace repairing. There is always a good deal of this work to be done, and if it hasn't been pushed already a strong campaign should be conducted from now till snow flies in order to get this business. A "furnace repair" advertisement in the local paper should bring results.

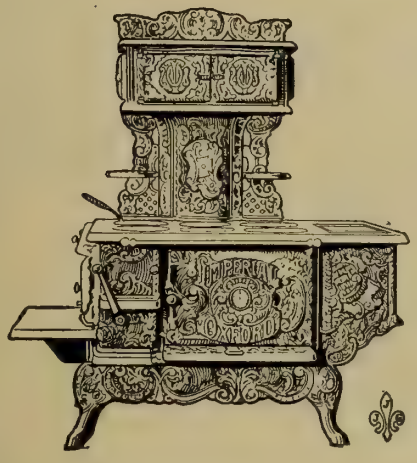
Have you sold out your stock of camp stoves? Better push them by a window display.

Don't neglect the small things. Some merchants devote all their time to stoves, refrigerators, nails, wire, etc., and overlook many of the excellent money-making small novelties, such as tack hammers, tacks, pocketknives, lemon squeezers, paring knives, food choppers, small tinware, pliers, nail clippers, wrenches, can openers, etc., etc. There are hundreds of these little things that can well be given a counter by themselves near the front of the store. They do not require much work in their selling, and the profit is almost invariably much greater than nails and other staple lines.

James Watson, of the Banner Coal Mine, Sturgeon, Alta., says that there lies an almost inexhaustible supply of coal under the surface in the vicinity of Edmonton. Seams of coal have been found all over the country within a twenty-mile radius of the city, varying in thickness from three to twenty feet. He predicts for Edmonton a great future as a manufacturing centre.

We give you "talking points" that are invincible; in fact, the goods talk for themselves. Just call attention to their excellence of material and construction, which give superior service and durability, especially in the oven, the vital portion of any range; their artistic beauty, which make them an ornament to the house, their economy in consuming fuel, AND the Guarantee Bond which accompanies each range. The

Imperial Oxford Range



is the handsomest and most serviceable that sixty years of constant effort could produce. Over 40,000 now in use in Canada alone. One of its most striking features is the Diffusive Flue, for oven ventilation, which insures perfect pastry baking—the supreme test of a range; the draw-out oven rack gives special facilities for basting, etc; the draw-out Duplex Grate and frame permit repairs to the grate without disturbing the fire-box linings, an insurance on the life of the range, as every stove man knows; the oven thermometer which has become indispensable to every progressive housewife; the perfected fire-box whose improvements are seen almost at a glance. The e are some of the features which customers will readily appreciate, and there are many more.

Does not the **IMPERIAL OXFORD RANGE** seem like a good article for your trade?

WRITE FOR PARTICULARS

THE GURNEY FOUNDRY CO., LIMITED

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

The Gurney Standard Metal Co., Limited, Calgary, Alta.

AT TORONTO FAIR AND AT LONDON FAIR

IN THE STOVE BUILDING **IN THE MAIN BUILDING**



We are making an exhibit of our Goods.
This exhibit includes the

Walker Pilot Steel Range

This Range justly demands your interest and most careful examination It is replete with many practical points of convenience and utility not on other ranges, and critical users everywhere vouch for its good results and economical consumption of fuel.

LOOK FOR OUR BANNERS

Do not fail to call. Bring your friends and prospective customers, and let us show them wherein our goods are superior

WALKER STEEL RANGE COMPANY
LIMITED.

Grimsby, Ont.

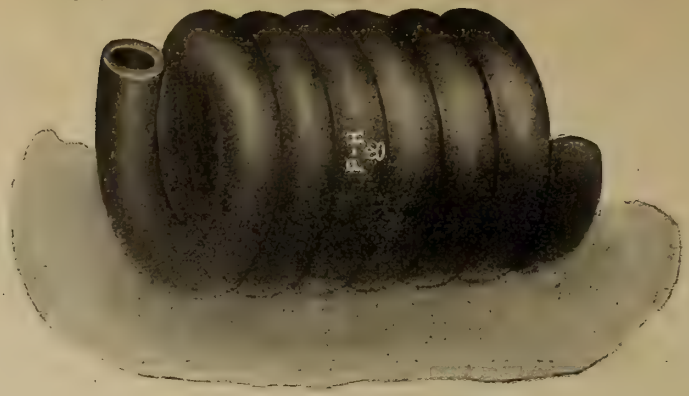
PIPE THAT IS PIPE

THIS IS OUR BRAND

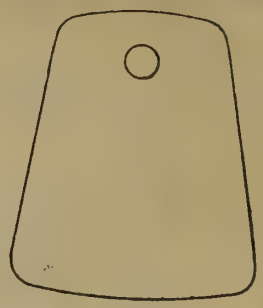
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

Trade Mark A★1

RETURNED AUG 29 1905

To Montreal Cut Book 37 Page 44



Trade Mark

RETURNED AUG 29 1905

Paring Knives in great varieties in blade and handle. High class finish.
Scissors and Pocket Knives of all kinds. Our assortment is large.

F. W. LAMPLOUGH & CO., - MONTREAL

PANDORA RANGE



RETURNED NOV 15 1905

To Dunn Cut Book 43 Page 26

The "Pandora" is now without question the most popular and best working cast-iron coal and wood range in Canada to-day.

Its many exclusive features have placed it above all competitors.

We can supply you with folders for distribution. Write for a supply.

If you are not handling the "Pandora" write to us for information.

THE McCLARY MANUFACTURING CO.

LONDON TORONTO MONTREAL WINNIPEG VANCOUVER
ST. JOHN, N. B. HAMILTON

"Everything for the Tinshop"

Markets and Market Notes

(For detailed prices see Current Market Quotations, page 90.)

Quebec Hardware Markets.

Office of Hardware and Metal,
232 McGill Street,
Montreal, August 25, 1905.

SHELF goods are now moving very strongly, and, to a certain extent share with sporting goods, the most important position in the trade. General business is particularly good, all the jobbers being crowded with orders.

Several inquiries for wire netting were received during the week, and considerable surprise is expressed at this, as the season was thought to be over.

The approach of the open season for duck shooting is still further stimulating the trade in guns and ammunition, while many orders for rifles have been booked in anticipation of a good season for big game.

All lines of builders' hardware are selling briskly. Local building strikes are approaching a crisis, and their settlement will help the trade in these lines.

Axes—Trade is increasing with the Fall coming on. Prices are as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—No change can be reported. We quote as follows: Axe handles, No. 3, $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No 3, $1.50 a dozen.

Sewing Machines—Business is quite up to expectations. Prices remain as follows. Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—Orders booked months ago are going forward rapidly, but no new business is reported. We give prices: Cold blast, $4.50; No. 0, Safety, $3.50.

Barb Wire — Is practically dead. Only occasional inquiries are received. Our quotations are as follows: $2.75 for 100 lbs. f. o. b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Are very slow at this season. Prices are unchanged as follows $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages 25c. extra.

Rivets and Burrs—No special demand is apparent, but trade continues very good. Our quotations are as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. cartoon boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—Are included in nearly every order coming in. Prices are: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts— The usual good demand is reported. We quote: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—Prices have been cut by some dealers, so that we give only nominal quotations. There is no profit in the figures given in many quarters, and the market is very slow. We quote: $2.10 to $2.20 per keg f.ob. Montreal.

Cut Nails—No activity is seen on this market, though manufacturers report that they are still shipping orders. Prices are: $2.20 per keg f.o.b. Montreal.

Horseshoes—Trade is good, and is improving each week. Our quotations are as follows: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No. 2 and larger $3.65. No. 1 and smaller $3.90, snow pattern, No. 2 and larger $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller $4.15; featherweight, all 1 to 4. $6.75. Packing—Up to three sizes in a keg, ten cents per hundred pounds. More than three sizes twenty-five cents.

Sporting Goods—All the wholesalers report an extraordinary demand for shot guns and ammunition, while orders are now coming in for rifles. The season for ducks opens Sept. 1st while the big game may be shot after October 1st. Our quotations are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Unsettled building strikes are the bane of the trade. Few buildings are being finished, and, consequently, there is little or no demand for roofing felt. Prices are the same as at our last report.

Cordage—Business is rather quiet, at same prices as we last quoted.

Cement and Firebrick—No recent developments are to be noticed. Trade is quiet, as is to be expected, at this season. Our quotations are as follows: $1.80 to $1.90; Belgium, $1.60 to $1.90 per barrel; ex-store, American, $2.00 to $2.10 ex-cars; Canadian Portland, $2.00 to $2.05. Firebrick, English and Scotch $17 to $21, American $30 to $35.

Coil Chain—The demand is quickening, many orders going up into the lumbering districts. Our prices are as follows: 5-16 inch, $4.25; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, 3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Spring Hinges—Are very slow at present. We quote: No. 5, $7.25 per gross; No. 19, $18 per gross; No. 20, $18.80 per gross; No. 120, $20 per gross; No. 51, $9.25; No. 50, $27.50.

Apple Parers—Good orders are being booked for delivery next month. We quote: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Orders for large shipments are on the books of local jobbers. Prices are 25c. to $2.50, according to quality.

Sleigh Bells—Inquiries coming in denote that the more expensive lines will be greatly in demand this week. We quote as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common 70c. to $1.50, pear shape $1.15 to $2.00; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2.00; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Some orders are being booked, and the better grades are now looking up. Our quotations are as follows: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12.00; 16-oz. Hessian, unlined, $6.50; 3-4 lined $11.50; full lined, $14.00, and up to $24.00; Kersey blankets, $9.00 to $21.00; all wool, $24.00, $30.00, $48.00, and $60.00.

Ontario Hardware Markets.

Office of Hardware and Metal,
10 Front street east,
Toronto, August 25, 1905.

ALTHOUGH this is rather between seasons, there is an excellent business being done. The sorting orders that are coming in show that Summer goods are still selling well, while the trade in Fall goods is beginning to materialize excellently. Already there is large trade being done in shot guns and ammunition. Rifles are also moving fairly well now. Some wholesale houses report general business this week even better than last.

There are no changes in prices this week.

Sporting Goods—Shot guns and ammunition are now moving quite briskly, while rifles are also beginning to be a feature.

Washing Machines—There is quite an active demand.

Chain—The ordinary Summer trade is

being done. We quote: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demands for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—Demand is reported good and country merchants are ordering in fair quantity.

Wire Nails—There is an exceptionally good business being done in this line, due probably to the extensive building operations.

Cut Nails—There is a very satisfactory trade being done. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—Trade is particularly good for this season. We quote as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—A seasonable trade is noted. Prices are the same.

Screws—The mills are busy, but stocks are satisfactory. The strong demand keeps prices firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—Trade is fairly good, considering that this is the off season for manufacturing in agricultural machinery, which constitutes the chief demand for bolts and nuts.

Cordage—Sorting orders are coming in. Prices remain unchanged since last week. Our quotations are as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30 to 32c.; "Star," 36 to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white 11 to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Business is brisk, demand being strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27 to 30c.; American low-grade, 20 to 25c.; high-grade, 27 1-2 to 37 1-2c.

Building Paper— The general activity in building circles has resulted in a good business being done so far this season. Prices are firm.

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 25, 1905.

NO relief has yet been experienced in the copper market, and the probability is that the present scarcity is due more to natural causes, and big demand, than to manipulation and restricted production. Local metal merchants are finding it very difficult to get ingot casting copper, with the result that brass manufacturers have been compelled to withdraw prices, even on contracts already booked.

Tin has created much interest, during the week, on account of its fluctuations. Early in the week a lull in the English market was reflected here by a drop in price, but a reaction set in, and at the time of writing tin is again at last week's price.

Even those dealers who were fortunate enough to lay in a good stock of antimony before the remarkable jump in price are rapidly approaching the end of their stock.

Pig iron has been in good demand and some good orders reported for the week. One or two lots of 500 tons have been bought, this helping to retain the strength of the market.

Canada Plates—Nothing of note has transpired since the changes announced last week. Prices are: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Ingot Tin—After a few fluctuations the market is again steady at our last week's prices. We quote: 35 1-2c. per lb.

Pig Lead— No change is reported. Trade continues very good and prices are firm, as follows: $3.75 to $3.85 per 100 lbs.

Boiler Tubes—Satisfactory sales are being made right along. Our prices are British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—As mentioned in our summary, some good orders have been placed by Canadian firms. We quote:

"Disc," No. 1	$16.50	delivered Montreal.
"Dom.," No. 1	17.50	" "
Usual difference in price for lower grades.		
Ferrona No. 1	$18 00	delivered Montreal.
" No. 2	17.50	" "
" No. 3	16 50	" "
" No. 4	16.00	" "
Londonderry	$18.50 to $19.00	" "
Glengarnock	18.25	" "
Gartsherrie	19.25	" "
Carnbroe	18.50	" "
Carron No. 1	19.00	" "
" (special)	18.00	" "
Ayresome No. 1	18.25	" "
" No. 3	17.50	" "
Summerlee	18.25 to 18.75	delivered Montreal.
Clarence No. 1	17.50	" "
" No. 3	17.00	" "
No. Cleveland	17.50	" "

Tool Steel—There is no change in conditions previously reported. Prices are as follows: Colonial Black Diamond, 8c to 9c; Sanderson's, 8c to 45c, according to grade; Jessop's, 13c; Jonas & Clover's, 10c to 20c; "Air Hardening," 65c per lb.; Conqueror, 7 1-2c; Conqueror High Speed steel, 60c.

Merchant Steel—The only change is in machinery iron finish, which has been quoted a little too high. Prices quoted are as follows: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2.00; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—Trade is good, with no change in prices, which we quote as follows: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—Large orders are reported by the dealers. Prices are: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 to 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c extra

Black Sheets—Prices are steady at last week's figures. We quote as follows: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—In spite of the scarcity reported by all jobbers they refuse to buy at the current price. We quote: 14 1-2c. to 15c.

Sheet Zinc—The scarcity reported last week still dominates the market. We quote: Cask lots, $7.25, small lots, $7.50.

Tin Plates—Are being closely watched by the trade on account of the almost daily fluctuations in ingot tin. The prices now ruling are: Cokes, $3.75; charcoal, $4.

Ingot Zinc—No change in prices has resulted as yet from the scarcity reported before. We give prices: 6 1-4c. to 6 1-2c.

Scrap Metal—Scrap iron is still practically dead but a more cheerful tone is given to the market by an increase in the price of copper and brass scrap, to correspond with the strengthening of the market for new metals. We quote: Copper and wire, 13 1-4c.; light copper, 12c.; heavy red brass, 10 3-4c.; yellow brass 9c.; light brass, 6c.; lead, 2 5-8c.; Zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap $12; stove-plate scrap, $9; No. 1 country rags, 75c. to 90c. per hundred lbs.; old rubbers, 5 1-2 to 5 3-4c. per lb.

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
Drummond, McCall & Co.
MONTREAL, QUE
or to
Canada Iron Furnace Co.
MIDLAND, ONT Limited

Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc, etc

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
August 25, 1905.

THE feature of the metal market this week has been the scarcity of ingot metals upon foreign markets, and the consequent jump in prices. This has been felt very considerably upon the local market with the result that both tin and copper have advanced, and we are expected to go still higher. Tin has advanced 2c. per lb. and copper 1c. It is thought that tin may reach the 40c. mark and copper the 20c. mark.

There is an active antimony market this week in spite of the high prices. Stocks bought before the rise are now giving out, and buyers simply must buy and pay the price. There is also a much more active tin plate market this week than last. So far the old metal market is not afflicted by advances in ingot metals.

Bar Iron—There is a very active market. The mills are running to their full capacity. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—Market has advanced 2c: per lb. Ingot tin is very scarce, and at the same time buying is active. We quote: 37c. to 38c. per lb.

Tin Plates—Since last week the demand has picked up and is now quite active.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—There is an active demand. Prices are steady: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper— The continued scarcity of copper, and the very active demand, has caused an advance in copper of 1c. per lb., with a further advance expected. Our quotations are as follows: Ingot copper, $16.75 to $17.00 per 100 lbs., and sheet copper $21.00 per 100 lbs.

Antimony—In spite of the excessive prices ruling, there is an active demand for antimony. Stocks obtained before the rise are giving out, and users are forced to buy and pay the price.

Old Material—The advances in old metal in the States, and the general advances in ingot metals, have not affected the local old metal prices except, perhaps, to make them very firm. Dealers' buying prices are as follows: Heavy copper and wire, 12 1-2c. per lb.; light copper, 11c. per lb.; heavy red brass, 10 1-2c. per lb.; heavy yellow brass, 8 1-2c. per lb.; light brass, 6 1-2c. per lb; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old

TERNE PLATES

"Dominion" Extra quality, bright finish
"Dean," The old reliable.
"Canada" Good standard quality.

A. C. LESLIE & CO.
MONTREAL.

ASK YOUR CUSTOMERS
if they don't need new pumps. If they do, sell them our
Standard
Anti-Freezing Pumps
They'll appreciate getting a pump that doesn't have to be thawn out every zero morning



—McDougall Pumps
—Made in Canada.

Write for Catalogue and Prices.
THE R. McDOUGALL CO., LIMITED
Galt, Ont.

B.K. MORTON & CO.'S
WELL KNOWN
B.C. BRAND
DRILL STEEL
AGENTS
E. C. PRIOR & CO., Victoria
BAINES & PECKOVER, Toronto
CANADIAN REPRESENTATIVE:
D. W. CLARK, Box 521, TORONTO

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Prices are firm at last week's quotations. We quote: Anthracite in cars at bridges: Grate, $5.15 per gross ton; egg, stove and nut, $5.40 per gross ton; pea, $3.80 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

MINES AND MINERALS.

The Queen Mine at Ymir, B.C., purchased recently by Wm. Waldie for $50,000, has been bonded to C. F. and R. J. Doyle, Chicago. The bond calls for the payment of $100,000 within 12 months, $20,000 of which is to be paid by September 10.

* * *

Some fifty town lots have been sold at Cobalt, Ont., at prices ranging from $250 to $710.

* * *

By the recent purchases of adjoining properties, the Granby Consolidated Co. have increased their holdings in the Boundary district at Phoenix, B.C., to about four times its original area. The properties added are those of the Gold Drop Mining Co., which includes the Gold Drop, the Gold Drop Addition Fraction, the Phillipsburg, and Nugget claims. This property has been under option at $250,000 for some months, during which time it has been exhaustively tested by drill holes, which have disclosed a deposit similar to that already developed on the Knob Hill and Old Ironsides.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, August 24, 1905.

To put it mildly, quiet confidence in the future reigns throughout the iron industry, while some of its great captains foretell, with expressions of regret the coming of a boom this Fall.

The trade is on the tiptoe of expectation over the purchases of pig iron which the Steel Corporation are to make. We understand that it will not be done for the next week or ten days in any case. The officers of the corporation have ordered every modern furnace into blast, so that only Niles, Zanesville and Columbus will be idle. With all these furnaces in operation, and drawing stocks down to the lowest limit there will be a shortage below requirements of 35,000 tons for September.

While the general trade is buying pig iron on a conservative scale, the consumption is evidently excellent since requests for quick shipments are frequent and urgent. Among the larger purchases during the past week are an aggregate of 10,000 tons of foundry iron for the first quarter of next year by a large mining machinery plant in Milwaukee and a lot of 8,000 tons of malleable pig for St. Louis. A leading steel foundry interest has purchased quite a tonnage of basic pig and of low phosphorus pig, the demand for the latter having been quite active lately.

In addition to the 75,000 tons of steel rails taken by the Harriman roads during the last week, 25,000 tons more have been purchased, of which 15,000 tons went to an eastern mill which can reach the Gulf by water. Some of the large systems tributary to Chicago, notably the St. Paul and the Rock Island, have been in the market in vain for large blocks of rails for this year's delivery. The St. Paul succeeded in placing 3,000 tons and the Great Northern 5,000 tons.

Eastern plate and structural mills are marketing quite a tonnage in the Chicago district. Thus a Coatesville mill took a lot of 6,000 tons of plates in Chicago and delivered the order within a week.

From Cleveland comes the report that three new ships have been contracted for and that seven more vessels are virtually placed.

The wire trade continues to witness a heavy movement. Some of the sheet makers report a heavy increase in business, but others still complain that there has been little improvement. The relatively low prices on merchant pipe have caused a perceptible increase in the demand, and even in tin plate business is stirring.

In the metal trade the principal item of interest is that 16 cents has been reached for lake copper for early delivery, that price having been made on the merits of the situation alone.

LONDON METAL MARKETS.

From Metal Market Report, Aug. 23, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 47s. 4 1-2d., and Scotch warrants at 50s. 6d., making prices, as compared with last week, 3d. higher for Middleboro, same for Scotch warrants.

Tin—Spot tin opened strong at £150 futures at £149 7s. 6d., and after sales of 170 tons of spot and 100 tons of futures closed firm at £150 for spot and £149 7s. 6d. for futures, making price as compared with last week 5s. higher on spot and 7s. 6d. lower on futures.

Copper—Spot copper opened strong at £69 15s., futures £69 12s. 6d., and after sales of 500 tons of spot and 500 tons of futures, closed firm at £69 17s. 6d. and £69 13s. 9d. for futures, making price as compared with last week, 11s. 6d. higher on spot, and 8s. 9d. higher on futures.

Lead—The market closed at £14, making price as compared with last week, 1s. 3d. higher.

Spelter—The market closed at £24 15s. making price as compared with last week 2s. 6d. higher.

Nova Scotia Trade News

THE hardware business is quiet and prices show no perceptible change during the week. The present dullness, however, was expected, and therefore it causes no surprise. About the only line showing any activity is building materials. Collections are coming in fairly good, and jobbers are not complaining. By the end of the month orders should be coming in for Fall supplies.

In Cape Breton everything is booming; the collieries are working full time, and also the steel works. It is reported on good authority that the Dominion Iron & Steel Co. have just closed a contract with the Intercolonial Railway for the purchase of 25,000 tons of steel rails. The price to be paid for these rails is $52.50 per ton, and delivery is to commence in the Autumn, or as soon as the Grand Trunk's order of 25,000 tons is finished. The rail mill made a record on Saturday last, when it turned out 631 rails in ten hours.

The Nova Scotia Telephone Co. have now completed the metallic line connecting Parrsboro with the main trunk line of the company at Amherst. This line is of pure copper, strung on cedar posts. Perfect connections can now be had between Parrsboro and all points on the company's system to St. John, and other cities with which connections can be had through the company's lines. With this metallic circuit ordinary conversation can be carried on with the greatest of ease.

The Maritime Contracting & Mining Co., which has been putting in a system of waterworks for the town of Springhill, has brought an action against that town, claiming damages for breach of contract. The Montreal Pipe Foundry Co. has been joined as defendant. The town in defence claims a right to retain certain moneys due under the contract, and also claims the contract has not been duly performed.

The new brick station of the Oxford Electric Co. has been completed, the machinery set up, and the electric lights are now in operation again, for the first time since the destruction of the plant of the company at the time of the fire which burned the factory of the American Furniture Co.

Mr. Hal. Upham, of Parrsboro, one of the popular young men of that town, leaves the employ of J. H. Cameron, hardware merchant, at the end of the present month and goes to Halifax, where he has secured a position with the firm of Emerson & Fisher.

The steamer Cacouna landed at Sydney last week 270 crates of fire brick for the Nova Scotia Steel & Coal Co.

Lead pipe	$ 4 90
Sheet zinc, in casks	7½c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb.	3¾ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 30
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 00
Black sheet iron	2 25
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94
Boiled oil	54
Raw oil	51

THE CANADIAN NATIONAL EXHIBITION.

ONCE more the Canadian National Exhibition, or the Fair, as the citizens of Toronto affectionately call it, is approaching. On August 26 the gates will be thrown open on what is the biggest annual exhibition on the continent. It may fairly be predicted that 1905 will eclipse all others in the magnitude of the undertaking, and the excellence of the attractions. The fine set of buildings which are now grouped together in Exhibition Park are ready for service, and the staff of officials, under the efficient management of Mr. J. O. Orr, are speedily completing arrangements for the entertainment of the coming crowds.

Educational Features.

Before referring to the attractions in the way of amusements, mention should be made of the exhibits, which form the essential part of the Exhibition. The progress of manufactures at home and abroad, the development of science and art, and the improvement in farm produce and live stock, are all represented in their highest form. The farmer carries home with him ideas on modern and time-saving farm implements, and information on breeds and relative qualities of live stock. Above all, he carries away with him higher ideals of excellence. Having seen the best that the country can produce, he is fired with the ambition to equal or better that showing. So with manufacturers. They see the best that human ingenuity has devised, and they straightway speculate on the possibility of applying what they have seen to their own business. More than anyone else, the business man is benefitted by such an exhibition. He sees the goods which he sells in course of manufacture in the Process of Manufacture Building, and he is fitted as never before to buy intelligently and to sell intelligently, because he knows whereof he is talking.

That manufacturers recognize Canada as being the country of the future is shown by the large demand for floor space in the Manufacturers' Biulding. Never has there been such a complete display of manufactures as there will be this year. The big building, with its 165,000 square feet of floor space, will be taxed to its uttermost capacity.

Nor are the finer elements of modern civilization at all backward. From simple and humble beginnings the arts and sciences have advanced in Canada till now we have a sturdy Canadian art. Sculpture and paintings will be on exhibition in the spacious new art gallery, which is admirably located for securing the best effects.

The management is to be congratulated on the excellence of its special attractions. The two features which will outrank all else in attractiveness will be the magnificent art exhibit, including the wonderfully fine painting by Edwin Abbey of the Coronation of King Edward VII. (which was painted at the command of the King, and is worthy of the magnificent subject of which it treats) and the Irish Guards' Band.



THE IRISH GUARDS' BAND—Canadian National Exhibition.

Other paintings and art creations of exceptional merit have been loaned by the Corporation of London, the Govern-

The Irish Guards' Band.

What is known as the finest military musical organization in the Empire will give two concerts daily on the grounds. The Irish Guards are a battalion who need no introduction to the public. The Irish Guards' Band has been awarded the palm for excellence by all the highest musical authorities in Great Britain, and is the favorite household band of His Majesty the King, who, whenever possible, selects it to play at the royal levees, drawing rooms and dinners, in fact on all state occasions.

Reduced rates will be in force on all Canadian railways. Besides the regular reduction, which makes a trip to Ontario's capital an inexpensive outing, there will be a number of one-d special excursions at exceptionally l rates.

Merchants who come to Toronto d ing Exhibition will want to combi some business with their pleasure. T afternoons and evenings may well be voted to sight seeing, leaving the mo ings free for visiting the wholes houses. We again cordially invite grocerymen of the country to make offices of Hardware and Metal th headquarters, while in the city. You c have your mail directed here and faci ties are provided for letter-writing a telephoning. If you have a friend meet, or an appointment to keep, y will find no more central or suitable pla than at 10 Front street east, just Yonge.

FIRE PROTECTION AND WATE SUPPLY.

AN example of what is probably of the most up-to-date instal tions of this kind in practice is be seen in the new Henry R. Worthi ton Hydraulic Works at Harrison, N. Water is raised by the air lift, whi is peculiarly well adapted to scatte batteries of bored or drilled wells. permits centralization of the pow plant, as the air compressor may located at any convenient point and air piped to the wells. It also eli inates all valves, plungers and oth moving parts from the well itself, th doing away with the air arising in oth devices from sand and gravel. T principle of the air lift is illustrated Fig. 1. Compressed air is forced i the water through a nozzle inside a near the bottom of the flow pipe, for ing a column of mixed water and air low specific gravity within the lat which, under the pressure of the so column of the water in the well outsi rises continuously. The submerged pa of the pumping outfit consist simply the wrought iron casing flow and pipes, a strainer, an elbow and p connections, all of which are practica indestructible even when working gritty water. At the Worthington pl there are four of these wells averagi 400 ft. in depth scattered within a 2 ft. radius, and having 8-in. casings, in. air and 4¾-in. flow pipes. One w discharges the mixture of air and wa directly into the concrete basin or res voir nearby. In the others the air a water discharge vertically from the fl pipe against an "umbrella," which lows the air to escape while diverti the water back into an open concr basin from which it flows by gravity to the reservoir.

Air is supplied to the wells at a pr sure of from 80 to 85 lb. by a Laidla Dunn-Gordon compressor in the m power house, having a capacity of abo 800 cu. ft. of compressed air per minu Ninety lb. pressure is required to st the wells, but 60 lb. will maintain flow. When it is desirable to pump unusual quantity of water, or stop t compressor, a large Cincinnati-gear co pressor by the same builders, which f nishes the aid for the foundry, machi shop and other departments, may be e ployed.

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost must accompany all advertisements. In no case can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

SITUATIONS VACANT.

HARDWARE clerk, with knowledge of tinsmithing by September 1. Box 483, Essex, Ont. (34)

TINSMITHS wanted; 20 to 25c. per hour. Apply to Pedlar People, Oshawa, Ont. (34)

TINSMITH wanted; experienced; must be good on furnace work; steady employment; wages $12 per week. Box 269, HARDWARE AND METAL, Toronto. (34)

WANTED—At once, one first-class tinsmith; must be temperate; steady job to right man. Apply to S. B. Merrill, Enterprise, Ont. (34)

AT once, bench hands for box-seat diner chairs; state experience; good wages paid. Stratford Chair Co. (f)

BLACKSMITH wanted, horseshoeing and general work; state wages, with board. John Craib, Summerville, Ont. (f)

BLACKSMITH wanted; good floor man; steady job; good wages. F. Trump, Woodstock. (f)

WANTED at once, a good shoemaker. Apply to Wesley McKnight, New Liskeard, Ont. (f)

WANTED, steel range mounters. Apply Walker Steel Range Co., Grimsby, Ont. (f)

FOR SALE.

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. (38)

PERSONAL AND TRADE NOTES

Montreal.

S. J. Granger, hardware merchant, Montreal, has sold his business.

Mr. Geo. Pearsall, of Toronto, called on the Montreal trade this week.

A new hardware business has been started under the name of Carmel & Frere.

Mr. Hickman, of the Ottawa Paint Works, was in Montreal on a flying visit last Monday.

Mr. D. Eppelsheimer has joined the mechanical engineering staff of the Montreal Rolling Mills.

G. H. White, hardware merchant, of Orillia, has returned home after visiting Montreal and Quebec.

W. B. Stewart, Toronto agent of the Hamilton Cotton Co., was in Montreal for a few days this week.

Mr. and Mrs. F. W. Karn, of Woodstock, visited Montreal while returning to the west from Quebec.

Mr. W. H. Evans, of the Canada Paint Co., Montreal, is spending a two weeks' vacation at Prout's Neck.

The Starke Hardware Co., Montreal, who were recently burned out, have reopened at 28 St. Peter street.

Mr. W. Brown, of Drummond, McCall & Co., Montreal, has returned from a pleasant vacation spent in Toronto.

The Quebec Hardware Association met in the Windsor Hotel, Montreal, last week and decided to make no change in prices.

A Warren of the staff of Frothingham & Workman, Montreal, has returned from Shawbridge, where he spent his holidays.

Messrs. Peck and Stanley, of the Stanley Rule and Level Co., New Britain, Conn., visited the Montreal trade this week.

W. Craig, who represents Frothingham & Workman, of Montreal, traveling out of Kingston, paid a visit to headquarters this week.

Mr. Gordon Seybold, of Seybold, Sons & Co., wholesale hardware merchants, Montreal, has returned from his trip up the Ottawa Valley and reports a good business.

Mr. Geo. Caverhill, of Caverhill, Learmont & Co., Montreal, returned from England on the Virginian and spent a few days among the Laurentians before resuming his duties.

D. B. Swinton, of the C.P.R., Montreal, was elected president of the International Railroad Master Blacksmiths' Association at the convention held last week in Cleveland, Ohio.

Montreal business houses pretty generally recognized the Civic Holiday Wednesday afternoon, thus enabling their employes to take part in the welcome to Prince Louis of Battenburg.

Messrs. McArthur & Webster, contractors, of Winnipeg, were in Montreal this week in connection with the G.T.P. contracts. While here they visited some of the local cement and supply houses.

Among the members of Caverhill, Learmont & Co.'s staff who are enjoying holidays are: Geo. McGowan, who has gone to the Eastern Townships; Geo. Goldthorpe, who is holding forth on poker at Ormstown, and Jno. E. Brown, who is having a good time up the Saguenay.

Mr. J. N. Athill, representing W. & T. Avery, Limited, weighing machinists, Soho Foundry, Birmingham, Eng., was in Montreal recently on business-widening pursuits. He reported that business was prosperous in Canada and that the Motherland was turning marked attention towards us.

Ald. F. J. C. Cox, of Winnipeg, secretary of the Northwest Commercial Travelers' Association, was in Montreal for a few days of this week. Mr. Cox is agent for the building papers of Alex. McArthur & Co., Limited, and speaks enthusiastically of the prosperity of the Canadian Northwest, where he has resided for many years.

Mr. Duane E. Minard, representing the California Asphaltum Co., of New York, was in Montreal recently calling upon the local trade. He was of course nervous about the commercial travelers' tax, which he thought very ridiculous, and after coming all the way up here he was powerless to do business. Notwithstanding, Mr. Minard did some good work and the probabilities are that his firm may establish a branch office in Canada.

Toronto.

Wm. Good, the genial clerk at the Toronto sales offices of the Canada Paint Co., is at present enjoying a couple of weeks' vacation.

T. G. Dexter, of H. S. Howland, Sons & Co., Toronto, is on a trip up the lakes as far as Duluth.

G. McAvity, of the Buffalo Forge Co., Buffalo, was in the city this week.

J. J. Metcalfe, hardware merchant, Shelburne, Ont., was on a business trip to the city this week.

John Audley, foreign representative of the Conrad Wm. Schmidt, varnish manufacturers, Stratford and London E., Eng., was in the city this week on business. Mr. Audley has just come from South Africa where he was in the interest of the firm.

Elsewhere.

H. McQueen & Co., tinware dealers, Port Dover, Ont., have been burned out.

The firm of F. W. Wier & Co., hardware merchants, Winnipeg, has been dissolved.

J. R. Standen, hardware merchant, Osage, N.W.T., has sold out to Munsey & Mitchell.



H. M. Roblin, hardware dealer and tinsmith, Colborne, has sold out to Barfett Bros.

The Canada Launch & Engine Works, Limited, Toronto, have assigned to E. R. C. Clarkson.

Butchart & Bishop, hardware merchants, Brookdale, N.W.T., have dissolved partnership.

Fire did considerable damage to E. McQueen's stove and tinware store at Port Dover last week.

Mr. Frank B. McEown, manager of the hardware department of J. D. Murdock & Co., Simcoe, visited Brantford last week.

W. B. Shannon & Co., hardware merchants, Carberry, N.W.T., have sold the Brookdafe branch of their business to E. M. Jones.

A new sewing machine warehouse has been established in Vancouver by Jas. H. Commiskey and Jas. Caldwell on Horner street.

The New Brunswick Wire Fence Co., have recently added the necessary machinery for manufacturing the most up-to-date fences.

The Rock Island Hardware Co., Rock Island, Quebec, have been dissolved, and S. D. Waterman and R. J. Hunt are taking over the business.

Mr. P. Hanson, builder and contractor, Pilot Mound, has two outfits of men at work, one at Mather and one at Purvis, each building hardware stores.

Mr. John Stewart, hardware merchant, Plum Coulee, Man., is on a visit to his home at Owen Sound. J. A. McTavish is managing the business for him during his absence.

Mr. C. Dolph, manager of the Metal Shingle and Siding Co., Preston, Ont., has just returned from Winnipeg, where he was visiting Clare & Brockert, the western representatives of the company.

CANADA RADIATOR CO.'S NEW FACTORY.

Admirably located on the main line of the G.T.R. about seven miles from Montreal proper, and near the station called Dominion, are the new works of the Canada Radiator Co., formerly established for some years at Port Hope, Ont. The business was founded and developed to its present proportions by Mr. F. J. Travers, the general manager. The floor space covers over two acres, and to look down either arm of the buildings resembles a long avenue. Everything modern and needful for carrying on the work of manufacturing radiators is to be seen. The foundry is a model, and the accessories of comfort for the workmen and convenience for all connected with the establishment are first-class. The fact that they will be able to turn out six times as much work as they could in the old factory will give some idea of how extensive the new premises are. A staff of 150 hands is required, and the capacity will be 8,000 feet per day. The task of moving from Port Hope to Montreal has taxed the railways to a heavy extent as 2,000 tons of freight was billed in the removal. The factory opened for business last week and are running full force now. Orders have naturally gone behind during the moving, but Mr. Travers expects to make up for lost time shortly.

Every street car for the Toronto Fair passes the palatial Show Room of the Metallic Roofing Co., King and Dufferin Streets. Don't fail to notice it.

Sides, posts, roofs, shingles—in fact, everything is made of our Sheet Metal, yet looks like stone, brick and fancy wood-work.

One can hardly realize that such a stately building is metal and only metal.

At the Fair Grounds nearly all the buildings are covered with our Sheet Metal, and our Pavilion in the Manufacturers' Building is another example of ornately beautiful "Metallic" work. It's a feature of the Exhibition you can't afford to overlook.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Richardson's" Pressed Metal Doors and Sheet Metal Building Material of every description.

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Aug. 25, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

AT present the attention of the entire western trade is centred upon the crop reports, as the volume and character of the next year's business depends almost entirely upon the size of the crop. That being the case, if is satisfactory to note that reports received still point to the prospect of the largest crop on record, and in a very short time these prospects should be realized. The optimistic reports have already had considerable effect in causing liberal buying of Fall and Winter supplies.

* * *

Work is in progress on the additions to the warehouse of G. F. Stephens & Co., and before the snow falls large additions will have been made to the floor space of this firm.

* * *

The Munro Wire Works, Limited, of this city, have been awarded the contract for the fence required for the new city park. As this fence is to be used to confine the buffaloes, the prime requisite was strength and durability.

* * *

The new warehouse of the western branch of the Metallic Roofing Co. of Canada, Limited, is now completed, and it is a handsome addition to the buildings on Notre Dame avenue. The building itself is a splendid advertisement of the company's siding and roofing.

* * *

Business was interrupted this week by the civic holiday on Monday, but all lines of builders' hardware are selling in large quantities and the week saw a large turn over. Values are steady.

Screen Wire Cloth—Price is still quoted at $1.55 per 100 square feet. The season's trade is almost over.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, perroll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Lanterns—Selling in large quantities for Fall trade. Prices, as recently announced by the wholesalers, are as follows:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Prices are still quoted as follows:

Barbed wire, 100 lb.		$2 85
Plain galvanized	6 to 8	3 39
"	9	2 50 2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Stephens'

Paint and Varnish Solvent

For removing paint or varnish from any desired surface.

It acts quickly and will not stain or raise the grain, leaving the wood in its original condition ready to be repainted or finished.

Absolutely reliable and a ready seller.

Write for information in detail and lowest prices.

G. F. STEPHENS & CO. LIMITED

WINNIPEG, CANADA

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand 40. 10 and 7 1-2 per cent.. "M" brand and other brands 55 and 60 per cent. Add 15c. per box.

Wire Nails—Base price $2.75 per cwt. Selling in large quantities.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p. c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p c.
Square nuts, case lots	3c. discount.
" " small lots	2½c "
Hex " case lots	3c. "
" " smaller lots	2¼c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4 60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4 00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 co
" double bitts	12 co to 18 co

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper — Prices are steady since the recent decline. We quote:

Anchor, plain	55c.
" tarred	65c
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition—Large orders are reported. Discounts are as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00

Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is only fairly active. Prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	9 00

Black Sheets—Business is active at following unchanged prices:

Black sheets, 10 to 16 gauge, 100 lb	3 56
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge,	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXX "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—As noted last week, the price has declined to $7.75 per 100-lbs. in cask lots and $8.25 for broken lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote:

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2-lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2-lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net.

Canadian Paris Green—50-lb. drums 17c., bulk 18c.; in 1-lb. packages 20 cents.

Paints, Oils and Turpentine—Business is still very active in all general lines. Prices are steady. We quote:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls		0 02½
" " in kegs		0 02¾
Turpentine, pure in barrels		0 96
Less than barrel lots		1 01
Linseed oil, raw		0 62
Boiled		0 65

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6to 100 "	

Heretofore the industries at Sault Ste. Marie, Ont., have been importing their coke from the south, but the time has come when numerous coke ovens will be established either on the Canadian or American side at the Soo. Coke comes into Canada free of duty and that is the reason the ovens may be established on the American side.

GENUINE

PRATTS ASTRAL LAMP OIL

Sold in all countries and recognized as the highest grade oil manufactured.

WHOLESALE ONLY.

THE QUEEN CITY OIL COMPANY, Limited
TORONTO, ONT.

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

TRADE MARK
This design a guarantee of quality

Manilla Paper
SMOOTH, TOUGH, BRIGHT, CLEAN
ALL SIZES AND WEIGHTS

Fibre Paper
THE TOUGHEST OF THE TOUGH
ALMOST WATERPROOF

SAMPLES AND PRICES GLADLY SENT.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

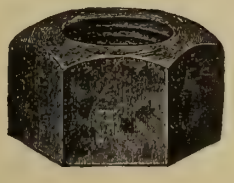
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THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

ARE YOU IN NEED OF

SPRINGS?

We make them any shape

Send samples for prices

The WALLACE BARNES CO., BRISTOL, Conn.

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

Porcelain Enamel Bath Tubs Lavatories Sinks Slop Hoppers

"MADE IN CANADA."

Write us at once if you want to secure

A CATALOGUE

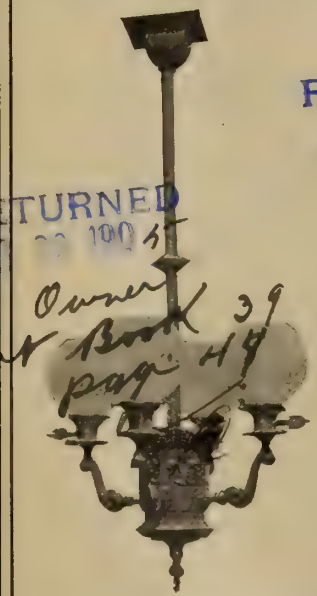
of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

Now ready for distribution and will be mailed on application.

THE ONLY MANUFACTURERS OF ENAMELLED WARE IN CANADA

Head Office and Factory:
Port Hope, Ont.

Sales Office:
50 Colborne St., Toronto.



Artistic
GAS and ELECTRIC FIXTURES.



Engineers' and Steamfitters' Supplies,
Locomotive and Marine Brass Work,
Steam Specialties.

TO THE TRADE:
You are cordially invited to visit our exhibit in Machinery Hall at the Canadian National Exhibition, where we shall take pleasure to discuss any lines of interest to you.

A. BETTON, F. W. ARMSTRONG,
N. L. SHAW, C. M. B. WORLD,
Representatives.

Toronto, Aug. 26th to Sept. 11th.



PLUMBING GOODS,
Lavatory Fixtures, Etc.

THE JAMES MORRISON BRASS MFG. CO., LIMITED, TORONTO

89-97 WEST ADELAIDE STREET

RETURNED AUG 29 1905

HEATING AND PLUMBING

MASTER PLUMBERS' AND STEAMFITTERS' CONVENTION

(Continued from last issue)

Re Vice-President's Report.

The resolution committee presented the following recommendations regarding the vice-president's report :

We recommend that the matter of the interchange of lists between Canadian and American associations be referred to the incoming executive.

We recommend that the example shown by British Columbia in including all the small towns that have plumbing firms in their Provincial association be followed by other Provinces, it being our opinion that Manitoba could with a little effort be organized into a Provincial association.

Re Secretary's Report.

The recommendations of the resolutions committee respecting the secretary's report were as follows :

We recommend that the secretary reside in the same city as the president, or as an alternative that the president appoint the sub-executive from the same city in which the secretary resides. While in sympathy with the opinion of our secretary that best results would be obtained from the employment of a permanent secretary, still in our opinion the finances of the association do not warrant at the present time the expenditure such a course would necessitate.

We recommend that the hearty thanks of the association be tendered Mr. Gordon for the able and efficient manner in which he has conducted the business of the association during his term of office.

Re N. S. Vice-President.

The report of the resolution committee with regard to Nova Scotia was as follows :

We regret to find conditions in Nova Scotia so unfavorable, and trust that the coming year will bring forth more satisfactory results.

Re Quebec Vice-President.

The resolution referring to Quebec was as follows :

The Quebec report shows very bright prospects for a Provincial association in the very near future. We are pleased to note that the city of Montreal has straightened out their labor difficulties and that things are running smoothly. Great credit is due Messrs. Mansell and Meredith for the help and advice they extended to Montreal members when passing through that city in April last, which goes to show what can be accomplished in organization work by competent men of the stamp represented by the above gentlemen. We believe it would be very beneficial to Quebec for this association to appoint a French-Canadian Provincial vice-president for the ensuing term.

Re Ontario Vice-President.

The report respecting Ontario was as follows :

Your committee are pleased to report that the Province of Ontario seems to be so well organized during the term of the retiring vice-president that he has left but a sinecure for his successor. We cannot pass without comment the hospitable manner in which the Guelph association, composed of but four members, entertained the delegates and visitors, numbering in excess of one hundred and fifty people, at the Ontario annual convention. The Guelph association deserves the greatest credit not only from the Ontario Provincial but from our National association for the pleasures they showered upon their guests on that occasion.

Re Mantioba Vice-President.

The report referring to Manitoba was as follows :

We find that the seed of organization is well sown in Manitoba. Business conditions are very bright, and the coming year should be a prosperous one to the followers of our craft in this Province, so that with a little care we have every hope of seeing a Provincial organization in Manitoba ere the National convenes again. Winnipeg we believe will be greatly benefitted as a result of this year's convention. We have already commented on Manitoba in dealing with the report of Vice-President Hammond.

Re British Columbia.

The resolution committee submitted the following report with regard to British Columbia :

Your committee cannot express in words of sufficient praise the work that has been performed in our westerly Province in the organization of that territory. While the Provincial Association of Ontario has been and is to-day one of the banner Provinces of our Dominion as far as master plumbers' associations are concerned, it has to-day to take off its hat in honor of the progress made in the Province of British Columbia, all due to the untiring efforts of our representative from that Province.

Your committee agree with the recommendation presented regarding the issuing of charters again to our Provincial and local associations, as was done some years ago, and advise the introduction of membership cards yearly to each member.

The recommendation from the same report for the appointment of a permanent secretary has been annually brought before our convention in almost every report, and still the condition of the finances of our association is not sufficiently plentiful to carry out this necessary appointment.

We can only hope that in the near future this will be accomplished. We recommend that the same procedure as last year be continued, viz., that an amount be set aside to each Province for organization purposes.

N. W. T. Report.

The report of the resolutions committee regarding the work in the Territories, was as follows '

We find conditions in the Northwest very favorable. Calgary is organized with five members and Edmonton has affiliated with the Calgary organization.

When we consider that last year we did not even have a delegate from this district we can well afford to congratulate ourselves upon the present conditions.

Apprenticeship Committee.

The report of this committee was as follows :

To the President and Members of the National Association in convention assembled :

The apprenticeship committee beg leave to submit the following report for your consideration : We wish to reiterate the statement contained in the report of the apprentice committee at our last convention, that the apprentice question has not received the consideration due so important a subject. In making this statement we wish to call your attention to the attitude of the journeymen's associations throughout our country in respect of this question inasmuch as it is practically made the most important item in the making of new agreements with local associations, their national body having many years ago pledged their support to all locals making a stand for the total abolition of the apprentice, and have met with a fair amount of success in some parts of the country.

Apart from this phase of the question, we are of the opinion that the employer could best serve his own interests by taking a more active part in the development of skilled mechanics from the youths who find employment in his shop and not leave the apprentice to the tender mercies of the journeyman who is pledged to abolish all apprentices, and who takes no interest in the youth who works with him other than to impress him with the necessity of living strictly to the union rules, which unfortunately in most cases do not tend to make first-class mechanics.

As it is impossible to attempt to take up the different phases of so large and important a question as this without more mature consideration (which unfortunately this question has not received heretofore) we would recommend that the association place itself on record as being in favor of the whole apprentice question being controlled by the employer through his local, Provincial or National body, and would further recommend that the convention appoint a representative committee, whose duties shall be to inquire fully into the conditions at present existing, and to prepare a National apprenticeship agreement or submit same to our next convention for amendment or approval by this National body.

Select Committee.

The select committee reported as follows:

Winnipeg, Aug. 10, 1905.

Master President,

Your select committee have examined all correspondence between the secretary of the National Association of Master Plumbers and all parties concerned for one year, from August 1, 1904, to August 1, 1905, and find that same has been done in a most creditable manner and very promptly attended to, and we compliment the secretary on the able manner in which he has done the work.

We find that a great deal of complaint has been caused by delay in getting out annual reports.

The Victoria correspondence in connection with charter and certificate, we recommend that the matter be open for discussion at this convention.

Re local association of Winnipeg, we feel that a meeting should be called respecting organization. Since writing a meeting has been called and we trust good result will be derived from same.

Respectfully submitted.

KENNETH J. ALLISON,
Chairman.

THE BANQUET.

Thursday afternoon was spent in a delightful sail down the Red River in the Alexandra, and at 9 p.m. the visiting delegates and supply men were the guests of the Winnipeg Association at a highly successful dinner, held in the Queen's Hotel. More than one hundred plumbers and supply men gathered round the festive board and the night was spent enjoyably. The delegates were on pleasure bent, and the night was spent in song and story, the serious speeches being few in number. President-elect Hammond presided and near him were seated Vice-President-elect Johnson, of Ottawa; Thos. Stewart, Winnipeg; R. W. Harrison, Toronto; Treasurer-elect Mahoney, Guelph; J. J. Coughlin, the British Columbia vice-president; Secretary Gordon, Montreal; Wm. Mansell, Toronto; Ald. Campbell, Winnipeg, and others prominent in association work.

The menu card was a triumph of the printer's art and a glance at the wonderfully constructed menu printed below will afford ample evidence that the chef who prepared the night's repast was also a genius. The menu explains itself:

When justice had been done to this menu of hardware and plumbing supplies, President Hammond called the gathering to order and the toast list was reached. The toast to "The King" was honored in loyal fashion and it was followed by songs by Messrs. Codd and Wray. The next on the list was the toast to

The City of Winnipeg.

The response to this toast was made by Ald. Campbell, who, in a brief speech, extended to the visiting delegates the hearty welcome of the city of Winnipeg. He regretted the absence of the witty Irish mayor of the city, whose place he was trying to fill. He was glad the visitors had had an opportunity of seeing the city, and he knew they would speak well of it on their return east.

Ald. Campbell's speech was followed by songs by Messrs. Quick, Stewart and Wray, and the gathering then honored the toast to

The National Association.

Robert W. Harrison, Toronto, responded in a short, witty speech, and he was followed by Ald. Hugh Wallace, of Hamilton. After a few introductory remarks, Ald. Wallace proceeded to point out a few of the benefits of the association. "I should like to take your minds back," said he, "to the time when we had no association. Only a few years ago it would have been utterly impossible to have such a gathering as this to-night. We were afraid and suspicious of each other then, but our fears and suspicions have been banished since we banded ourselves together in an association. Why are we here to-night? Some of us have traveled more than 1,000 miles to attend this convention, and business men would not do that for pleasure alone. When business men spend money in such ways they expect a direct or indirect dividend on their investment, and the indirect returns which we will get from this convention will be very far reaching; plumbers in all

Menu

SOUP

Plumbago de Caviar Bouillon in Oil Cups

RELISHES

Celery en Y Branches Salted Half-inch Plug Almonds
Nickle Plated Olives

FISH

Whitefish, a la Heinrichs—*All Broken Up!*

PATTIES

Taylor-Forbes, Point de Flett

IRVINE PUNCH, A LA ROMAN

Vulcan Strength

PLAXTON ICE CREAM, ALL FLAVORS

ASSORTED CAKES

B.C.—Coughlin N.W.T.—Young Manitoba—Hammond Ontario—Mansell Quebec—Gordon

SOFT AND HARD-SHELL NUTS

Stephenson Wallace Denman Mahoney Harrison
Cameron Johnson Orr Allison Watson Gate
David Ryan Turner Mellon Plaxton

RAIS-IN PRICES

Marshall Higginbottom M'Kenzie Ball Waltz

WINNIPEG CHEESE, A LA FORCE PUMP

Torch Toast Coffee on the Half Shell

PICKLES

Buchman Henrichs Mueller Flett Merwin Yeiser
Sampliner Emerick Covington Cluff Fulton
Barrett Wood Murdoch Rogers
McLaren Leonard

FIREWORKS

parts of Canada will benefit from such a gathering.

"We have representatives here from Montreal in the east to Victoria in the extreme west. This is something to think about, as only a few years ago plumbers in the same town would pass each other on the street with a mere bow of recognition. At that time we cut prices on each other and sometimes did work at less than cost. We did so because we knew if we did not our competitor would cut below us to take away our customers. Competition was too keen. We thought that ten per cent. was profit and at the end of the year we wondered why we had made no money, forgetting that that small margin had been eaten up by expenses. When things became so bad they could scarcely be worse, a few men of business ability saw that the time had come for us to get together. We followed the leadership of these men and found that our competitors were not such bad fellows after all. We saw we had to make more profit and we have had it since coming together. The public press said we were robbers,—well, we had been before, for we had been robbing our families of their due. Not one man in twenty was making a profit of $3,000 per year on an investment of $10,000.

"We don't band together to 'do' the public; all that we want is to benefit our members without making prices unfair. We ask only a fair price, and the master plumbers of Canada are beginning to see this. None of us are afraid to take our books into court. We have a right to a profit of 25 per cent., and we look forward to the time when all the master plumbers in Canada will be banded together to get a fair profit. We have come as missionaries to Winnipeg with the gospel of fair profits." (Applause.)

Wm. Mansell, of Toronto, also responded to this toast. Winnipeg was undoubtedly the hub city of Canada and the Winnipeg Association the hub of the National Association, extending from Halifax to Vancouver. In ten years' time the association had covered Canada from the Atlantic to the Pacific—a showing which he thought very creditable. In two Provinces, Ontario and British Columbia, there were Provincial Associations, and in addition there were many local unions. What more could be expected in ten years? For three years Ontario has had a Provincial Association, and it now embraces in its membership almost every master plumber in the Province. Last Spring a Provincial Association was organized by Mr. Coughlin in British Columbia, and now almost every British Columbia plumber belongs to it. What more could be expected?

"I have been surprised to find," said Mr. Mansell, "that here in Winnipeg there is more work in progress to be done by 50 plumbers than there is in Montreal, Toronto, Ottawa and Hamilton combined. My advice to you Winnipeg plumbers is to go in and get your legitimate profit. Do proper work, but don't work for nothing.

"We have the same right to organize as have the lawyers and doctors, and our profession, having as its object the betterment of sanitary conditions, is just as important."

Mr. Mansell concluded his remarks with a humorous gas-stove story, which convulsed the gathering.

J. J. Coughlin, Victoria, spoke briefly to the same toast, outlining the work done in British Columbia. He had come 1,500 miles to this convention, but he would willingly travel 15,000 miles if he could be sure of a Winnipeg welcome at the other end of the journey. He hoped the National Association would meet in Victoria in 1907.

Songs by Messrs. Codd and Quick followed and then the gathering paid due honor to the toast of

The Architects.

H. R. Eade, a prominent city architect, responded briefly to this toast, pointing out ways whereby the architects and plumbers could co-operate.

After another comic song by Mr. Wray, President Hammond proposed a toast to

The Master Plumbers and Steamfitters' Supply Houses.

C. E. Gate, Winnipeg, responded to this toast. Sometimes the press said the plumbers were rogues; those who knew the facts would acquit the plumb-

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These Stains are becoming more popular every day. Have you seen a set of our samples? If not, why not drop us a card to-day and ask for prices and samples? You may require these any day. Many buildings will call for Ramsay's Creosote Stains this Fall.

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THE WORK OF TWO WITH

The "Toledo" Adjustable Die Stock

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A new principle in Hand Power Pipe Threading.



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With this device one man can thread 2-inch pipe easily with one hand and we

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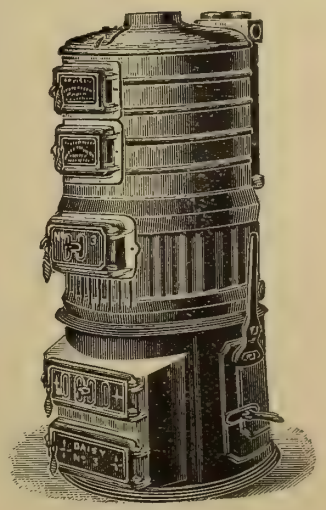
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R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR

WARDEN KING & SON, MONTREAL

ers and indict the public. If the plumbers would do the class of work asked for the death rate would soon be doubled and tripled. Men build houses to rent them and they don't care what kind of plumbing is put in provided it is done cheaply. A by-law compelling first-class plumbing was urgently required in all cities and towns in Canada.

John Stevens, of the John Stevens Co., Limited, made a humorous speech as a supply man. He had come to the conclusion long ago that if the supply man wanted to "do" the public he must use the master plumber. Some of the speakers had indulged in ancient history, giving the story of the beginnings of the association. He would go back farther than the others. The master plumbers were forming an association in Pompeii centuries ago when Providence frustrated their evil designs by an eruption of Vesuvius. He himself was the son of a reformed plumber; he was a supply man.

Stephen Mellon, Hamilton, also responded to this toast, expressing his pleasure in visiting Winnipeg. Ald. Wallace and he had been given their instructions before leaving Hamilton. Mr. Wallace was to investigate the Winnipeg sewerage system and the speaker was to examine the waterworks. He did not know the result of his colleague's investigations, but he would report that the Winnipeg water was good to wash in; that was the only use the natives seemed to make of it.

John McKechnie, president of the Vulcan Iron Works, responded briefly to the same toast. He said he was the oldest supply man in the Province, as he had established the first iron foundry in Western Canada in 1874.

After a song by Mr. Stewart, the toast to "The Ladies" was responded to by W. K. Bearisto. The toast to "The Press" was omitted owing to the lateness of the hour. The gathering dispersed after singing the National Anthem.

CONVENTION NOTES.

Wednesday evening the delegates attended a very pleasant social gathering at "The Elks" club room.

Tuesday evening the sound of the cow bell told where the plumbers were to be found. O. T. Emerich and J. C. Covington, the representatives of the United Brass Mfg. Co., distributed small brass bells as souvenirs, and the night was made merry with their music.

H. R. Flett, the Toronto manager of the Taylor-Forbes Co., had an attractive exhibit in the Queen's Hotel of the new "Sovereign" radiators. The delegates were all interested in the new radiators and favorable comments were many.

Taylor-Forbes Co. distributed tags, which were worn by all the delegates, announcing that the wearer was "out for a time," and giving his name and address with instructions to "ship me home."

The Glauber Brass Co. distributed handsome souvenirs of brass goods very artistically designed.

H. Mueller Mfg. Co. were represented by F. B. Mueller and Will C. Heinrichs. At the banquet they distributed neat tie pins as souvenirs.

General regret was expressed at the illness of President Ross and Secretary G. H. Kirkham.

Very attractive badges with red, white and blue ribbons were worn by the delegates.

The delegates were the guests of the Fairbanks Co. at the conclusion of the business sessions.

Among the local supply men noticed at the Queen's Hotel, the convention headquarters, were C. D. Waldon, of the Pease-Waldon Co.; G. Griffith, of G. Griffith & Co., and John Stevens, of the John Stevens Co., Limited.

Four of the delegates, W. Mansell, Toronto; S. Mellon, and Alderman Hugh Wallace, of Hamilton, and H. Mahoney, of Guelph, made a trip to Brandon at the close of the convention; while Mr. John A. Gordon, of Montreal, with his wife and daughter, who are accompanying him, go on to Vancouver.

Mr. John A. Gordon and Mr. George C. Benman, of Montreal, are peculiarly interested in Winnipeg, as it is their first visit since 1885, when they went west in the Montreal Garrison Artillery, of which Mr. Benman was sergeant-major. Their first duty on arriving was to bury those killed at Batoche, and the first shots they fired were over the graves in St. John's cemetery. Mr. Benman remarked on the changed aspect of Winnipeg since then. At that time the artillery camped in front of Fort Osborne barracks and they waded in mud in many of what are now the best portions of the city. Where old Fort Garry stood he now sees only its gateway, to remind him of the stirring scenes of twenty years ago. His company went west as far as Regina, and when the rebellion was quelled they returned with the other garrisons and spent a short time in Winnipeg before leaving for home.

Mr. E. A. Rogers, Toronto, represented the James Robertson Co. at the convention, and his geniality won many friends.

One of the most popular supply men at the gathering was Mr. W. J. Fulton, who covers the western territory for the Dominion Radiator Co. He was busy at the jollying game as usual.

Toronto's youngest supply house, R. J. Cluff & Co., was well represented by "Billie" Cluff, who was kept busy shaking hands with his old time friends on the road.

Mr. James Drew, Winnipeg, representative of the Gurney Foundry Co., kept the good qualities of Gurney goods before the delegates by his own good qualities as a conversationalist.

SEWAGE SYSTEM OF PARIS.

THE city of Paris maintains four sewerage farms, having a combined area of nearly 14,000 acres—one each at Gennevilliers, Acheres, Pierrelaye and Triel. The former has been in operation for thirty-five years or more, and there is conducted what has come to be called the "model garden for the agricultural utilization of sewage." The sewage of Paris amounts to more than 185,000,000 gallons a day. About 160,000,000 gallons of this are pumped at Clichy, and from there are taken through conduits—at some points, after repumping—to the reduction works operated in connection with the four farms, one of which is eighteen miles from Paris. At one point the rise of the moving sewage is 118 feet above the level of its discharge from the city pipes. The lands constituting the farms are either owned outright or leased by the city, and their total capacity for the absorption of the sewage-fertilizers is upward of 57,000,000,000 gallons a year—an amount that already calls for additional farm lands to meet the steady increse in the volume of the sewage. The whole system is not only a magnificent engineering work but also constitutes a rational, scientific and business like solution of what might now be a serious municipal problem at the French capital had not her officials given the subject intelligent attention forty years ago.

DIAGRAMS OF LARGE SYSTEMS.

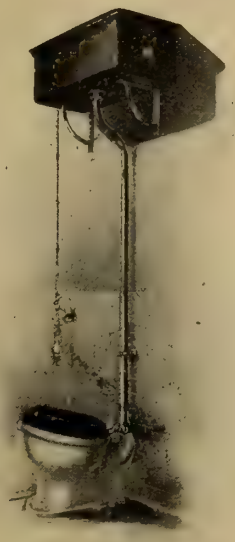
MASSES of piping used for various purposes in large buildings, has necessarily resulted in the use of a large number of valves for controlling the different parts of the system. As the multiplicity of valves and the ramifications of the piping are sufficient to confuse the mechanic or engineer during the construction of the building, the layman naturally is apt to be still more in the dark in regard to the uses of the various valves and pipes after the completion of the work. To avoid mistakes in the use of the valves, and in order to indicate the functions of each pipe, in many large buildings all the valves are now marked with a numbered tag attached to the wheel of the valve. In addition, a chart is provided, made in different colors, corresponding to the various uses of the pipes, and which also shows the position of the numbered valves. The chart is accompanied by a key giving the number and location of each valve, together with its use. Both are framed and kept in an accessible place where they may be readily found.

These diagrams and keys are very useful in case of the sudden breaking of any portion of the system, as any one, although unaccustomed to the equipment, could in a few moments shut off the portion of the system affected by the break without interfering with the rest of the installation. For example, suppose a break should occur in the sixth floor hot water supply; by consulting the key it is found that by closing the valves Nos. 9, 16 and 33 and opening No. 12 the hot water supply will be cut off above the fourth floor and properly drained. The diagram shows the location of these valves and the tag enables any one to secure the correct valve at once.

Charts and keys of this kind in cases of emergency will save many times their cost and should be used whenever a system is at all complicated.

The Plumbers' and Steamfitters' Union of Toronto have withdrawn their delegates from the Toronto Labor Council, giving as a reason the excessive number of meetings the delegates had to attend. They still retain their connection with the Federated Building Trades' Council.

Some Men Are Dead And Don't Know It.



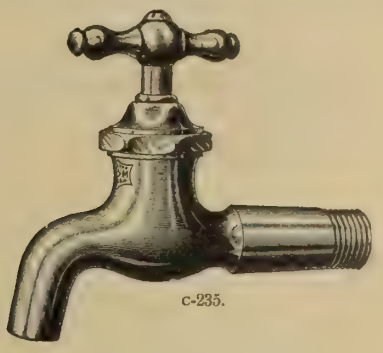
You've met that kind of man.
He lives only in the past.
Nothing to-day is as good as when he was a boy.
Don't believe in improvements.
Fortunately—
You don't belong to that class.
Therefore we say to you
It is a pity if you are not handling the NATURO Closets.
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in sizes from 4 inches to 24 inches.

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PLUMBING MARKETS

QUEBEC

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, August 25, 1905.

LITTLE change is noticed in the condition of the plumbing markets this week, but last week's tone is accentuated. The scarcity of ingot casting copper is even more noticeable, some of the largest producers claiming that the shortage is largely the result of the hot weather, and the consequent inability of workmen, in the refineries, to put out the normal amount of goods. But this cannot wholly account for the condition in which buyers find themselves to-day. We must necessarily conclude that an unusually heavy demand has helped to reduce stocks, while it must be admitted that manipulation by the "bulls" has not been without its effect.

Be that as it may, the supply houses are facing a serious scarcity of copper, and, as reported in Hardware and Metal last week, brass manufacturers have withdrawn their prices on nearly all lines. Jobbers are still hoping that the situation is only temporary, but the consensus of opinion is that it is here to stay, and, although prices have not yet been advanced on the strength of reduced stocks, we confidently predict a jump in the near future.

The approach of Fall is giving an added strength to the pipe market, as many house-owners are anticipating the Winter by repairs and extensions to their plumbing.

The continued firmness of lead pipe has, as yet, not affected the price of lead pipe, the inference being that stocks of good size are in the hands of the trade.

Range Boilers—An active demand is reported. Prices are quoted as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—In spite of good sales and the high price of pig lead, we still quote lead pipe as follows: Discount 30 to 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra.; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—Conditions remain as before reported. Our prices are: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Manufacturers report a much better demand which is expected to continue throughout the Fall. We quote: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent. 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch 48 per cent.; 1-2 inch, 63 per cent. 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30,00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanised, 61 per cent.

Soil Pipe and Fittings—No special feature is to be noticed, the general activity being largely shared by soil pipe and fittings. We give prices: Standard soil pipe, 50 per cent. off list. Standard fittings 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Aug. 25, 1905.

BUSINESS continues very good this week, and indeed some of the supply men report an increase this week over last. Some large orders for plumbers' supplies have been filled this week. The manufacturers are kept very busy to supply the demand from the supply houses.

Prices remain unchanged in all lines and are firm for the most part. The advance expected in lead pipe because of the advancing price of raw material, has not as yet materialized. However, the advance is still looked for. Iron pipe also, it is surmised, may go up, and as a consequence there is not a little stocking in these two lines.

Lead Pipe—The looked-for advance has not as yet taken place, but the continued firmness in the raw material points to an almost certain advance in the near future. We quote as follows: **Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.**

Soil Pipe and Fittings—Demand is very keen, but supplies are plentiful We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Buying is heavy and prices continue very firm. Our quotations are as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers— The large amount of building accounts for the general activity in buying. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Some dealers are buying large stocks in anticipation of an advance. Prices are firm. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder— Last week's prices hold firm. Our quotatoins are as follows: Bar solder, half and half, guaranteed. 19 1-4c.; wiping solder at 17 1-2c., and refined 17 3-4c.

Enameled Ware—Demand continues exceedingly strong for Canadian ware, but manufacturers keep well up with their shipments. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50, special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet, 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

AN IMPROVED SOLDERING ACID.

OWING to the value of the information, we reprint the following article on soldering acid by Charles H. Poland, which was presented in the Brass World:

The method of making ordinary soldering acid is well known and there are several objections to its use. One disagreeable feature is the flying or spattering when the soldering iron is applied to it. The other portions of the work not only become covered with it, but the hands of the operator suffer to a greater or less degree. If work is soldered in which it is necessary that the acid shall not come in contact with any but the portion which is to be soldered, the



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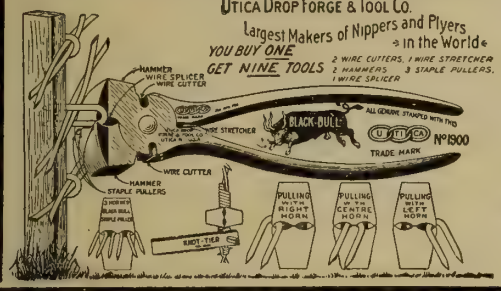
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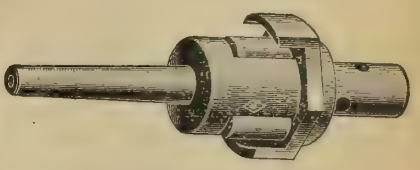
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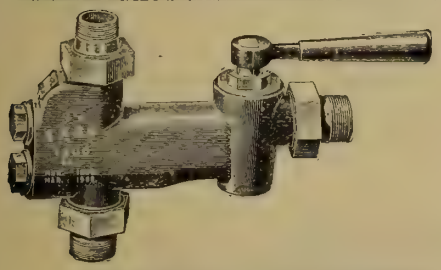
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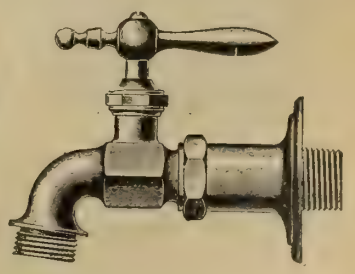
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Apex No. 1



Operating Side

Capacity of machine from ¼ to 2 inches inclusive. The Reamer is conveniently located so as to ream while cutting off, and can be thrown to one side to permit of long pieces of pipe being cut off. One set of right-hand dies, for each size of pipe, is furnished. The Oil Pump is automatic and is arranged to flood both the Chasers and Cutting-off Tools. This machine is especially adapted for making nipples.

Write for Catalogue.

THE CANADIAN FAIRBANKS CO. Limited

Sole Agents for Canada

MONTREAL, TORONTO, WINNIPEG, VANCOUVER

usual form of soldering acid cannot be used.

Such a difficulty has confronted me in past times, and I actually had to dispense with the use of soldering acid and use rosin and oil on account of the trouble which was caused by the acid spattering upon the finished portions of the work. The article which I have had to solder is a high grade of coach lamp, and it is necessary to solder certain portions of it after other parts have been finished. For this reson no spattering of acid upon the finished portions could be tolerated. No matter how careful the operator was and no matter how the acid was made, the results were the same, and in desperation I returned to rosin and oil with all its accompanying disadvantages. It is well known that the strongest joint may be obtained with soldering acid, and that rosin, no matter how well applied, fails to give the same results.

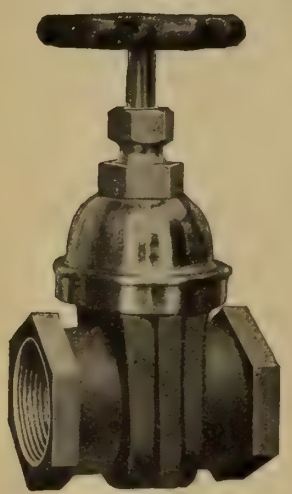
I have found that a very satisfactory soldering acid may be made by the use of ordinary soldering acid for the base and by introducing a certain proportion of chloride of tin and sal-ammoniac. This gives an acid which is superior in every way to the old form. The method of making it is as follows:

To make one gallon of this soldering fluid take three quarts of common muriatic acid and allow it to dissolve as much zinc as it will take up. This method of course, is the usual one followed in the manufacture of ordinary soldering acid. The acid, as is well known, must be placed in an earthenware or glass vessel. The zinc may be sheet clippings or common plate spelter broken into small pieces. Place the acid in the vessel and add the zinc in small portions so as to prevent the whole from boiling over. When all the zinc has been added and the action has stopped, it indicates that enough has been taken up. Care must be taken, however, to see that there is a little zinc left in the bottom, as otherwise, the acid will be in excess. The idea is to have the acid take up as much zinc as it will.

After this has been done there will remain some residue in the form of a black precipitate. This is the lead which all zinc contains and which is not dissolved by the muriatic acid. This lead may be removed by filtering through a funnel in the bottom of which there is a little absorbent cotton, or the solution may be allowed to remain over night until the lead has settled and the clear solution can then be poured off. This lead precipitate is not particularly injurious to the soldering fluid, but it is better to get rid of it so that a good, clear solution may be obtained.

Now dissolve six ounces of sal-ammoniac in a pint of warm water. In another pint dissolve four ounces of chloride of tin. The chloride of tin solution will usually be cloudy, but this will not matter. Now mix the three solutions together The solution will be slightly cloudy when the three have been mixed, and the addition of a few drops of muriatic acid will render it perfectly clear. Do not add any more acid than is necessary to do this, as the solution would then contain too much of this ingredient and the results would be injurious.

This soldering acid is used in the same manner as any solution of this kind, but it will be found that it will not spatter when the iron is applied to it. It has also been found that a poorer grade of solder may be used with it than with the usual soldering acid. From my experience I have found that a solder composed of two parts of lead and one of tin, works equally as well and produces fully as strong a joint as that obtained



KERR'S GENUINE WEBER

GATE VALVES

have many imitations, but none equal the "real" article made by us. Be sure you get "Kerr's." Every valve made of the best red metal, and beautifully finished.

The KERR ENGINE CO., Limited

WALKERVILLE - ONTARIO

IT'S TIME

to consider Horse Nails—time to think about your Fall order. It's important what nails you buy. Some will give your trade satisfaction and bring profit to you—others won't.

B th considerations are of interest to you.



"M" Horse Nails

Will satisfy the most exacting. They're made to satisfy—their reputation confirms it. There is profit in the "M" Nails for you — It is

"The Right Nail at the Right Price"

THE MONTREAL ROLLING MILLS CO.

RETURNED NOV 22 1905 T. Montreal Vol Book 43 page 81

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR { **ALL CAST** Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO

with the customary half and half solder. An experience extending over some time has demonstrated that this acid will do what I claim for it, and I cheerfully recommend it to those who are desirous of improving their soldering acid.

UNIQUE CELEBRATION AT "SOO."

An international celebration took place recently at the "Soo," the occasion being the fiftieth anniversary of the opening of the first Sault Canal. While the United States take to themselves the honor of building the first Sault Canal, the truth is Canada was many years in advance of them. As long ago as 1797 a canal on the Canadian side was constructed. The Northwest Co. was at that time competing with the Hudson's Bay Co. for the fur trade. As will be remembered, the Northwest Co. was a Canadian corporation, with headquarters at Montreal, while the Hudson's Bay Co was English. The Hudson's Bay people operated via James Bay, drawing their supplies that way, and sending out their furs by the same route. The Northwest Co., on the other hand, traded through Canada. That corporation found it necessary to send its batteaux up the Georgian Bay, and across the head of Lake Huron, to Lake Superior. In order to reach the latter lake the Sault Rapids had to be overcome, and here the canal was built. The remains of this structure, which was abandoned when the company failed, are extant to this day, and it is understood that they perform the duty of a flume for the power company.

PLUMBING GOSSIP.

Montreal delegates to the great Master Plumbers' Convention in Winnipeg report that they were surprised and delighted with the general air of prosperity in that city. It was greatly in advance of what they expected to find.

* * *

Mr. J. A. Gordon, secretary of the National Association of Master Plumbers, has not yet returned to Montreal from the west. He will remain in the land of wheat until the first week in September.

* * *

The plumbing shop of Geo. Ross & Co., Brockville, Ont., was burglarized recently and $2,200 in cash taken from the till.

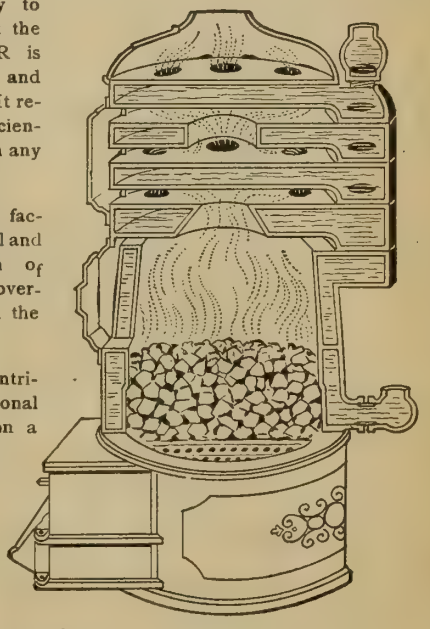
* * *

Mr. Wm. Parrott, plumber, Collingwood, was in Toronto this week on a business trip.

OXFORD HEATING SYSTEM

("B" SERIES)

BOILERS and RADIATORS.



Economy and Efficiency You can safely say to every customer that the OXFORD BOILER is the most perfectly constructed, economical, and efficient heating apparatus ever produced. It represents sixty years of the most careful and scientific effort that has ever been expended upon any article of its kind.

Over-hanging Fire Pot One of the essential factors in its economical and prolific distribution of heat is the construction of the fire-pot whose overhanging walls give the greatest amount with the minimum combustion of fuel.

Triangular Revolving Grate The grate is a contrivance of exceptional merit. It is built on a triangular revolving basis with revolving bars which allow the maximum of air space without permitting the coal to fall through, and is dumped with a slight turn.

No Washers or Gaskets The OXFORD BOILER is built with iron to iron push nipple connections—there are no washers or gaskets which are the weak factors in all other goods of this kind.

OXFORD HOT WATER and STEAM RADIATORS

form a combination with the OXFORD BOILER and give universal satisfaction. They are cast iron and will not rust if the water lies in them all summer.

No Fibrous Material Used The Oxford Push Nipple, made of steel, with which all connections of radiator loops are made, obviates the need of any kind of washer, and absolutely prevents leakage. The Oxford gives the highest degree of radiation proportionate to size, and even distribution of heat throughout the house.

We cannot give complete details here but suggest that you write for our handsomely illustrated catalogue which will inform you on every point.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.

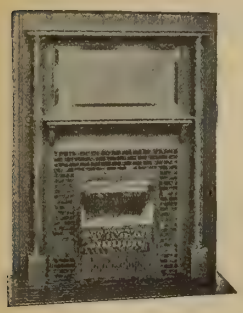
The Gurney Standard Metal Co., Limited, Calgary, Alta.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. *Head Office: 98 King St. W., TORONTO*



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

The Best South Wales Produces

IN STEEL COKE TINPLATES

"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"

IN CHARCOAL TINPLATES

"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"

FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

MISTAKEN IDENTITY.

Owing to a similarity of names, a slight mix-up occurred in illustrating the report of the plumbers' convention in last week's Hardware and Metal. Mr. J. A. Gordon, the Catherine street plumber, Montreal, was elected secretary of the association, but the illustration represented Mr. Jas. A. Gordon, a well known Montreal business man who is selling agent for the St. Lawrence Sugar Refinery. The latter gentleman was no doubt placed in a position new and unfamiliar to him, much to the surprise of his many friends, who were not slow in making inquiries regarding his having adopted a new line of business.

PUTTY FOR GAS PIPES.

A joint for gas pipes which is said to be much cheaper than the usual white lead cement is made by working up equal weights of Roman cement, brick earth, and quicklime with linseed oil. Another putty is made with melted pitch, brickdust, and oakum. The metal should be warmed, and the putty, made in such proportions that it is plastic to the finger, is wiped on. This last recipe is specially useful when pipes are joined by the small end of one pipe being fitted into the socket or enlarged end of another.—English Plumbers' Review.

ROOM FOR WESTERN BUSINESS.

THE Maritime Provinces are bewailing the fact that their population is showing practically no advance. Their need, however, is not so much an increased population as it is for a few more men with the energy and ability to build up large manufacturing plants such as are being established in western cities and towns.

Mr. Joshua Peters, general manager of the Record Foundry and Machine Co., Moncton, N.B., which firm was one of the first Maritime firms to appreciate the value of the western market, and to establish an agency in Winnipeg, said in conversation with a representative of Hardware and Metal, that the Maritime Provinces offered many advantages to manufacturing firms and that there was no reason why manufacturers in Nova Scotia and New Brunswick should not receive their fair share of western trade.

Asked as to whether freight rates were not a serious handicap, he replied that

CARRIAGE SPRINGS & AXLES

ANCHOR BRAND

GUELPH AXLE WORKS

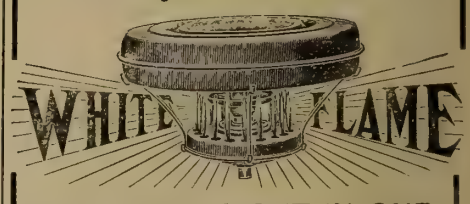
THE GUELPH SPRING & AXLE CO.
LIMITED
GUELPH, ONT.

QUICK ACTION

Fall and Winter Sellers

Time for Trade to
ORDER NOW
to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58, or send for Catalogue.

WALTER CROSE, MONTREAL — Sales Agent for the Dominion

PURITAN SMOKELESS OIL HEATERS

Absolutely Safe and Reliable
Odorless as Well as Smokeless

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RETURNED
SEP 21 1905
To Come
out Book 40
Page 57

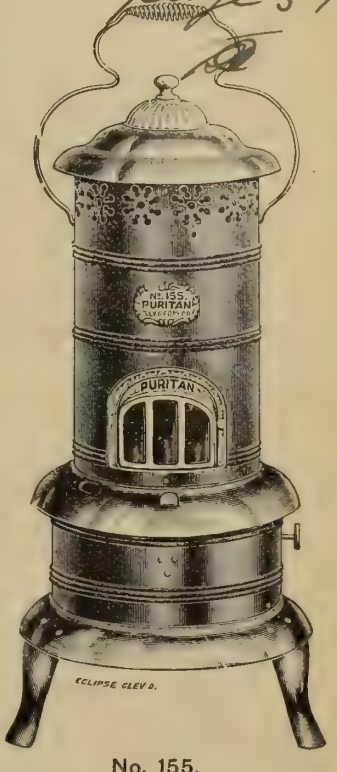


No. 149.

No. 149—Height (bail down), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent corrosion, (4 qts.) Polished steel drum, 8 in. in diam. Mica window frame shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Top nickel-plated and highly finished. Legs, base-ring and drum base, black finish.

No. 154—Height (bail down,), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent any corrosion, (4 qts.) Polished steel drum, 8 in. in diam. Mica window shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Legs, base-ring, drum-base and top nickel-plated and highly polished.

No. 155—Height (bail down), 27½ in. All stamped steel. Removable reservoir of heavy sheet steel, heavily coated with lead inside and out to prevent any corrosion (4 qts.) Polished steel drum, 8 in. in diam. Mica window shows flame adjustment. Indicator on reservoir. Top removable for heating water. Equipped with wick-stop, which prevents smoking. Legs, base-ring, drum-base and top nickel-plated and highly polished. Ruby glass front over mica, softening the light.



No. 155.

Buckeye No. 161-S.—Height (bail down,) 25½ inches. All stamped steel. Removable reservoir of heavy sheet steel heavily coated with lead inside and out to prevent corrosion (4 qts.). Polished steel drum, 8 in. diameter. Mica window shows flame adjustment, without indicator. Top not removable; aluminum finish. Equipped with wick-stop, which prevents smoking.

Write for Prices

FOR SALE BY

The Hobbs Hardware Co., Limited

London, - - Ontario

Manufactured by The Cleveland Foundry Co., Cleveland, Ohio

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not not them, write direct to

R. E. THORNE

768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

SAVED—LOST.

One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

Bolton, Fane & Co.

Leadenhall Street, London, E.C., Eng.

TINPLATES

In all qualities and sizes

Bessemer Coke - - - "Lofoden" Brand
Seimens Coke - - - "Pelican" Brand
Charcoal - - - - "Mocha" Brand
Best Charcoal - - "Cardigan" Crown Brand
Staffordshire Bar Iron - - B.G. Crown Brand
Galvanized Sheets "Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

there was a difference of only 6c. to Winnipeg and the west between their freight rate and that of a well known firm in London, Ont., and that this was more than made up for by the lower price of coal in the Maritime Provinces.

Labor, too, was somewhat cheaper in the east, and while they had had two strikes within the last few years still as a general rule labor difficulties were very few. Many skilled mechanics come over from England, and most of these seek work in Halifax, St. John, or neighboring towns.

A SUCCESSFUL CANADIAN.

MR. LAWRENCE R. GREENE, general superintendent of the department of publicity of the Sherwin-Williams Paint Co., Cleveland, Ohio, called on Hardware and Metal in Toronto on Saturday last. Mr. Greene, who has been spending his vacation in Toronto, is a young Canadian who has earned distinction in the States, having been for seven years with the "S.W." Co. at Cleveland. Prior to that time he was employed in Bertram's hardware store at Hamilton, Vokes hardware store, Toronto, and the Sherwin-Williams branch offices in Toronto.

Mr. Harry Dwight Smith, who was head of the department of publicity, has become assistant to the general manager, and his many Canadian friends will be glad to hear of his promotion, as well as to learn that his former position is to be filled by Mr. Greene, a former Canadian.

Regarding Hardware and Metal, Mr. Greene stated that it had a warm place in his heart as well as a prominent place on his desk. Being a former hardware clerk, it is but natural that he should be interested in the Canadian hardware paper, but he states that regardless of his former associations, there is no American hardware paper which he finds so interesting and newsy as Hardware and Metal, this opinion being shared largely by Mr. Smith, his former chief. The Sherwin-Williams Co., says Mr. Greene, are conservative advertisers in trade papers, but use liberal space in Hardware and Metal because they have found it to give unequalled results. Mr. Greene proved his interest in the paper by making some valuable suggestions for its improvement, an action which is greatly appreciated by the editor and publishers.

TOO ANXIOUS FOR BUSINESS.

AT a recent merchants' convention one of the speakers attributed many of the ills of the trade to the retailer's over-anxiety to do business, says the Hardware Trade.

Prices are cut below profitable figures and bad debts made by too much anxiety to see the volume grow. This same anxiety gets in its work among competitors and results frequently in a demoralization that proves disastrous.

But what are we going to do about it? That is the question. Education is the only way out. You cannot check a man's ambition without destroying his usefulness. The only thing to be done is to teach him where his anxiety to do business which is his ambition is likely to turn off on the wrong road.

This over-anxiety to do business is not confined to the retailer. We think we see traces of its work in wholesale circles frequently. Every now and then some retailer goes straight up the flue of failure whose whole career is a result of the over-anxiety of some wholesale house to do more business in that particular community

So anxious that it took a long chance and lost. So anxious that it bolstered up competition for good merchants and, perhaps, assisted in demoralizing trade conditions in that community for the time being.

Each year's history of failures contains a good proportion of this class. No special course in education is needed for the wholesaler. He gets his lesson burned in with such big chunks of loss that he is sure to profit by it. But the over-anxious reach for more business never disappears in wholesale competition, and each year's crop of failures of this class is about the same.

After all, it gets back to the nature of the man and to the kind of a head which is doing the thinking. If he is of the kind that can be stampeded by reports of what his competitor is doing, or if he forgets net profit in his wild desire to push his volume over a certain figure, he will stumble into the pitfall which over-anxiety prepares for all such. The best the bystanders can do is to wave the danger signal frequently.

A. C. Waltx & Co., Port Arthur, have been awarded the contract for the plumbing in the high school in that town. The firm have also secured the contract for the installing of a lighting plant at Fort Frances. At present the firm are finishing the wiring in R. A. Ruttan's new residence.



THE BANNER COLD BLAST LANTERN

ALWAYS LEADS GREAT LIGHT WIND PROOF.

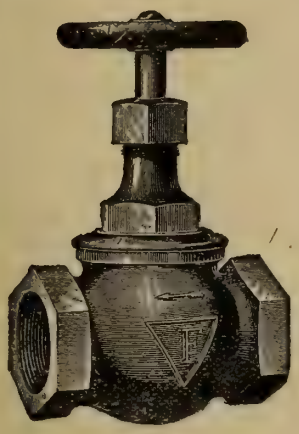
Note Improvements for Season 1905.

We make twelve different styles of Lanterns in Tin, Antique Copper and Solid Brass.

For Sale by all Prominent Jobbers Throughout the Dominion.

ONTARIO LANTERN & LAMP CO.
LIMITED

SOME PLUMBERS ARE BLIND

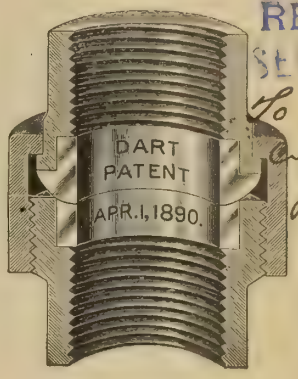


to their own interests when it comes to a question of Valves, Fittings and Steam Goods of every description.

They never pause or endeavor to discriminate between poor quality and the best quality.

The reason we keep "drumming" you constantly regarding Fairbanks Valves, Steam Goods and Specialties is because we really know the quality of our goods to be the very best. This is the open secret of our success and growth in business in Canada.

No one has ever built up an honest lasting trade on poor quality of goods. See the point?



MORAL:

BUY FAIRBANKS VALVES.

THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO VANCOUVER WINNIPEG

Crain Loose-Leaf Systems

Are you using them? Others are and are satisfied. The Monthly Account System for the Retail Trade. Our Stock Ledger cannot be surpassed for Quality or Price.

WRITE FOR PARTICULARS.

The Rolla L. Crain Co.

OTTAWA, CANADA. LIMITED

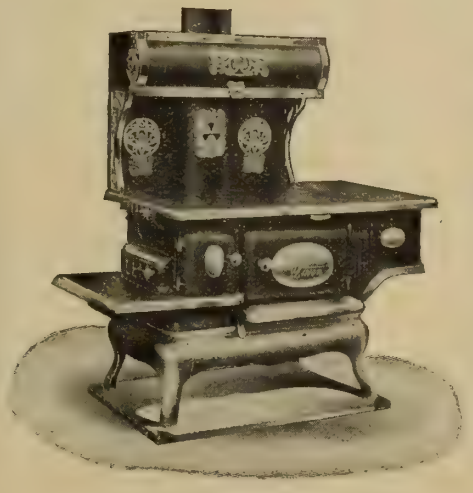
BRANCH OFFICES:

Toronto, 18 Toronto St. | Montreal, 74 Alliance Bldg. | Winnipeg, 54 Princess St.

AGENCIES:

Schofield Bros., St. John, N.B.
White & Bindon, Vancouver, B.C.

MENTION THIS PAPER.



The Firebox of The Empire Queen Range

is perfectly proportioned to the size of the oven, fitted with the latest duplex grates, and heavy sectional cast iron linings for coal, and separate grates for wood. The change from wood to coal, or vice versa, can easily be effected. YOU should handle **THE EMPIRE QUEEN RANGE.**

WRITE FOR PRICES.

The Canadian Heating & Ventilating Co. Limited

OWEN SOUND, Ontario

FOR FALL TRADE

STOCK

BLACK DIAMOND (registered)
JOLIETTE and CYCLONE (registered)

No sharp salesmen needed to sell these brands of Building Paper.
They Sell Themselves. ***Write for Quotations.***

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Aug. 25, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

M.L.S., equal to Bradley—	Per box.
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs. }	
" 14x60, " }	7 00
" 14x65, " }	

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality		0 18
"I" "		0 14
"B C" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:	
Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 12
No. 1	0 10
No. 2	0 07
No. 3	0 05½
Large orders subject to discounts.	
The Canada Metal Co.:	
Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	
J. C. M. 3 Crowns	
18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 40	
22 to 24 gauge 3 50	3 50
26 " 3 75	3 75
28 " 4 00	4 15

Comet Bell.	Queen's Head
16 to 20 gauge 3 40	
22 to 24 gauge 3 45	3 65
26 " 3 70	3 90
28 " 3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "		5 60
"	5-16 "		4 45
"	⅜ "		3 85
"	7-16 "		3 70
"	½ "		3 55
"	9-16 "		3 45
"	⅝ "		3 35
"	¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.
Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
inned copper sheet	24 00
lanished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks		7 00
Part casks		7 25

LEAD.

Imported Pig, per 100 lb		4 00
Bar, " "		4 80
Sheets, 2½ lb. sq. ft., by roll		0 06½
Sheets, 3 to 6 lb. "		0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality		Special
4 and 4½ ft. 3 in. rolled rim			$18 00	16 00
5 feet		"	19 00	17 00
5½ "		"	20 50	18 50
6 "		"	23 25	21 25
Plate E II				
4½ feet	2½ in.	"	16 75	14 75
5 "	2½	"	17 50	15 50
5½ "	2½	"	19 00	17 00
Plate 123 E, lavatories		1st quality		8 90
" 123 E, "		2nd "		7 50
" 127 E, "		1st "		5 70
" 127 E, "		2nd "		4 80
" 128 E, "		1st "		5 60
" 128 E, "		2nd "		4 70
" 129 E, "		1st "		5 40
" 129 E, "		2nd "		4 50
Sinks 18 x 30 in flat rim, A quality				2 45
" " " " "		B "		2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
⅛ inch	2 86
¼ "	2 89
⅜ "	3 14
½ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c.
Cushion work. discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " "	1 75
No .7 Fuller's "	2 10
No. 4½, " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon "	22 00
" 35 " "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS.

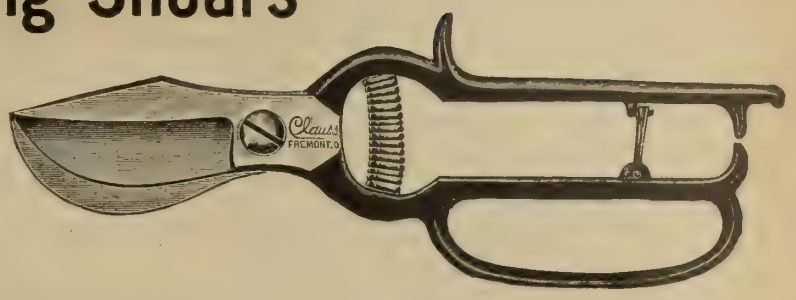
Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	22.00	34.00
120	34.00	46.00
144		55.00

Clauss Brand Pruning Shears

Fully Warranted

Our Plain Pruning Shear is of the very best our secret process of manufacturing can produce. There is no question as to the quality, which is unsurpassed.

File Handles and Finely Polished Blades. Ask for Discounts.



Clauss Shear Co., 169 Spadina Ave., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	....	$5 25
Genuine, 100 lb. kegs, "	....	5 50
No. 1, 560 lb. casks, per cwt	....	5 00
No. 1, 100 lb. kegs, per cwt	....	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07¼
No. 1	....	0 06¼
No. 2	....	0 05¼

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10¾
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	....	75
" hunters	....	5 25
Underhill American Bench Axes, 40 p.c.		

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07¼	0 12

BOLTS AND NUTS

	Per cent.	
Carriage Bolts, common ($1 list		
" " ⅝ and smaller	60	and 10
" " 7-16 and up	55	and 5
" " full sq. ($2.40 list)	60	
" " Norway Iron ($3 list)	60	
Machine Bolts, all sizes, ⅝ and less	55	
Machine Bolts, 7-16 and up	55	and 5
Plough Bolts	55	and 5
Blank Bolts	55	and 5
Bolt Ends	55	and 5
Sleigh Shoe Bolts	70	
Coach Screws, cone point	70	and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 70

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50 8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	

A Christmas Dinner

without Plum Pudding is no more complete than a Hardware Store without a stock of Paterson's Building Papers and Wire Edged Ready Roofing.

You'll increase your profits and avoid arguments by handling our goods because we make the material your customers want.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet		3 00
3 "	"	"	4 00
4 "	"	"	5 25
5 "	"	"	6 75
"	"	"	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	....	1 75
Coil, 9 to 11 in	"	0 95	1 65
English	"	2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western 70 and 10 per cent.
Arcade 70 " 10 "
Kearney & Foot 70 " 10 "
Disston's 70 " 10 "
American 70 " 10 "
J. Barton Smith 70 " 10 "
McClellan 70 " 10 "
Eagle 70 " 10 "
Nicholson, 60 and 10 to 60, 10 and 5 "
Royal 80 "
Globe 70 to 75 "
Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft.
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanleys, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65	2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ¾-inch	per gross	9 00
Rope, ⅞ "	"	12 00
Rope, ⅞ to 1-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1½ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10	1 20

Sledge.

Canadian	per lb.	0 07	0 08½

Ball Pean.

English and Canadian, per lb.		22	0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00	4 00
Store door	per doz.	1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00	1 25

Plane.

American	per gross	3 15	3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1½ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00	4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50	1 10
Clothes line, No. 61	"	0 00	0 70
Harness	"	0 60	12 00
Hat and coat	per gro.	1 10	10 00
Chandelier	per doz.	0 50	1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00	3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30	0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock
American per gross 0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin per doz.	2 75	3 25
Bronze, Genuine "	6 00	9 00
Shutter, porcelain, F. & L. screw per gross	1 30	2 00
White door knobs per doz.	....	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20	5 60
Galvanized	"	1 87	3 85
King, wood	"	2 75	2 90
King, glass	"	4 00	4 50
All glass	"	0 50	0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut		$ 8 50 to	$11 00
Star, 9 -in.	"	6 00 to	6 50
Daisy, 8 -in.	"	5 25 to	5 75
Philadelphia, 7½-in.	"	6 00 to	7 50
Woodyatt, 10½ in., ball bearing		13 25 to	18 00
Grass Boxes		1 75 to	2 00
King Edw'd 12-in., 14-in. cut		9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	...per doz.	2	25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50	6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25	1 50
Carpenters', hickory,	"	1 25	3 75
Lignum Vitae	"	3 85	5 00
Caulking, each		0 60	2 00

MATTOCKS.

Canadian	per doz.	5 50	6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	....	6 75
Plumbers	"	....	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen		....	10 00
Davidson oilers, discount 40 per cent.			
Zinc and tin, discount 50, 50 and 10 per cent.			
Copper	per doz.	1 25	3 50
Brass	"	1 50	3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35	1 50
Brass head	"	0 40	1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

½ pint in tins	per gross	...	7 80
1 " "	"	...	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent

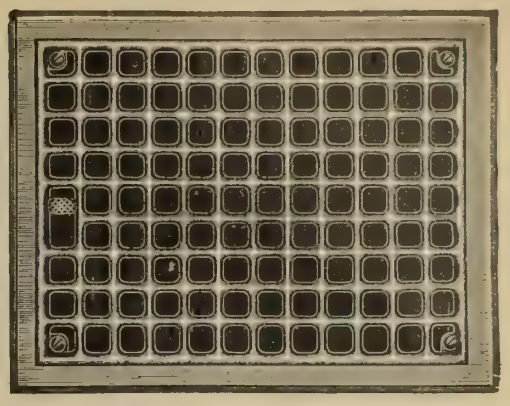
Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.

HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.



PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's..... ...	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ¼ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set		0 75
" No. 50, nickle-plated, "		0 80
Common, plain.....		4 50
" plated		5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent		
S. & D., discount 40 per cent.		
Crosscut, Disston's....per foot	035	0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.		
Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24..... ...		0 85
" 18 x 30.....		1 00
" 18 x 36.....		1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized		3 00
Plain		2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.
German.....per doz. 4 75 6 00
S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" " 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c.	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c. —in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16, $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17, $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 fo small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	....	32 00
Royal Canadian, 11 in. "	....	29 00
Royal American, 11 in. "	....	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

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In this paper cost 2 cents per word first insertion, 1 cent per word subsequent insertions. Contractions count as one word, but five figures (such as $1,000) may pass as one word. Cash remittance to cover cost **must in all cases** accompany orders, otherwise we cannot insert the advertisement. When replies come in our care 5 cents additional must be included for forwarding same. Many large business deals have been brought about through advertisements of 20 or 30 words. Clerks can be secured, articles sold and exchanged, at small expenditure.

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VANCOUVER, B.C. WINNIPEG, MAN.

THOS. C. IRVING, Gen. Man. Western Canada. Toronto.



WALKER CORK SCREWS

over seventy varieties to select from. Every one tested and guaranteed. Our large window display stand will help sell them.

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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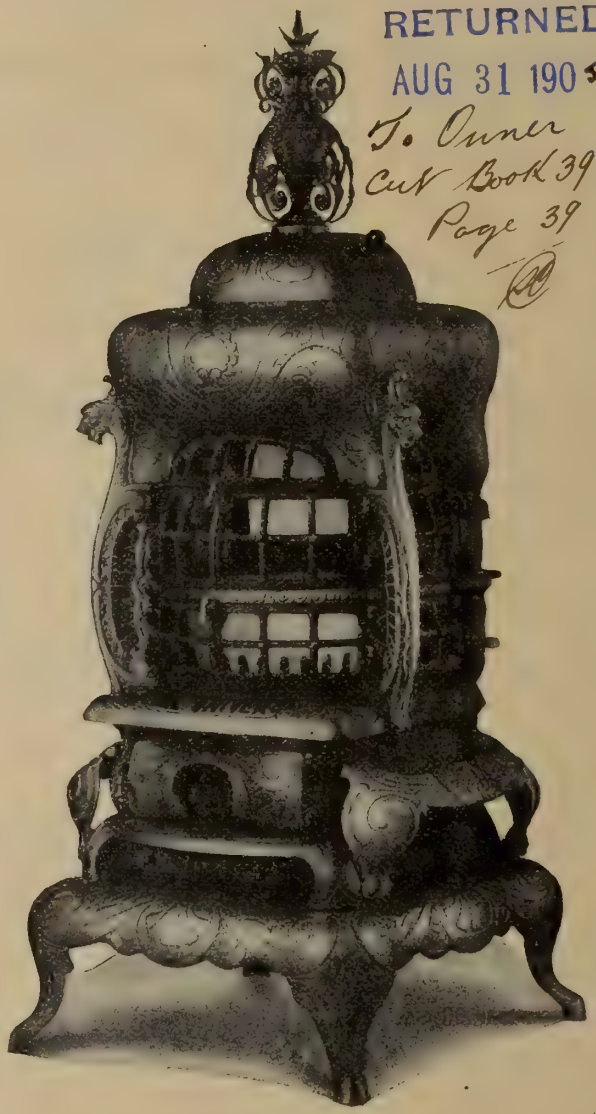
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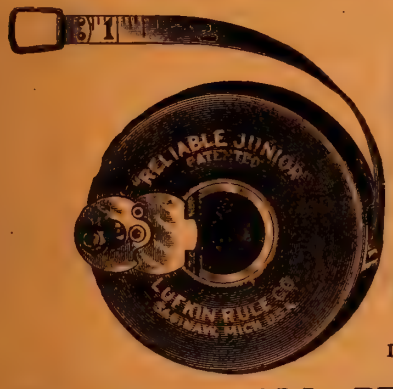
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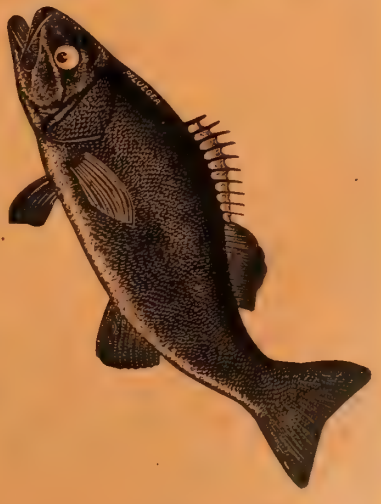
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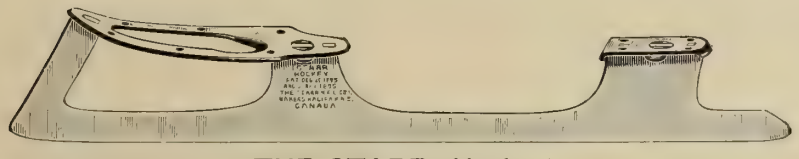
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To Owner
see Book 39
page 40



No. 08 Combination.

This combination is especially desirable in School Houses, Orphan Asylums and similar institutions, where the users, through carelessness or the lack of knowledge, would not flush a regular Pull or Push Action Combination. May also be used as a Urinal.

Some "Royal" Good Points:

The Tank is so ventilated and constructed that it will not sweat. The lining is of copper—no solder exposed to the action of the water.

The Valve and Ball Cock is perfect in construction—not complicated, and always ready—always tight.

The Woodwork is well made and highly finished.

The Closet will not craze—has a deep seal, extra large passage, and sharp action. Flushes better than a high tank, and makes comparatively no noise.

If we have your orders, accept our thanks. If you do not handle "Royal" Low Tanks, may we not quote you prices delivered in your town?

T. McAVITY & SONS, - - ST. JOHN, N.B.

Features of the Canadian National Exhibition

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, SEPTEMBER 2, 1905 NO. 35

POCKET KNIVES
H. BOKER & COS
IMPROVED
TREE BRAND
TRADE MARK
RAZORS CUTLERY SCISSORS

FOR SALE BY LEADING WHOLESALE HARDWARE HOUSES.

"QUEEN'S HEAD" IRON

CANADA

Sold on merit

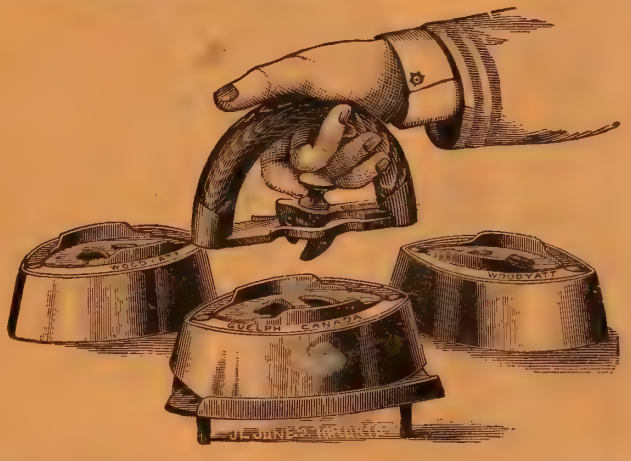
but price is also right.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.

A. C. LESLIE & CO., MONTREAL
Managers Canadian Branch

Do you know that all Sad Irons bearing the name of "Mrs. Potts" are not alike?

The Genuine Mrs. Potts Cold Handle Sad Irons



are made in Canada only by us. You can always tell the genuine iron by the name "Woodyatt" stamped thereon. It is distinguished from the non-genuine by the loose or detachable plate on the top of every iron. This device is valuable in that it enables the iron to retain the heat far better than the non-genuine solid iron. Then, too, the finish on "Woodyatt" stamped irons is distinctly superior. All parts fit; handles are interchangeable. The retailer who handles our make can make a sale every time; he can't with the non-genuine sort.

Always carried in stock. Order through your jobber.

Taylor-Forbes Company, LIMITED.

The Largest Manufacturers of Hardware in Canada.

Montreal Branch:
9 De Bresoles St.

GUELPH, CANADA.

Classified List of Advertisements on Page 63.

TORCHES


RETURNED
SEP 2 190 5

FAMILY GRINDSTONES


RETURNED
SEP 2 190 5

Gasoline Torch


RETURNED
SEP 2 190 5

FAMILY GRINDSTONES

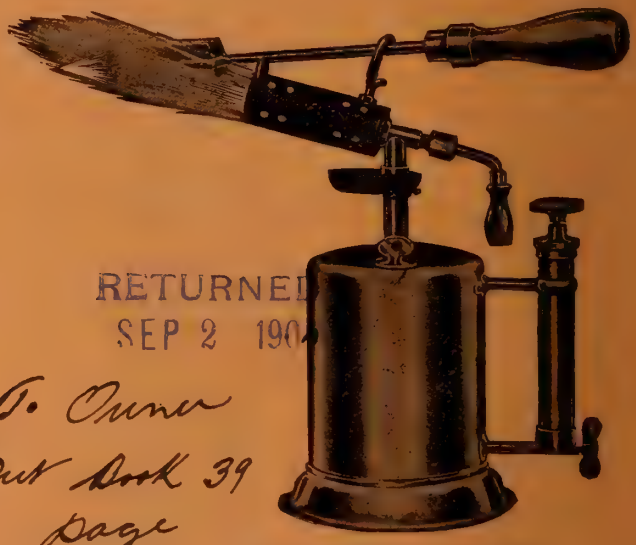
BLOW TORCHES

are an indispensable article for all mechanics, being especially useful to electricians, gas fitters, dentists, linemen, and those who do work calling for a needle flame and a hot one.


RETURNED
SEP 2 190 5

RELIANCE TORCH

TORCHES


RETURNED
SEP 2 190

RELIANCE TORCH

T. Cuner
Cut Book 39
Page

WRITE FOR PRICES

RICE LEWIS & SON

LIMITED

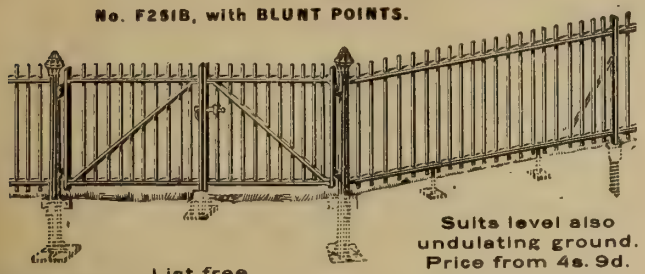
TORONTO.

BAYLISS, JONES & BAYLISS, LD.

MANUFACTURERS OF
PATENT SELF-ADJUSTING, ROUND-BAR, UNCLIMBABLE

RAILING.

No. F2518, with BLUNT POINTS.



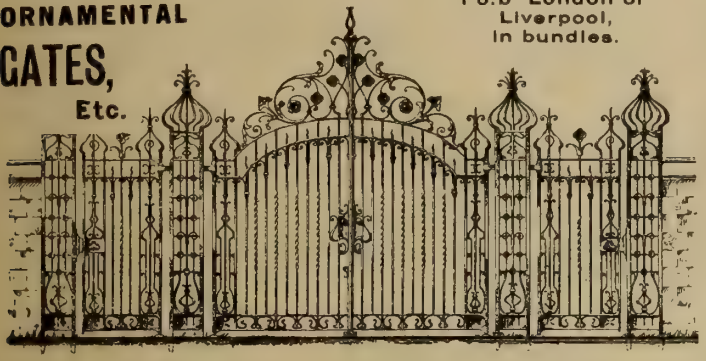
Suits level also undulating ground. Price from 4s. 9d. per lineal yard, f.o.b London or Liverpool, in bundles.

List free.

PLAIN AND ORNAMENTAL

GATES,

Etc.



Also Manufacturers of IRON AND WIRE FENCING, BOLTS, PATENT NUTS, TIE-BARS, Etc. Catalogue Free.

VICTORIA WORKS:— **WOLVERHAMPTON,** (ENGLAND).

LONDON OFFICES AND SHOWROOMS: 139 and 141 CANNON ST., E C.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO.,

LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.



"AMERICAN"

(2 in 1) TWIN FREEZERS

Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.

PHILADELPHIA, PA.

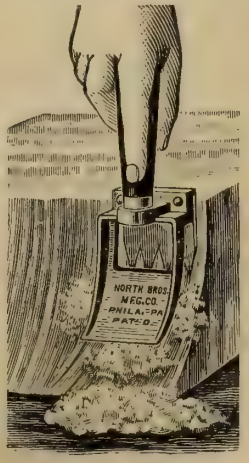
"LIGHTNING" "GEM" "BLIZZARD"

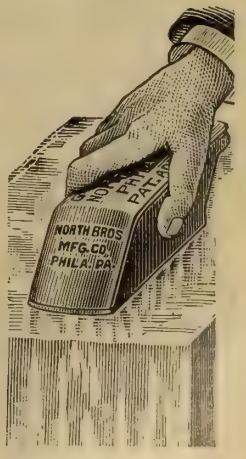


THE BEST ICE CREAM FREEZERS in practical use, because convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops, Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



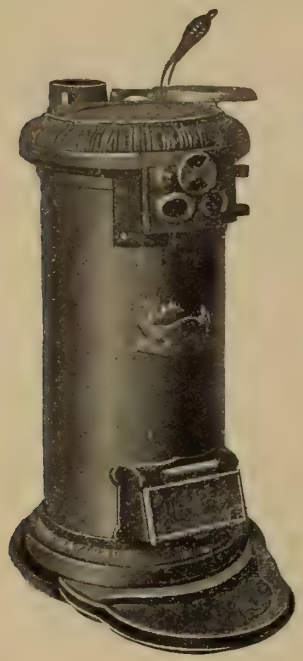




"LIGHTNING" ICE CHIPPER "CROWN" "GEM" ICE SHAVE

THE BEAVER SLOW COMBUSTION STOVE

4 SIZES



No.	Diam. of Steel Body.	Height.	Weight.
2	9½ inches	27 inches	90 lbs.
3	11¾ "	31¾ "	125 "
4	13 "	34½ "	165 "
5	15¾ "	37¼ "	210 "

A POWERFUL HEATER.

BURNS A MINIMUM AMOUNT OF FUEL.

Lined throughout with Fire Bricks. The body is made of cold rolled steel and the base and top are cast iron.

Has nic el-plated tea-pot stand and is very neat and compact in appearance.

WRITE FOR PRICES.

The Thos. Davidson M'f'g Co., Limited

MONTREAL

CANADA PLATES

Ordinary

18 x 21 x 60 sheets
18 x 24 x 52 sheets
18 x 24 x 60 sheets
18 x 24 x 75 sheets
20 x 28 x 40 sheets

All Bright

18 x 21 x 60 sheets
18 x 24 x 52 sheets

From Stock or For Import

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

You know that every article that leaves your store is some kind of an advertisement for the store.

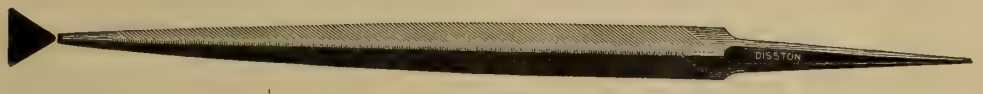
If it is good it is a good advertisement, if not it is a bad one. This applies just as much to Files as it does to everything else you sell. In fact, a poor File is the poorest thing you can offer any mechanic.

You cannot afford to sell anything but the best goods to your best customers. Disston's Files, like Disston's Saws, have stood the test of time.

Ask a mechanic who has used these Files and he will tell you the same story.

Disston's Files do not cost any more than a second grade, why not have the best?

RETURNED
SEP 2 1905



REGULAR TAPER SINGLE CUT.

We have the largest and best assorted stock of Files to choose from in Canada.
We can fill any reasonable sized order.

We Ship Mail Orders Promptly

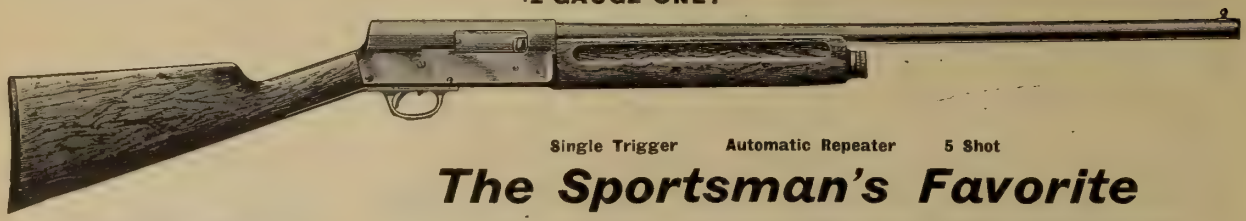
LEWIS BROS., LIMITED

WHOLESALE HARDWARE
IMPORTERS and DISTRIBUTORS
Always Address Head Office at
MONTREAL

Ottawa
Toronto
Vancouver
Calgary

The Browning Automatic Shot Gun

12 GAUGE ONLY



Single Trigger Automatic Repeater 5 Shot

The Sportsman's Favorite

IMMEDIATE SHIPMENT

WRITE FOR PRICES AND CATALOGUE

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street.

Montreal Bank of Ottawa Building.

Chicago The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

The perfection of QUALITY AND WORKMANSHIP



No. 87.—"Silver Steel," patent ground, hollow back, highly tempered and finished blade.

OUR HAND SAWS have gained a reputation for perfection of quality and workmanship.

BACK SAWS of the finest quality and finish.

CIRCULAR SAWS of all sizes and for all purposes.

CANADA WEBS, HACK SAWS, MILL SAWS, FILES, EDGE TOOLS, SHOVELS, FORKS.

SPEAR & JACKSON ETNA WORKS SHEFFIELD

Canada Leads the World in the Manufacture of

HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

GOLD MEDAL AWARDED 1904

WILKINSON CUTLERY

MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

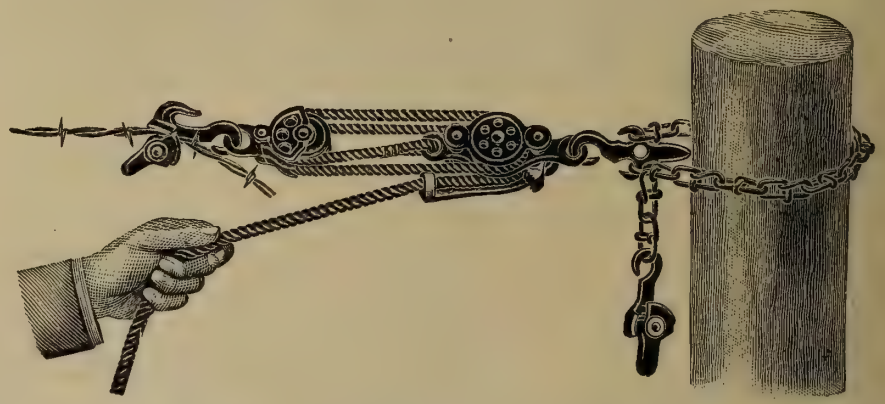
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

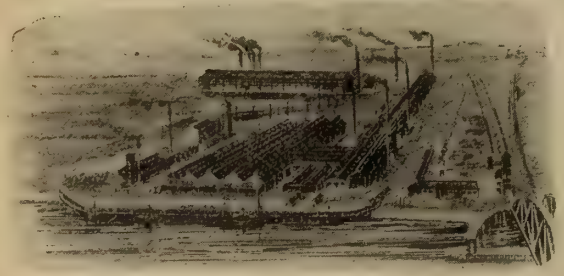
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



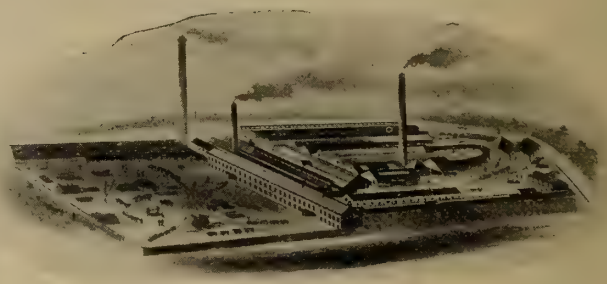
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

Agent: F. Hankin, Montreal

RETURNED SEP 2 1905



RETURNED SEP 2 1905

Are You Wasting Your Energy

Trying to sell goods that require to be talked ?

Don't do it !

Handle "The Racer" and "The Lance" Cross Cut Saws. Their quality is known, and their quality sells them.

The same is true of the "Black Champion" Axe, sold by us exclusively.

Made in Michigan, Full and Half Wedge patterns.

Frothingham and Workman, Limited

Wholesale
Hardware Merchants
Montreal, Canada
Founded 1809.

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
J.R. & S. ALL THE ROUND
ESTABLISHED 1847

Tudor Works :
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



31520.—ENTREE DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME ?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE



31197.—E.P.N.S. CAKE BASKET

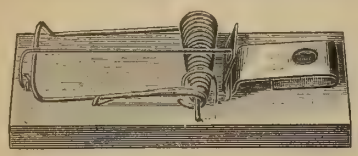
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.

LITITZ, PA.

GLAZIERS' DIAMONDS

Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

ALSO Established 181

Lead Vices, Carbon Tools, Etc., Etc.,



Agents for Canada: A. Ramsay & Son Company, Montreal

GLAZIERS' DIAMONDS



Ahead of all others in quality and workmanship. If sparks of fine quality, set by experts, are what you require, buy Diamonds of A. Shaw & Son's make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED **HEINISCH** SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 155 Chambers St
NEWARK, N.J., U.S.A.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

SEYMOUR SHEARS

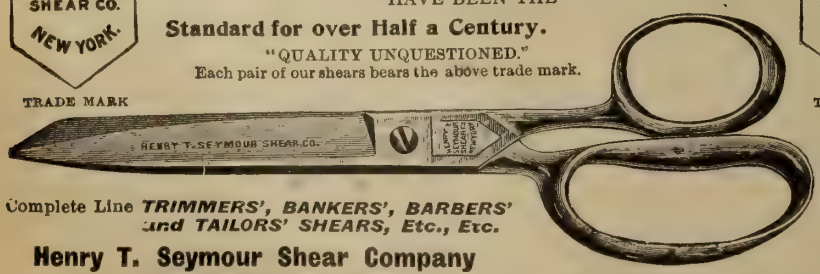
HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK



Latest Catalogue will be sent in exchange for your business card.

Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSOH & HILGER, Limited, NEW YORK, Sole Agents



COVERT MFG. CO.,

TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Spring

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Prices

Buy the Best.

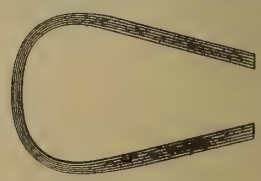


HERCULES

Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

MAPLE LEAF

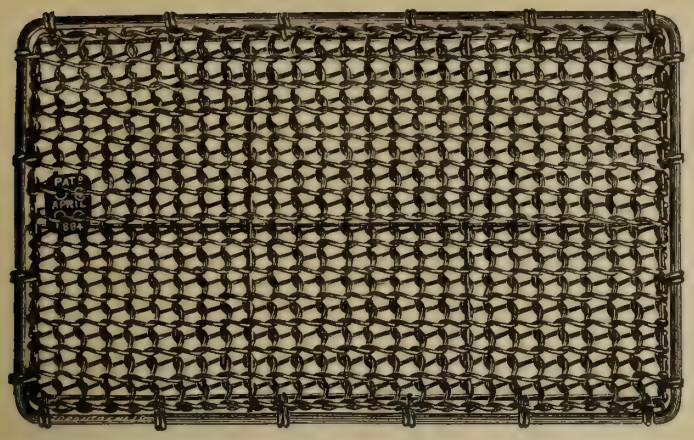
STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA

Wire Door Mats



The most durable, cleanest and perfect sanitary Mat made.
Has been on the market for 20 years.
All sizes and shapes made to order.
For stock sizes see catalogue.

THE B. GREENING WIRE CO.
LIMITED
HAMILTON, ONT. MONTREAL, QUE.



Strand Wires and Other Things

You know the importance of Strand Wires in Wire Fencing. If they haven't resilient power there will be, as a result of contractions and expansions caused by cold and heat, undue strain on the top or other wires, a slackness in the strand wires that soon causes a continuous-stay fence to lose its original neat appearance. In the **Dillon Hinge-Stay Fence** every strand, whether heavy or light, is made of High Carbon Hard Spring Wire, besides being extra well galvanized. That, with the HINGED-STAY, is why "Dillon" fences never get bent down and disfigured as you see the average wire fence. Think of "Dillon" superiority here alone when reading the next ad.—**"Why Dillon Stays Stay."**

THE OWEN SOUND WIRE FENCE CO., Limited
Owen Sound, Ont.
MESSRS. CAVERHILL, LEARMONT & CO.,
(Eastern and Western Agents.) **Montreal and Winnipeg**

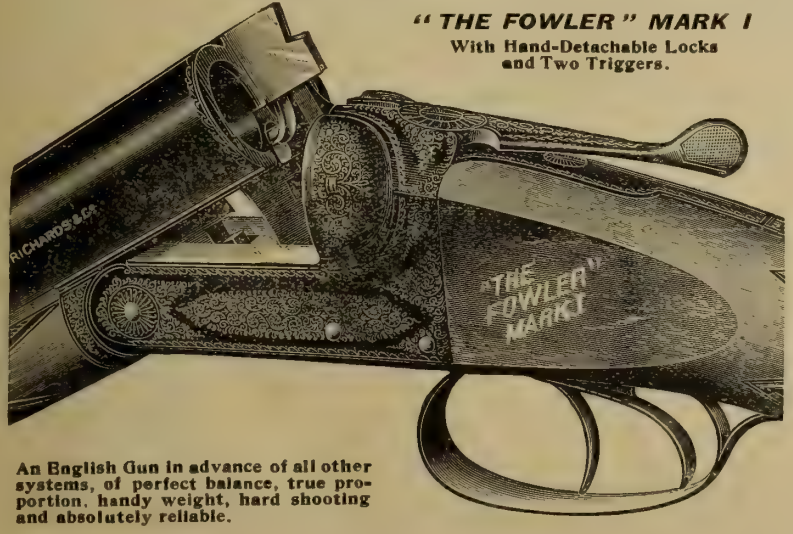
BE AHEAD OF THE TIMES

Westley Richards' SPECIAL HAND-MADE Game, Trap and Duck Guns

WITH THEIR CELEBRATED HAMMERLESS ACTION AND HAND DETACHABLE LOCKS; TWO TRIGGERS

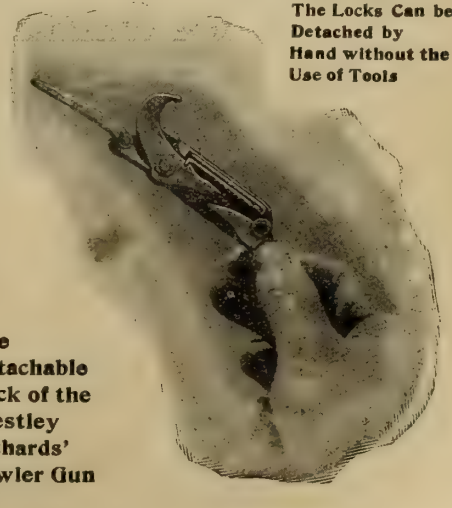
"The Fowler Mark I," Ejector, from.....$125 to $130
"The Fowler Mark II," as a Non-ejector, price..... $110 to $115
Duplicate Locks ..... $25 extra

"THE FOWLER" MARK I
With Hand-Detachable Locks and Two Triggers.



An English Gun in advance of all other systems, of perfect balance, true proportion, handy weight, hard shooting and absolutely reliable.

Seven Parts only. The Locks Can be Detached by Hand without the Use of Tools

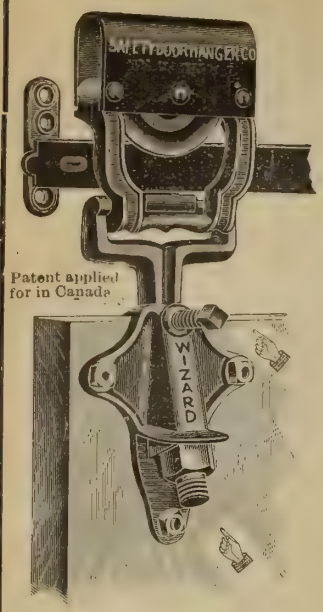


The Detachable Lock of the Westley Richards' Fowler Gun

Remember our prices include free delivery to you ; we pay freight and duty. Address—

POSTAGE 5 CENTS

WESTLEY RICHARDS & CO., Ltd., Bournbrook, Birmingham, England



Patent applied for in Canada

Doors hung with WIZARD ADJUSTABLE Flexible Door Hanger

may be placed as

Close to the Building

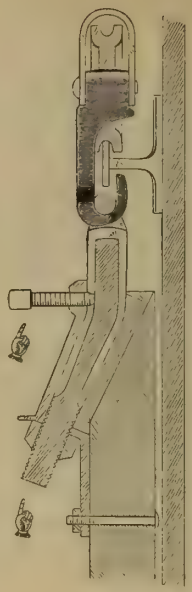
as desired.

Lateral Adjusting Screw.

This makes it the **Best Hanger** for **Canadian Winters.**

Ask Your Jobber or Write Us.

Vertical Adjusting Nut.



Safety Door Hanger Co.,
HAMILTON, ONT.

IRONSIDE FOR IRON

OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

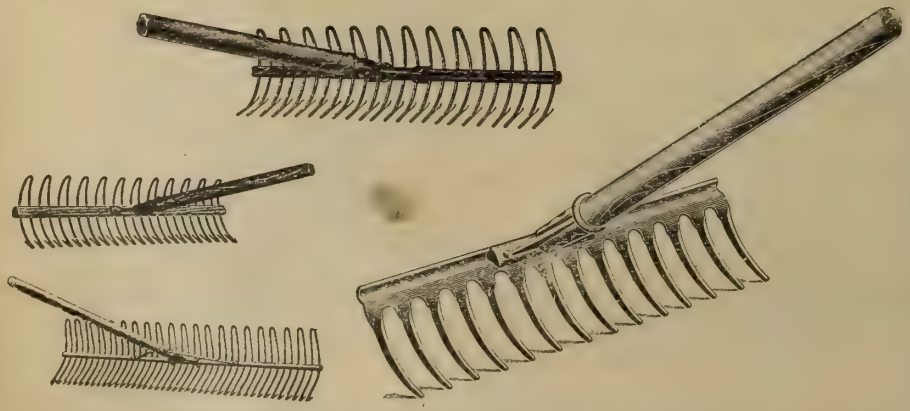
IRONSIDE'S PATENT WIRE CUTTERS, guaranteed to cut any wire

We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

IRONSIDE, SON & CO., 16 Water Lane Gt. Tower St., E. C **LONDON, ENG.**

Sole Agent for Canada: MR. SYDNEY T. HACKETT, 233 St James St., Montreal.

LAWN AND GARDEN RAKES



Also a large line of Posthole Diggers.
If interested please write for our Catalog.

F. E. KOHLER & CO., Canton, Ohio, U.SA.

SOL-A-RINE

The Great Polish



For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."

Send for Circular

H. F. FALKINER,
60 George St., TORONTO

OAKEY'S 'WELLINGTON' KNIFE POLISH

The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters

JOHN OAKEY & SONS, LIMITED

MANUFACTURERS OF

Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

Agent:
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In the Lead

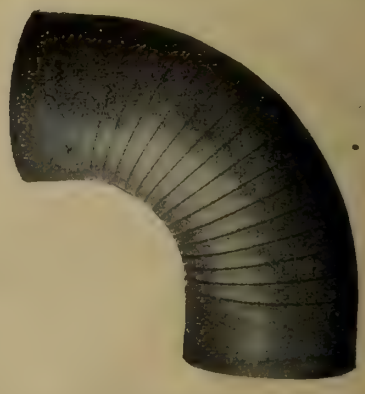
YORK

Metal Polish for bicycles, firearms, candlesticks, door plates, etc. Liquid or paste. Quick, clean, brilliant. 10c. and upwards.

Sample Free.

ANGLO-CANADIAN SUPPLY CO.
3 Wellington St. E., TORONTO

Cooper's Improved Patent One-Piece Stove Pipe Elbows



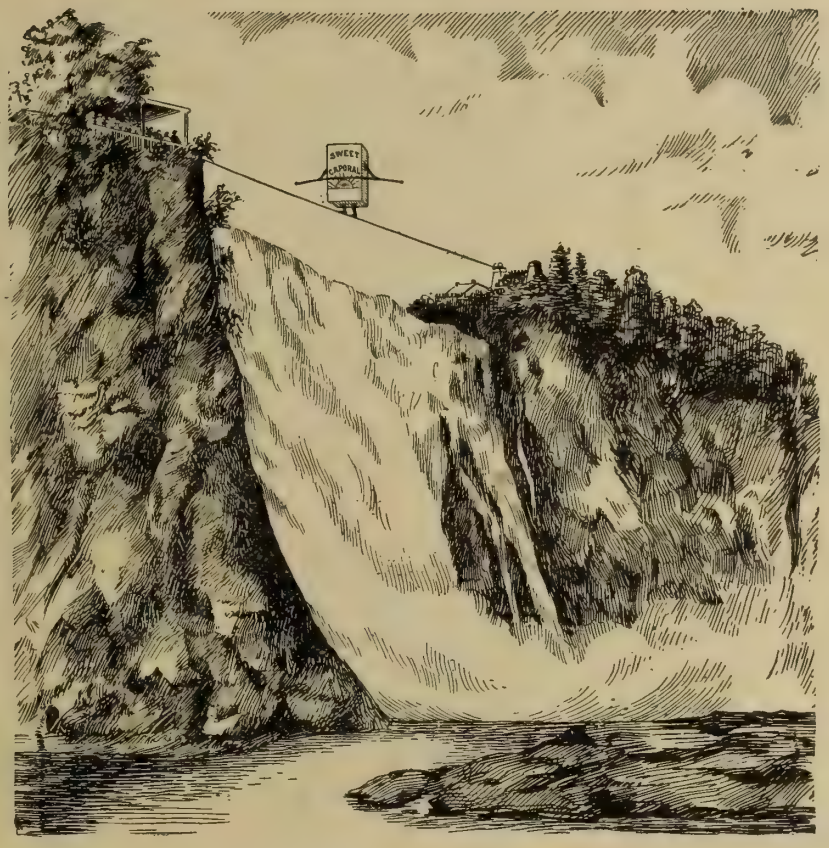
The Heaviest and Best Elbow on the market. Measures 23 inches long at the back.

Send in for sample dozen.
Polished or Common.

E. T. WRIGHT & CO.,
Sole Manufacturers and Patentees.
HAMILTON and MONTREAL.

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; F. H. ANDREWS & SON, Quebec, P.Q.; GEO. WOOD, London, Eng.

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

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THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED



Enameled Preserving Kettles

in

Onyx, Diamond and Pearl Steel Wares.

KEEP YOUR STOCK WELL ASSORTED.
PRICES QUOTED GLADLY.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. AND METAL CO.,
McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

Canadian National Exhibition

THE formal opening of the Canadian National Exhibition in Toronto by Hon. J. P. Whitney, Premier of Ontario, on Tuesday was attended by the usual interesting ceremonies, speeches, directors' dinner, and, as a special feature, music by the Irish Guards' Band and drill manoeuvres by the sailors of Prince Louis of Battenburg's squadron now lying at Quebec. A tour through the various buildings and show places by Hardware and Metal's representative tends to bear out the opinion of Dr. Orr, manager, and the board of directors that the Exhibition of 1905 will eclipse all previous ones. In many of the departments, such as the mechanical, electrical, and agricultural, the entries are unusually large and the exhibits of a high class. The introduction some years ago by several of the leading Canadian manufacturers of actual working appliances from their factories and shops, showing the processes of manufacture of their products, is more extensively followed this year. This feature is interesting and instructive and introduces the public more closely to a knowledge of what they wear and use, and also leaves the impression that Canada as a manufacturing country is rapidly advancing to the front.

What There is to See.

Hardware merchants will, of course, be interested in the spectacular and amusement features of the Exhibition: the fireworks, the grand stand show, the soldiers' and sailors' drills, the side shows, and the hundred and one attractions brought to Toronto at greater or lesser expense. The live stock judging and parades will also attract many, Canada's reputation for breeding fine animals having developed an interest in this industry amongst all classes of people. But by far the most important object the hardware merchant has in visiting the Exhibition is to see the exhibits of the manufacturers and jobbers in his own line of business. Every year there has been an improvement in this respect and there are now in every building exhibits of interest to the hardwareman. There has been no falling off this year and Hardware and Metal notices that more attention is being paid to a better arrangement of the goods shown and the display is of a higher order than in any previous year.

The Stove Display.

Entering the Stove Building at the main doorway, the first exhibit to attract attention is the magnificent display made by the Gurney Foundry Co. to the left of the doorway. Oxford stoves, ranges and furnaces form the central feature of the display, while other lines manufactured are shown to advantage. Next to this is the George Sparrow Co.'s showing of restaurant supplies, and in the corner at the opposite end a large display of Moore's Happy Home ranges. Clare Bros. have the next space for their Hecla furnaces and Peninsular ranges. The Pease Foundry Co.'s exhibit is one of the most striking in the building, next to it being the neatly arranged display of the Moffat Stove Co. In the centre of the building a display which occupies a prominent position is that of the Western Foundry Co., Wingham, makers of Huron stoves. Next to them are the exhibits of the Walker Steel Ranges, made in Grimsby, a fine display of heaters by Telephone City Stoves, Limited, Brantford, and the Favorite ranges made by the Doherty Mfg. Co., Sarnia. On the opposite side, showings which arrest the attention of the visitor are those made by the Guelph Stove Co. (formerly the Guelph Foundry Co.), the Grundy Stove Co., Guelph, the Canadian Heating and Ventilation Co., Owen Sound, and the mantels and gas heaters exhibited by the Archer Co., Toronto. Some interesting souvenirs are given to stove dealers by the exhibitors and a visit to the building will repay any hardware merchant who visits the Exhibition. The "Carrie Nation" axe presented by the Grundy Co. is a particularly pleasing memento.

Plumbing and Paint Exhibits.

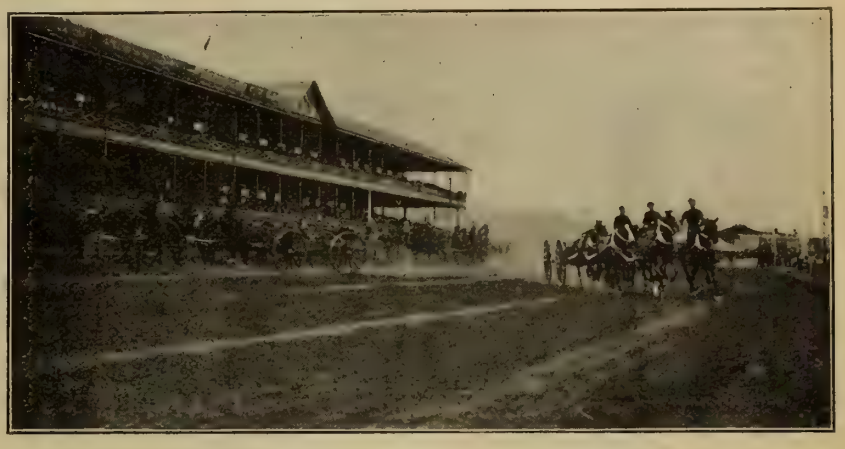
One of the handsomest displays in any of the buildings is that of the James Morrison Brass Mfg. Co. at the central entrance to the Machinery Building, the arrangement of their plumbing and engineering supplies and electrical fixtures being most artistic. Equally well arranged, but of a different class, are the exhibits of enamelled ware, etc., made by the Ontario Lead and Wire Co., and the James Robertson Co. in the Manufacturers and Liberal Arts Building. The feature of the former display is the "Made in Canada" line of Standard Ideal enamelled ware, while the Robertson Co. make a special feature of the "Naturo" closet.

Very few paint and varnish displays are made, but the excellence of the few make up in a measure for the absence of the many. The Imperial Varnish Co.'s exhibit in the Main Building is especially pleasing and instructive, while the wax model of the monument to Shakespere, shown in the exhibit of the Canadian Oil Co. in the same building, is also very handsome. The Blackwell Varnish Co. have their display in the Transportation Building.

A General Survey.

On the lake front near Society Row the various wire fence companies have made an excellent showing of their fencing. All report an excellent season's business, the demand for wire goods being steadily on the increase. A feature of the trade is the large volume of business done through hardware merchants, they having pushed the line so successfully that it is now looked upon as essentially a hardware line.

Stock foods are not shown by so many companies as a year ago, but the strong and older-established companies have good displays.



The Artillery Drive—Canadian National Exhibition.

Binder twine and washing machines are to be found in the Implement Building, here also being shown many of the smaller lines of implements which can be handled to advantage by hardware dealers.

Canadian Fairbanks Co. have their display in Machinery Hall, here also being other scale displays, the Bowser oil storage system, the Canada Metal Co.'s exhibit, and other interesting displays.

In building exhibits, those of the Metallic Roofing Co. in the Main Building, the Philip Carey Mfg. Co. in Machinery Hall, the Le Page Door Check Mfg. Co. in the Women's Building, the J. A. & W. Bird Co. on the grounds, are all interesting, while there are also some cement block machines shown.

Taking the Exhibition as a whole, the number of exhibitors this year is 1,771 some of whom have five or more entries of goods. In the industrial exhibits are: Manufacturers and liberal arts 116,

transportation 36, implements 50, stoves 16, machinery 34, women's work 8, Manufacturers' Annex 22, Dairy Building 8, automobiles 6, and on the grounds outside of the buildings 12.

Interesting to Hardwaremen.

It will be seen that there is much of interest to readers of Hardware and Metal at the Exhibition and a visit to Toronto at this time will well repay the time and money spent. This is an opportune time also to pay a visit to the jobbing houses, special preparations having been made to show customers the most seasonable and up-to-date lines of goods. The growth of Toronto and the wonderful development of Canada's manufacturing industry should also provide reasons for a visit to the Exhibition at this time.

As it has been impossible to note all the exhibits of interest to our readers in an afternoon's walk through the grounds and buildings the following more extended list is appended:

Manufacturers and Liberal Arts Building—The Ontario Rubber Co., International Gas Appliance Co., Limited, Toronto Brass Mfg. Co., Berlin Robe and Clothing Co., W. H. Dunne, Library Bureau of Canada, Limited, Kemp Mfg. Co., A. D. Fisher Co., Limited, Singer Sewing Machine Co., Limited, Office Specialty Mfg. Co., Limited, National Cash Register Co., Canadian Oil Co., Limited, Imperial Varnish Co., Limited, Standard Silver Co., Limited, The James Robertson Co., Limited, International Stock Food Co., The Metallic Roofing Co. of Canada, E. W. Gillett Co., Ontario Lead & Wire Co., Limited, United Typewriter Co.

Stove Building—Archer Light, Heat & Power Co., Limited, Clare Bros. & Co., Charles F. Rees & Co., The Walker Steel Range Co., Limited, Canada Malleable and Steel Range Mfg. Co., The Grundy Stove Co., The Western Foundry Co., D. Moore Co., Burrow, Stewart & Milne, Guelph Foundry Co., The Gurney Foundry Co., Telephone City Stoves, Limited, Doherty Mfg Co., Pease Foundry Co., Moffat Stove Co.

Implement Building—The Canadian Ladder Co., Johnston Oil Engine Co., Limited, Monteith, Nixon & Co., The London Cement Brick Mfg Co., Clydesdale Stock Food Co., Limited, The Paris Plow Co., Limited, The Steel Trough & Machine Co., Limited, The Berlin Woodenware Co., Davis Acetylene Gas Co., St. Thomas Acetylene Mfg Co., The Brantford Cordage Co., Limited, Louden Machinery Co., The Ontario Wind Engine & Pump Co., The Bach Specialty Co.

Machinery Hall—D. K. McLaren, S. F. Bowser & Co., Borden Co., C. Wilson & Son, Dominion Belting Co., The E. Long Mfg. Co., The Canadian Fairbanks Co., Canada Metal Co., Canadian General Electric Co., Philip Carey Mfg. Co.

Manufacturers' Annex—The Anglo-Canadian Supply Co., Pulvo Mfg. Co., Raimes & Co., Metal Polish Co., Domestic Specialty Co.

Transportation Building — Blackwell Varnish Co., D. Conboy, Samuel Trees & Co., E. H. Heney Co., Limited, Wm. Gray & Sons Co., Toronto Welsbach Light Co., The Dunlop Tire Co., The Toronto Pole & Shaft Co., Canada Saddlery Harness Mfg. Co., Tisdale Iron Stable Fittings Co., Geo. A. Rudd & Co., Guelph Carriage Top Co., C. Kloepfer.

Women's Building—Lepage Door Check Mfg. Co., M. N. Dafoe.

On Grounds—Page Wire Fence Co., Limited, McGregor-Banwell Fence Co., Pittsburg Perfect Fence Co., The H. R. Lamb Fence Co., The London Fence Machine Co., The Frost Wire Fence Co., Limited, The Canadian Portable Fence Co., The Canadian Steel & Wire Fence Co., The O. S. Wire Fence Co., J. A. & W. Bird & Co.

Automobile Building—The Ford Motor Co., and Canada Cycle & Motor Co.

Wire Fence Exhibits.

The Page Wire Fence Co.'s display has been arranged in a most attractive and telling manner, a log cabin having been erected out of goods manufactured by the Page Co. Fifteen miles of fencing and 67 Page metal gates are used in the construction, the general effect being of a high order. The "White Brand" of the Page goods gives their wire a fine appearance and the sixteen standard varieties of their fencing allow of a fine display. After the wire is galvanized it is given a coat of white enamel paint, this making the fencing popular amongst hardwaremen for display purposes. Mr. Dyer, the Toronto representative of the company, states that more inquiries have been received this year than ever before from hardware merchants, and the business is passing out of the hands of farmer agents into regular trade channels.

Another interesting exhibit is that of the Owen Sound Wire Fence Co., their arrangement of the "Dillon" fencing being very artistic. The "Dillon" hinge stay has won its way to a prominent place in Canadian wire fence manufacture and it is known wherever hardware stores exist in Canada. Mr. R. R. Goldsmith is in charge of the exhibit and he states that wherever the Owen Sound fencing has been introduced sales have steadily grown in quantity, this proving the quality of the goods. The "Dillon" is easily erected, is strong, retains its appearance well, has no locks to rust, break or become loose, and the stays being hinged will not bend when weighed down between posts. This point is well illustrated in their familiar illustration "The Man on the Fence."

EVADING THE TRAVELERS' TAX.

An interesting discussion was evoked at the annual meeting of the Montreal Branch of the Canadian Manufacturers' Association when it was brought to the notice of the members that foreign travelers were evading the $300 tax that is supposed to be levied on them. Quite an ingenious method has been adopted by the travelers representing American and British houses, by which they are enabled to conform with all the requirements of the law. Several of them have pooled issues, and rented a small, cheap office, so as to be within the clause of the Act which calls for a resident agency. By following this method, an office can be rented for a hundred dollars or so per annum and when this amount is divided between several it is a mere bagatelle.

Mr. Dakers Cameron, secretary of the Montreal Branch, has drawn the attention of Hon. Mr. McCorkill to the evasion of the tax, and that gentleman has stated that the Act will be so amended as to cover all such contingencies.

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

Revolvers and Guns.

One of the most attractive catalogues of the season is that just received from the Harrington and Richardson Arms Co., Worcester, Mass. Thirty-one pages, 9 x 6 ins., give complete specifications of the many lines of revolvers and shot guns manufactured by this firm. There are many illustrations, giving views of the factories and their products. The cover is gotten up to represent an oak slab, and on the fzont is an embossed illustration of the H. & R. automatic double action revolver. The back cover is even more striking, representing as it does in embossed work a shoulder plate of the H. & R. shot gun. Readers desiring this catalogue will please refer to it as Catalogue No. 8, and mention Hardware and Metal in writing.

Pipe Machines.

The Williams Tool Co., Erie, Pa., have sent out 7 sheets, on the front of which is illustrated one of their pipe machines, and on the back of each the machine is described. The illustrations are good, and the descriptions include prices and also pointers regarding the care of the machines.

Facts.

The Maritime Nail Co., Limited, St. John, N.B., have issued a neat little booklet entitled "Facts, Like Mules, are Stubborn Things," in which the essential qualities of a good horse nail are pointed out, and it also shows how the "Peerless" has these necessary qualities. It is printed in two colors and is illustrated.

Case-Hardening.

"Case-Hardening. What to use. How to use it," is the title of a small booklet sent out by W. H. Palfreyman & Co., 17 Goree-Piazzas, Liverpool, in which there is a complete description of how to case-harden steel with hydrocarbonated bone black, which this firm claims is the best material for case-hardening where the toughest, finest and deepest case is desired. The process of annealing is also described.

Shot Guns, Ammunition.

A. M. Bell & Co., dealers in shelf hardware, fishing supplies, tinware and enamelware, Halifax, N.S., have issued

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

their No. 11 catalogue, July, 1905. It describes and illustrates profusely their shot guns, rifles and ammunition—very seasonable goods. Among the shot guns illustrated are double and single breech-loading guns of several kinds, including Iver Johnston, and also Winchester repeating shot guns. Among the rifles described are Winchester repeating, "Mannlicher System" repeating rifles, Savage hammerless, sporting and Stevens rifles.

Prize List.

The prize list of the Fredericton Exhibition, to be held September 21 to 28, 1905, is ready for distribution. It is very neatly gotten up, an index of the principle features being printed on the cover for ready reference. It contains 90 pages, 6 x 9 ins.

Annual Report.

The forty-fourth report of the Cape Town Chamber of Commerce for 1904-'05, is to hand. It contains the president's address, statements of accounts, statistics relating to the trade of Cape Colony. It contains 170 pages, 8 x 5 inches.

Convention Number.

The convention number of monthly bulletin of the National Association of Credit Men, New York, is a very neatly gotten-up book. The entire bulletin is devoted to the proceedings of the national convention held at Memphis, Tenn., in June, 1905. It contains 113 pages, 9 x 6 inches.

Heating and Ventilation.

An elaborate 48 page and cover book of album style, entitled "Heating, Ventilating and Sanitation," has been issued by the Fuller & Warren Co., Troy, N. Y. The topics enumerated in the title are practically considered and applied for use in schoolhouses and other public buildings, numerous illustrations being given to show the buildings equipped by this company's system, and the plans illustrating the methods of installation. Heating contractors who send for a copy should mention Hardware and Metal in their letters.

Victoria Bolt and Nut Works.

Among the English firms who are waking up to the fact that the Canadian trade is a desirable one, is that of Richard Davies & Sons, Victoria Bolt & Nut Works, Manchester. They have issued a neat price list giving quotations on bolts, nuts, set screws, washers, etc. Another branch of their business is the manufacture of the "Perkins" bench for pattern makers, and wood workers. By means of this bench, it is claimed that the cost of production is cheapened, while maintaining a high standard of quality. McLean & Sophus, 301 St. James street, Montreal, are Canadian agents for this firm.

The Canada Damper.

McClary Mfg. Co., London, are sending out a neat blotter of envelope size. An illustration of the damper and the inscription, "This is a good damper. Try it once," sets off the blotter nicely.



Loew Steam Specialties.

A folding post card has been sent out by the Loew Supply & Mfg. Co., 39 Cortlandt street, New York. The card introduces Loew heaters, die stocks and other specialties and provides a return post card on which an interested party can send for a larger catlogue. Mention Hardware and Metal when writing.

A NEW STEEL PROCESS.

THE Standard Foundry Co., of Longueuil, Que., have been carrying on some interesting experiments of late to demonstrate the superiority of a new process of steel making, discovered and developed by them.

By the new process, it will be possible to cast steel as easily as iron or to give immediately to cast iron the properties of steel, which, it is claimed, will reduce the cost of steel production fully one half. Indeed the management state that as soon as the new process is commercially adopted it will hardly be necessary to use forged iron at all, as the new steel will be more economical.

An experiment recently made at the Hochelaga works of the Montreal Street Railway, demonstrates very clearly that the new process will not only hold its own with the older methods in quality, but, what is very surprising in view of its cheapness, will even exceed the durability of the latter. The trial was made with the steam hammer, and at the first blow the two pieces of the old-style steel were shattered, while the one made in Longueuil not only stood the test, but, after repeated blows, instead of breaking, simply flattened out.

This will be gratifying news to all steel-consuming manufacturers who are trying hard to reduce the cost of production. Further tests will be awaited with great interest, and with the hope that it may become a commercial success.

NEW ELECTRICAL WAREHOUSE.

During the last three years the R. E. T. Pringle Co., Limited, Montreal, have had an office and sample room in Toronto and have made shipments directly from their factory in Montreal, but owing to the increased demand for quick shipments to patrons in Western Ontario, they have put in a complete stock in the new Empire Building, 62-64 Wellington street west, Toronto, where they will carry a full line of electrical supplies, etc.

BUSINESS CHANGES

Ontario.

W. F. Cockshutt & Co., hardware merchants, Brantford, have sold to G. W. Serles.

A. M. Regan, of Regan & Nickels, wholesale hardwood lumber dealers, Toronto, is dead.

H. Killer, dealer in agricultural implements, Waterloo, has assigned to Dilman Liebler.

Quebec.

E. Chateauvert, carriagemaker, Lambton, has been burned out.

F. Dion, carriagemaker, Lambton, has been burned out.

J. R. Durand, tinsmith, Berthierville, has compromised.

A. Drolet & Cie. have been registered as plumbers, Montreal.

E. Dupuis, tinsmith, Cheneville, has been succeeded by Z. Latrendress.

Rainville & Lussier, contractors, Farnham, have dissolved partnership.

Calestagne & Fournier have been registered as painters and decorators, Montreal.

J. E. Gratton, plumber, Montreal, has assigned. A meeting of creditors will be held Sept. 1.

A meeting of the creditors of J. H. Lacroix, hardware merchant, Shawinigan Falls, was held Aug. 31.

Nova Scotia.

E. Archibald, harness dealer, Truro, has assigned.

Manitoba and N.W.T.

B. Van Blaricomb, hardware merchant, Arden, has sold out.

H. H. Avery, harness merchant, Darlingford, has sold out.

S. Tits, hardware dealer, Napinka, has sold to Hughes & Jones.

Currie & Harris, harness dealers, Newdale, have advertised their business for sale.

British Columbia.

S. McMahon, blacksmith, Revelstoke, has suffered loss by fire.

Iver Johnson Safety Automatic

Hammer, $5.00

Hammerless, $6.00

Extra length Barrels, 50c. per inch. Pearl Stocks, $1.25 extra.



No Fear of Accidental Discharge if it's an

IVER JOHNSON

Safety Automatic Revolver

because the revolver hammer never touches the firing pin. This *safety principle*, found *only* in the Iver Johnson is due to the fact that the lever which transmits the blow from the hammer to the firing pin is never in position to do so except *when the trigger is pulled all the way back.* All hardware and sporting goods dealers sell Iver Johnson Revolvers and can verify these facts if they will.

Send for illustrated booklet "Shots," mailed free with descriptive catalogue.

Iver Johnson's Arms and Cycle Works, River Street, Fitchburg, Mass.

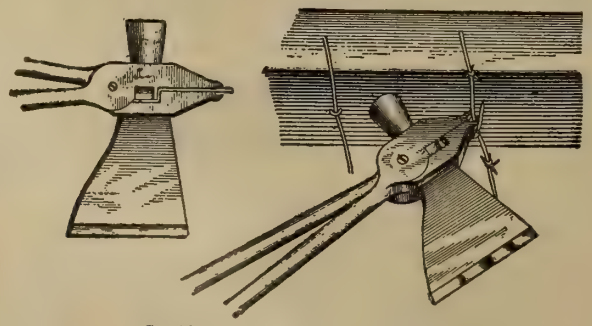
NEW YORK OFFICE: 99 Chambers Street

NEW CEMENT INDUSTRY.

The Lehigh Cement Co. have closed the purchase of about 1,000 acres of limestone and clay lands preparatory to the erection of what will be one of the largest single cement plants in the world. It will have a capacity of 4,000 barrels per day. The company hope to be turning out cement at their Canadian plant some time next Summer.

A NOVEL MILK PAIL.

A NEW milk pail is provided, in addition to the receptacle for milk, with a compartment for carrying a sponge and a chamber for water to be used in washing the cow's udder before milking so that the milk will be kept clean. According to the arrangement the pail is made reversible, being in one position adapted to carry water and in the reverse position to receive milk. A transverse wall separates the sponge and water compartments from the milk receptacle, and an inclined wall separates the water compartment from the sponge-holder. This inclined wall forms a contracted mouth for the sponge compartment, so that the sponge will be retained while the pail is carried in reverse position. A ring or band encircles the body of the pail and is prevented from slipping off by the crimped edges of the pail. To this band the bail is hinged. On the body of the pail two ribs are formed which prevent the band from dropping down to the lower end. However, two offsets are formed on the band so that when the pail is reversed they may be brought into register with the ribs and the band may be raised, bringing the bail in position for use. When raised to the top, the band is given a half turn to prevent it from slipping down again. A suitable cover closes the mouth of the milk receptacle and prevents entrance of dirt when the pail is set on the ground in an inverted position. It also serves as a protection when carrying the milk. Mr. Fred. W. Lechner, of Winona, Ill., (R.F.D. No.11! is the inventor of this novel milk pail.



Combination Tool for Fence Building.

TOOL FOR FENCE BUILDING.

THE combination tool illustrated herewith will be found of value in building and repairing wire fences. It comprises in one instrument a hammer, hatchet, pliers, wire cutters, wire benders, and staple pullers. The hammer head is attached to one, and the hatchet blade to the other of a pair of hinged plier jaws. Just below the pliers are the wire cutters, consisting of tapering blades, formed on the opposite jaws. When it is desired to bend a wire, preparatory to making a loop, it is seized between the plier jaws, in the manner indicated by our side view of the tool, when the lower end will be bent at right angles by the lug projecting above one of the cutter blades. Each jaw carries at its upper end a pair of claws, which will be found useful for removing staples, etc.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

CUTLERY

Joseph Elliot & Sons
SHEFFIELD, - ENGLAND

Corporate Mark
J&C
TRADE MARK.

CELEBRATED CUTLERY MAKERS

If you want the Best quality buy Joseph Elliot & Sons, NONE BETTER

RETURNED SEP 2 1905



Table and Dessert Knives



Stag Handle Carver

To Owner a Book 39 page 64



Celluloid and Ivory Handle Carvers



Table Steels



Pocket Knives



Pearl Handle Fish and Dessert Knives



Jack Knives



Razors



Butcher Knives

H. S. HOWLAND, SONS & CO., LIMITED

We Ship Promptly.

GRAHAM NAILS ARE THE BEST

Factory: Dufferin Street, Toronto, Ontario.

Our prices are right.

When Your Customer Says :

"I want you to put in for me a heating plant that will be first-class in every respect," this reply will meet all the demands of the situation :

"Then I will use the

PEASE ECONOMY"

From your standpoint the installing of a Heating Apparatus presents two desirable opportunities—first, to add to your profits and, second, to please your customer and thus gain a permanent hold on his trade. How much easier to accomplish this when you use a Heater that is time-tested and sure—one that the great majority of our people know to be the best !

We can supply your every need in Heating Apparatus and we invite your inquiries.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

A CINCINNATI dispatch says the deal is being completed by which the Niles-Bement-Pond Co., builders of machine tools, at Hamilton, Ohio, will acquire control of the machine tool manufacturing business of the John Bertram & Sons Co., Limited, of Dundas. By this move the Niles Co. absorbs its principal competitor in Canada, and will be able to manufacture for Canadian consumption on Canadian soil. The present capital of the Bertram Co. consists of a paid stock issue of $300,000. All this will be purchased by the Niles-Bement-Pond Co. In addition, the Bertram Co. is to increase its capitalization by the addition of $100,000 of common stock and $200,000 of 6 per cent. cumulative preferred stock. The Niles Co. will purchase the additional $100,000 of common stock for $100,000 in cash or at par. The Niles-Bement-Pond Co. has an authorized capital of $8,000,000, of which there has been issued $5,000,000 of common, which is the full authorization of that class of stock, and $2,000,000 six per cent. cumulative preferred. It is a New Jersey corporation. The London Machine Tool Co. is not concerned in the amalgamation.

The Brantford Screw Co. proposes to double the size of their factory.

A representative of an American churn company has been looking for a factory site at Brantford.

C. A. Cyphers, incubator manufacturer, Buffalo, is considering the establishment of a branch factory at Berlin.

The Robb Engineering Co. are building two 200 horse-power Robb-Mumford boilers for the Cumberland Railway and Coal Co.

Work on the railroad tunnel which is to be constructed under the Detroit River between Windsor and Detroit has been begun.

The site for the factory of the Dominion Thread Mills in Stratford has been selected, and the building will be commenced very shortly.

The factory buildings of the Plymouth Cordage Co., Welland, will be located at the Michigan Central station, and the warehouses on the canal.

In order to establish a branch stove foundry at Vancouver the Record Stove Foundry of Moncton, N.B., proposes to increase its capitalization from $800,000 to $1,000,000.

The Ladysmith (B.C.) Iron & Stove Works are receiving many orders for stoves from the mainland, and a number of fresh hands have been put on to cope with the orders.

Hon. Mr. Emmerson has been authorized by the Government to purchase forty new locomotives for the Intercolonial Railway. The understanding is that they are to be purchased from Canadian firms.

The largest shipment of steel by the Dominion Iron & Steel Co. was made last Friday, when twenty-nine cars, amounting to about 1,500 tons, were shipped to Montreal and upper Canadian markets from Sydney.

The Canadian Westinghouse Co. of Montreal has been awarded the contract for the installation of a 1,500 k.w. steam turbine for the Ottawa Electric Co. The turbine will be the largest placed by the company in Canada.

The Dominion Iron & Steel Co. has an average daily output for the past three months from the open hearth furnaces of 450 tons of steel, of which about 350 tons have been used in the rail mill since it started. The rest went to the billet mill. One day last week the record output of 670 tons was made. It is said that the company may have a plate mill in operation next year.

The Western Canada Cement & Coal Co., London, England, has authorized applications for £2,250,000 of first mortgage bonds at par to be supplied in acquiring cement, clay and anthracite coal lands at Kananaskas, Alberta, in erecting a portland cement factory and for working capital. Besides this is contemplated the building of 300 to 500 elevators throughout the Northwest, equipped with the latest appliances and with a capital of from ten to twelve million dollars.

After all is said, the removal of the bounty on steel rails will not so seriously affect the producers as was at first supposed. As a matter of fact, the bounty, owing to the sliding scale adopted when the bounty was introduced, amounted this year to only $1.65 a ton, and not to $3, as was generally thought. It is not the same bounty that is paid on finished steel. So far, at least, as the Dominion Iron & Steel Co. is concerned, the removal of the bounty simply reduces the protection from $11.40 to $9.75 per ton.

The contract for the complete construction of the roadbed ready for ties and rails upon that section of the Grand Trunk Pacific Railway from Portage la Prairie to Touchwood Hills, N.W.T., 275 miles, was awarded last week at the office of Mr. Frank W. Morse, Montreal, to the McDonald, MacMillan Co., of Westbourne, Man. This does not include the construction of the steel bridges. The successful firm is a purely Canadian organization, well and favorably known in the Northwest. The contractors' figures for the work are variously estimated from between $3,000,000 and $3,500,000.

Companies Incorporated.

The Stuart Machinery Co., Limited, of Winnipeg, will apply for the right to increase their capital stock from $49,000 to $200,000.

The Kerlin Brother Co. of the State of Ohio have been granted the right to do business in Ontario to the extent of $30,000, with H. E. Rose of Toronto as its attorney.

Monarch Realty Corporation, Winnipeg; share capital $40,000; purpose, to carry on the business of a land company.

The directors are C. H. Brooman, R. A. Jones, P. Ulrich, C. Smith, and C. J. O'Toole.

The Detroit & Kent County Oil and Gas Co., of Ontario, Limited, have been granted the right to do business in Ontario to the extent of $40,000, with W. Jackson of Osborne P.O., Ont., as its attorney.

Port Arthur Iron Mines, Limited, of Toronto; share capital $500,000; purpose, to carry on the business of a mining, milling, reduction and development company. The directors are W. H. Moore, G. G. Ruel, and F. C. Annesley, all of Toronto.

The Buffalo Mining Co., Limited, of Fort Erie; share capital [illegible]; purpose, to carry on the business of a mining, milling, reduction and development company. The directors are C. L. Dennison, R. W. Pomeroy, and G. C. Miller, all of Buffalo, N.Y.

New Ontario Cobalt & Silver Mining Co., Limited, of Ottawa; share capital $1,000,000; purpose, to carry on the business of a mining, milling, reduction and development company. The directors are L. Bedell of Goshen, N.Y., and W. A. Allan and J. T. Lewis of Ottawa.

The Western Lighting Co., Limited, of Rosser; share capital $20,000; purpose, to carry on a business as manufacturers and dealers in all kinds of illuminating supplies, etc. The directors are E. E. Price and R. Price of Rosser, and W. P. Rogers, W. F. Farrow, and R. G. Afleck, all of Winnipeg.

The Dymond & Abitibi Mining & Development Co., Limited, New Liskeard; share capital $25,000; purpose, to carry on the business of a mining, milling, reduction and development company. The directors are J. Wilson, J. McCracken, J. Mason, C. A. Marwahn, J. Scott, W. J. Tindall, and W. J. Evans, all of New Liskeard.

The St. Lawrence Supply Co., Limited, of Montreal; share capital $20,000; purpose, to carry on a general business as machinists and engineers. The directors are W. A. McKay, J. G. Veith, A. R. Oughtred and M. A. Phelan, all of Montreal, and E. G. Place of Westmount.

The Cataract Electric Co., Limited, of Orangeville; share capital $50,000; purpose, to construct and maintain works for the production of electricity for purposes of light, heat and power. The directors are J. M. Deagle and E. M. Deagle of the township of Caledon, and F. Deagle of the township of Artemesia.

The Temiscaming Mining Co., Limited, of Haileybury; share capital $100,000; purpose, to carry on the business of a mining, milling, reduction and development company. The directors are C. A. Richardson of St. Catharines; J. L. Wheeler of Emporium, Pa.; R. A. Cartwright of Broekport, Pa.; B. E. Cartwright of Buffalo, N.Y.; and J. F. Gillies of Haileybury, Ont.

The Sucker Creek Gas & Oil Company of Anderton, Limited, of Amherstburg; share capital $50,000; purpose, to bore and drill for oil, petroleum and natural gas. The directors are J. G. Mullen, W. H. McEvoy, J. A. Auld and H. Clay, all of Amherstburg; H. G. Duff and W. H. Gatfield, of the township of Anderton; J. Anderson of Windsor, and E. Winters of Leamington.



No. 19. OSHAWA, ONT. SEPT. 2, 1905

FOR ALL MEN

Perfect Metal Lath is for all men who intend to build or to renovate, no matter when, no matter where. It is as essential to modern equipment as the telephone, electric light or any other of the great inventions which found their way into existence through the portals of Necessity. Fire has devasted so many buildings, decayed wood has made so many inroads on health, that to ignore the Remedy when contemplating construction is nothing short of homicide, much less business puerility.

FOR ALL TIME

Perfect Metal Lath stands as the all-conqueror of fire, the hitherto unconquerable disaster-monger, and it has ill-health (from buildings) driven to the wall. With its perfectly-cast mesh, non-corrosive metal, freedom from scales, it retains the plaster permanently, permits no cracking and never rusts. It can be applied quickly and with little labor. The price is **10c. per sq. yd.**—low enough for **any builder.** We would like you as an enterprising Hardwareman, alive to your opportunities, to correspond with us. If we cannot show **you** the way to profit on **Perfect Metal Lath,** we may be able to convince **you** that it pays to carry our **Steel Ceiling** and **Wall Covering, Metal Shingles, Tile, Siding, Cornices, Store Fronts, Ornamental Zinc and Copper Work, Eavetrough, Conductor Pipe** and all Accessories. The sending of a post card to-day may spell **Success** for you in the near future—Act Now.

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of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
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WRITE YOUR NEAREST OFFICE.

"DOMINION BRAND" TARRED FELT
(THE OLD RELIABLE QUICK SELLER)

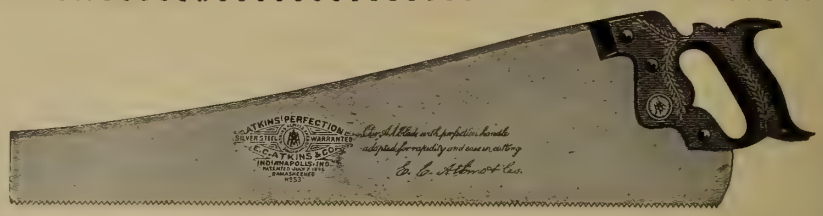
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WHEN YOUR TRADE DEMANDS **THE BEST** ROOFING MATERIALS

CONSULT THE WELL-KNOWN MANUFACTURERS

LOCKERBY & McCOMB, 65 Shannon St., Montreal

Our Reputation



Is behind every Hand Saw which bears our Factory Brand.

With this guarantee of quality it is no wonder that dealers find a line of **Atkins Celebrated Silver Steel Hand Saws** the fastest selling and most profitable stock that they can carry.

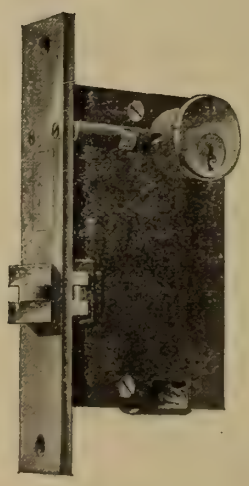
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Why should any hardware dealer urge the sale of a high-priced imported lock when he can offer a Canadian-made lock of equal quality—not to say better — at a decidedly lower price ?



No. 650.

OUR CATALOGUE No. 7 is a real necessity to every dealer. It shows an immense variety of builders' hardware and illustrates the many lines of

GURNEY CYLINDER LOCKS

It is mailed cheerfully to every enquirer.

WRITE FOR THE SUPPLEMENTS.

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BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

HAMILTON

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

BUILDING NOTES.

D. A. Hopper is erecting two stores at Brandon.

A $5,000 hotel is to be built at Fielding, Sask.

A new Oddfellows' Hall will be erected at Vancouver.

A new town hall is to be built at Qu'Appelle, Sask.

Alfred Piper is to build an $1,800 residence at Brantford.

A large three-storey hotel is to be built at Portage la Prairie.

The Merchants Bank are to occupy a new building at Napinka, Man.

Geo. Benger will build a modern block on Arthur street, Port Arthur.

David Booth, of Brockville, will build the $70,000 armories at Guelph

The Hall-McNab Co. will build a $40,000 flour mill at Red Deer, Alberta.

The Bank of Montreal are erecting a $30,000 business block at Lethbridge.

Kelly & Mitchell are to erect a marble bank building at Winnipeg for the Bank of Toronto.

An addition to the Calgary, Alta., Post Office will be built by the Alberta Building Co.

L. B. Schalanser has the contract to erect a handsome brick residence at Regina to cost $8,000.

J. Tompkins has about completed the construction of the C.P.R. roundhouse at Westmount, Que.

Permits have been granted to William Morrison, Brantford, for two brick houses at a cost of $1,500 each.

Swan, Church & Co., Montreal, are executing the expanded metal work in the new Mount Royal Club, Montreal.

The Canadian Northern Railway plan to build a hotel, depot and general office building at Winnipeg to cost $2,500,000.

Contracts were let this week for the construction of buildings for the new sheet steel and tin plate mills at Morrisburg, Ont.

There are several new buildings yet to be started in Fort William this Fall, chief of which is the large addition to Avenue Hotel.

The Manitoba Brewing Co., Fort Rouge, will begin the erection of an ale and porter brewing house and bottling works very soon.

Crowe & Wilson are to erect a $10,000 rooming house, A. M. Forbes a $5,400 store, and J. Leckie & Co., a $4,500 factory at Vancouver.

It is expected that eleven miles of the Elbow and Moose Jaw branch of the C. P.R. will be completed by the time the crop is ready to move.

The Trees, Spriggs Co., Limited, manufacturers of harness and saddlery, have under way the construction of a new block on Ross avenue, Winnipeg.

The contract for the erection of the new C.P.R. station at Medicine Hat has been awarded to Jas. McDiarmid, Winnipeg, the price being about $2,000.

R. J. Geddes, Sixth avenue, Vancouver, B.C., is going to erect a $2,300 frame residence; J. H. Geatrix, Fifth avenue, is going to build a $2,000 residence.

Pilkington Bros., Limited, glass manufacturers, St. Helens, Lancaster, Eng., are at present building a fine warehouse in Winnipeg on the corner of Louise and Market streets.

Work is progressing rapidly with the construction of the concrete piers for the Battle River bridge, the contractor, Mr. Foley, of Ottawa, having nearly fifty men at work.

Extensive plans for the improvement of the system of lighthouses along the Atlantic seaboard of Canada are announced by J. F. Fraser, of the Marine Department at Ottawa.

Adams Bros., of Winnipeg and Toronto, have a gang of men tearing down the old buildings at Moosomin preparatory to the erection of a fine new block, 54 by 60 feet, two storeys.

A start will soon be made on three new buildings in Guelph. These are the new C.P.R. station, $40,000; the Homewood Sanitarium additions, $100,000; and the Armoury, $100,000.

The W. G. Grace Co., of Chicago, have secured the contract for all concrete work, foundations, etc., for Sir William Macdonald's Agricultural Farm building at Ste. Anne de Bellevue, Que.

The work on the new lighthouse at Burlington Beach, Hamilton, has been commenced. A concrete base will first be laid, and on that will be erected the steel structure of the lighthouse.

Plans and specifications for the first 80 miles of the Lake Superior branch of the transcontinental railway are now on exhibition in Montreal, and contractors will be allowed 30 days in which to submit tenders.

Building activity is showing no signs of slowing up in Winnipeg at the present time. The number of permits being issued daily still indicates that the present year is to be a record one for building operations in the city.

Messrs. F. F. Powell & Co., Montreal, have completed the contract which they have carried on for the past twelve months on the Royal Mills, grain elevators, conveyors, flumes, etc., for the Ogilvie Flour Mills Co.

Mr. S. L. E. Cuddy, St. Lawrence street, Montreal, has purchased, through Messrs. P. S. Ross & Sons, the property at 295 St. Lawrence street and along De Montigny street to and fronting St. Dominique street, for $28,000.

The Lehigh Portland Cement Co., Allentown, Pa., have purchased 10,000 acres of limestone and clay lands lying east of the Belleville Portland Cement plant. This company will erect next Spring a plant of 4,000 barrels per day capacity.

The W. G. Grace Co. have sub-let the expanded metal lathing and partition work required in Sir Wm. Macdonald's Agricultural College to the Clinton Fireproofing Co., of Montreal. This firm are using Pedlar's Perfect lathing on this work.

The Winton Automobile Co., Cleveland, have purchased property on Richmond and Victoria streets, Toronto, on which a large three-storey automobile repair shop and showrooms will be erected. Building will be commenced by September, it is said.

The Fairbanks-Morse Co., Chicago, have the contract for the construction of new coal sheds and the installation of the coal handling machinery for the Dominion Coal Co. in Prince Edward Island. The driving machinery consists of two 50 h.p. engines.

The National Construction Co., who, it is announced, will be the principal contractors of the Grand Trunk Pacific Railway from Winnipeg to the Pacific, is made up of interests connected with the Grand Trunk Pacific Railway and the Grand Trunk Railway.

The following are among the buildings being erected in Brampton: Residence for J. C. Laird; residence for Misses Trimble; residence for W. E. Milner; store on Queen street for Wm. Burton; curling rink; Copeland-Chatterson's buildings, of which the machine shop is completed.

The Western Canada Milling Co., Montreal, have let the contract to Jas. Stewart & Co., Pittsburg, for the erection of a flouring plant in Montreal to cost between $550,000 and $600,000. The buildings will be concrete-steel construction, and the plant will have a capacity of 5,000 barrels per day.

Messrs. Nagle & Mills, of Ingersoll, have secured the contract for the erection of the new factory for the Ingersoll Nut Co., at $9,250, which is $1,250 more than the cost of the building originally contemplated in the agreement in connection with the by-law granting a loan of $20,000 to the company.

New tenders are being called for by the Public Works Department for the Implement building for the Ontario Agricultural College at Guelph, and the cottages to be erected there. The appropriation for the building is $25,000, and for the cottages $3,000, and the former tenders so greatly exceeded these amounts the Minister decided to ask for others.

Building permits have been issued at Vancouver as follows: E. E. Williamson, Westminster avenue, $2,000; Capt. Ledwill, Pacific street, $1,800; J. Elliott, Hornby street, $2,000; C. O. P. Olts, Lansdowne street, $1,800; E. O. Lyte, Pender street, $3,000; Mrs. W. J Brenton, Ninth avenue, $6,000; C. C. Eli, Davie street, $1,800; H. Hadden, Hastings street, $16,000; A. C. Clemes, Hastings street, $20,000; A and W. Vachon, Granville street, $5,500; J. Kendall, Fifth avenue, $2,500.

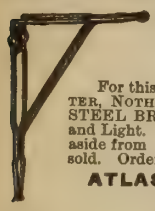
STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.

OF ONTARIO Limited

Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.

Head Office:
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Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
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"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables— "Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited

HANOVER, ONTARIO

Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.

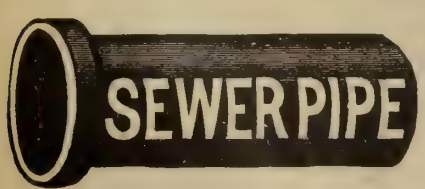
Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

The Best Door Closer Is . . .
NEWMAN'S INVINCIBLE FLOOR SPRING
Will close a door silently against any pressure of wind. Has many working advantages over the ordinary spring, and has twice the wear. In use throughout Great Britain and the Colonies. Gives perfect satisfaction. Made only by
W. NEWMAN & SONS,
Hospital St., - - BIRMINGHAM

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO.
TORONTO, ONT. LIMITED.

...FULL STOCK...
Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

MONTREAL BUILDING PERMITS.

Elie Pepin, 30 Aylevin street, dwellings, $2,500.

D. Sperber, 1221 St. Lawrence street, dwelling and store, $1,500.

Octave Aube, Huntly street, St. Denis ward, dwellings, $2,000.

Nap. Chayer, La Salle street, St. Denis ward, dwellings, $2,000.

Elie Yelle, D'Argenson street, St. Denis ward, dwellings, $3,000.

G. Clairvoux, Dorchester street, Papineau ward, dwellings, $3,000.

J. P. O'Shea, Ste. Agathe street, St. Louis ward, dwellings, $3,000.

W. L. Haldimand, St. Antoine street, St. Joseph ward, stores, $3,000.

Auguste Marsolais, Gauthier street, Papineau ward, dwellings, $2,000.

Felix Dansereau, Chausse street, St. Mary's ward, dwellings, $2,000.

Nap. Guilbault & Co., Boyer street, St. Denis ward, dwellings, $3,000.

McGill College, Sherbrooke and Victoria streets, club house, $100,000.

Gedeon Chartrand, St. Hubert street, St. Denis Ward, dwellings, $1,500.

R. R. S. S. Grey Nuns, 14 St. Peter street, alterations to warehouse, $4,000.

Paul G. Martineau, Park Lafontaine, Duvernay ward, alterations to dwelling, $2,000.

R. Peladeau, St. Hubert street, corner Beaubien, alterations to dwelling and store, $3,000.

TORONTO BUILDING PERMITS.

C. Selwood, dwelling, Van Horne street, $1,500.

Chas. Landy, brick dwelling, Preston avenue, $1,100.

M. J. Kelly, residence, brick, Dale avenue, $7,500.

H. Q. Milligan, brick dwelling, Perth avenue, $2,200.

L. E. Price, brick dwelling, Dovercourt road, $1,800.

Henry Durke, dwelling, Palmerston boulevard, $5,000.

S. Austin, roughcast dwelling, Dovercourt road, $1,800.

R. L. Davey, brick store and dwelling, Queen street, $6,000.

A. F. Saunders, brick dwelling, 350 Concord avenue, $2,000.

George S. Bell, roughcast dwelling, Emerson avenue, $1,800.

J. Simpson & Sons, brick factory, 8 Berkeley street, $30,000.

J. A. Matthewson, brick dwelling, 218 Deleware avenue, $3,000.

W. D. Michall, brick residence, Palmerston boulevard, $4,000.

F. W. Cox, brick store, corner Pape and Dagmar avenues, $2,200.

J. R. Fullerton, alterations to dwelling, Balmoral avenue, $3,000.

Geo. Edward Key, one pair roughcast dwellings, Garnet avenue, $3,000.

Jas. Simmons, four pair concrete dwellings, Yonge street, $18,000.

M. Murray, one pair roughcast dwellings, Palmerston avenue, $3,000.

Staunton Limited, factory, steel and concrete, 944 Yonge street, $50,000.

W. Stark and W. Black, one pair brick dwellings, Walmer road, $7,000.

Dominion Realty Co., brick and stone banking offices, Yonge street, $50,000.

J. S. Montgomery, one pair brick and stone dwellings, Bathurst street, $7,000.

W. E. Redway, brick residence, corner Broadview avenue and Smith street, $4,500.

J. A. Aberdeen, three pairs brick dwellings, 210 to 220 Braodview avenue, $12,000.

A. Cornwall, three pairs brick dwellings, corner Dupont and Albany avenue, $9,000.

Henry H. Hall, stone and brick residence, corner Bathurst and Barton avenue, $3,500.

Trustees College Street Methodist Church, brick Sunday school, corner College street and Sheridan avenue, $20,000.

CANADIAN VS. ENGLISH BRUSHES.

IN a recent issue of Hardware and Metal space was given to a letter written by Mr. E. P. Oxenden and published originally in the Ironmonger. The writer has been in Canada only a year and endeavored to give his former English friends his impressions of Canadian hardware stores and goods in comparison with ironmongery in Great Britain. Exception could well be taken to some of his criticisms, particularly to those dealing with the supposed poor quality of Canadian brushes and tinware, and we publish below a short letter from a correspondent dealing with the brush trade. Readers of Hardware and Metal are well aware that there is a vast difference between English and Canadian goods. British goods are in many cases made unnecessarily heavy, while the demand in this country is for lighter articles. The English writer being accustomed to the heavy goods is naturally unwilling to admit the merit of the product of factories catering to a different constituency to that which he has been accustomed to. The letter referred to is as follows:

Toronto, August 29, 1905.

Editor Hardware and Metal,—In your issue of last week you publish an article from the Ironmonger sent from a party in "Canada" stating that the household brushes made in Canada were not as good a variety as made in England. The party who wrote this was evidently not acquainted with brush manufacturing in Canada or the large assortment made in Toronto. We would invite this gentleman to visit the sample rooms of the Boeckh factories at 80 York street and see the large assortment of household brushes, where everything he will require for trade in Canada will be found to order. The trade and requirements are entirely different to Old Country trade, and we cater to a more up-to-date market. We are well aware of the fact that the lines used in England are not saleable in Canada; therefore, manufacturers should not be placed in such bad light, or as slow as this new arrival makes out we are. Trusting the writer of the article to the Ironmonger will have an opportunity of reading this, and thanking you for your valuable space.

BRUSH TRAVELER.

To the Trade

THE McCLARY MANUFACTURING CO. extend a cordial invitation to their friends and to the trade generally to visit their new warerooms, No. 177 King Street West, where they are showing many new goods, and their travelling staff will be on hand to welcome visitors.

REMEMBER THE ADDRESS:

No. 177 King Street West, South Side

Between York and Simcoe

IT'S PERFECT

Maximum Light Glass has proven itself efficient in the most trying cases—proven itself efficient in such cases ***all*** times. Daylight passing down a light shaft 105 feet high in a London Building, is gathered and diffused throughout a room 40 feet long by

MAXIMUM LIGHT GLASS

The same glass placed in as ceiling lights, in any building, gives a uniform white light in "every" corner—quite different to the "patch" light of other systems. ***Maximum Light Glass*** applied to lean-to skylight is effective in long rooms where it would almost seem impossible to have anything but darkness. And ***Maximum Light Glass*** is the ***only glass*** that when placed directly in the window sash can successfully produce daylight. No wonder it is used the world over, and is in steady demand! No wonder Hardwaremen everywhere are glad they wrote for samples! A sample awaits you. It, with our Booklet, is the stepping-stone to opportunity—success.

Sole Canadian Agents:

The Hobbs Manufacturing Co., Limited, - London, Ont.

Glass Importers and Manufacturers

STOVES AND TINWARE

MAKING FURNACE BUSINESS.

THE man for whom I first worked was one of those sour fellows who thought anybody who traded with his competitors offered him an affront, and he used to growl about not getting all the business he ought to have. I was too young and inexperienced at the time to know it was mostly his own fault and due to lack of sound business enterprise. Like all healthy young fellows I had lots of friends and got along well with the old folks. Knowing I would be laid off if the shop wasn't busy I took to asking my friends if they had any work in our line. After I had been a year or two in the shop doing mostly furnace work with an excellent furnaceman I learned enough to like it, and made it a point to keep a list of people with the name and size of the furnace and range they had in their houses. I lost no opportunity to add to this list, and then I made it a point to find out what condition they were in. This not only brought in repair work, but I inquired if the stoves and heaters gave good satisfaction. I got the boss into one or two scrapes by these inquiries and he cut a caper about it, but being young I told him he ought to have done the work right in the first place. This brought out the statement that he couldn't afford to because he had taken the job low to keep the hands going and to keep it out of the other fellow's hands. What a lame excuse for putting in a small furnace and small pipes for a man who could afford to pay for it. I told him it was and he showed me his teeth, but I showed him some of the work that I had brought in that he would have never got and that more than evened things up.

I found many a job that was unsatisfactory and was continually stuck, but learned that my journeyman preceptor saw through every mystery and had a remedy. I was in hot water a good deal of the time, but kept inquiring all Summer how people's furnaces worked till we had orders for lots of alterations, which, through the good judgment of my old shopmate, gave fine results and brought others that I had nothing to do with. This work kept us all that Fall and Winter, when without it we would have lost a lot of time. The boss growled and I hustled because I wanted to make full wages every week. I learned that it is best to do good work every time. I learned that people don't object to a bill if they know what it is going to be when the work is done and when good results that show follow it. I learned that job done low just to advertise is a fool trick and sets a low price for all other work. I learned that good furnace work that results in heating a building is worth a good profit and should bring it. I learned that salesmanship is as valuable as handicraft even to a journeyman. I learned that many furnaces which are too small are in houses in the section where I worked and have since learned that the same trouble is everywhere. I learned from my preceptor that the work of almost every furnace can be greatly improved by a man who thoroughly knows his business. I learned that more furnaces suffer from too small a supply of cold air than from short firing. I learned that an air supply equal in area to the total area of the hot air pipes is better than a smaller supply. I learned that hot air pipes should have a square inch of area for every 25 or 30 cubic feet of space in the room heated. I learned that a better rule is to consider the glass and wall surface as well as the contents. I learned to allow 1 square inch of area for every square foot of glass, 1 for every 10 square feet of wall and 1 for every 100 cubic feet of space. I learned to add 20 per cent. for exposed north walls, 15 per cent. for west walls and 10 per cent. for east walls. I learned that 1 square inch of grate surface should be provided for every 1.5 square feet of equivalent glass surface, counting 4 square feet of wall as equivalent to 1 of glass. I learned that a furnace with a long fire travel is more economical and a better heater than a direct draft furnace having the same size grate. I learned that this systematic method of getting down to facts avoided mistakes, inspired confidence and brought in the orders. I learned to be thankful that my old preceptor had clippings on all these points and had proven them and was willing to teach me. I learned to feel sorry for the narrow-minded, unprogressive old curmudgeon who bossed us both. I learned that I could not work and hustle too after a year or two on this plan and made the boss send out cards saying what we could do and inclosing addressed postal cards to be used for orders. I learned something about advertising from this, and have had seasonable circulars ever since. I learned more things about other things and may tell about them another time.—W. I. N., in the Metal Worker.

NEW PAN OR POT LIFTER.

HOUSEWIVES always welcome any new device or apparatus which will lessen their labor and make their housework more easy. Perhaps this is why inventors are constantly striving to invent something that can be universally used. Numberless household inventions are patented yearly, and, although the majority are meritorious, they are generally too complicated or too costly to be of real value.

A Colorado man has invented an extremely simple lifter to be used for removing hot pans which have no handles from the fire. All the pans used in cooking are not provided with handles, and it is invariably the custom for the housewife to remove them with the aid of a towel or cloth, and unless she is quick about it she burns her fingers. Nobody should think for a moment of lifting the stove lid without a stove-lifter, and this device is much the same shape and design. It comprises a handle with a fixed jaw blade formed at one end, with an additional handle pivoted between a pair of lugs attached to the upper handle. A movable bar, with a jaw blade at the end, is mounted underneath the upper handle. The jaw blades are placed over the edge of the pan, and, by squeezing the handles together, the inner jaw blade is brought into contact with the pan, and with a firm grip the pan can be carried anywhere desired with no danger of burning the fingers. A spring connecting the ends of the handle serves to keep the jaw blades apart except when in use.

WESTERN HEATING CONTRACTS.

THE Hartney Hardware Co., of Hartney, Man., agents for the Pease-Waldon Co., of Winnipeg, are installing a Pease Economy combination heating and ventilating system in a large new residence now being built in their town.

The school board of Saskatoon have accepted the Pease-Waldon Co.'s specifications for the heating and ventilating of the Neutana school. Accordingly a Pease Economy school heater and ventilator will be installed by local agents.

A ZINC ALLOY.

A zinc alloy which is easily worked, and stands rough usage better than white metals made with lead as a base, may be made by using 88 lb. of zinc, 10 lb. of copper, and 2 lb. of aluminum. By using 12 pounds of copper and no aluminum the alloy will be made harder. The process of melting is as follows: The copper is first melted and enough cold zinc is added to kill it and to prevent it spitting when added to the bulk of the zinc. The zinc is melted separately, and the copper poured into it, and the mixture is stirred. The aluminum is added after the copper and zinc have become perfectly fluid, and the mixture is thoroughly stirred. It is then cast into one inch plates, which are cooled, broken up and remelted under small charcoal. The alloy should be poured into horizontal sand-covered molds. The surface of this alloy resembles oxidized silver, and may be filed and polished. It cuts to a file similar to grey iron.

NEW STOVE COMPANY IN B. C.

It is definitely announced that the negotiations between A. E. Peters, president of the Record Stove Foundry, of Montreal, and the directors of the Albion Iron Works, Victoria, B.C., for the transfer of the stove foundry of the latter firm have fallen through. The proposal, however, has been taken up by a Victoria syndicate. The deal has not yet been concluded, but it is not expected that any difficulty will be met in reaching an understanding. The local company will be incorporated immediately, and when assuming control will expend a considerable sum in improving the plant and increasing the scope of the industry.

CONTRACTS SECURED.

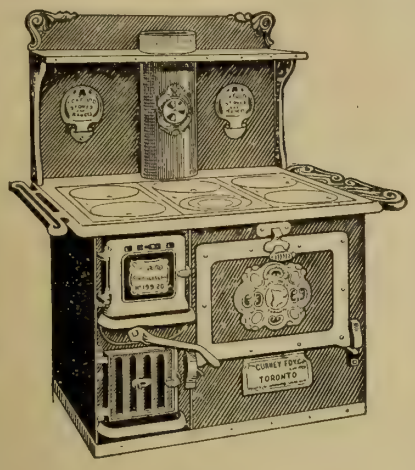
The James Smart Mfg. Co., Limited, Brockville, report that they have secured the contracts to install Kelsey warm air generators to heat and ventilate the public school at Alliston, the St. Andrew's Presbyterian Church at Peterboro, and the St. Matthew's Presbyterian Church at Montreal. Three generators will be used in each case.

Steel Ranges are growing more popular every day and the most highly perfected one on the market is the **Oxford Chancellor Steel Range,** the sales of which are rapidly increasing.

Its unusual capacity, ready consumption of fuel, facilities for burning hard or soft coal, or wood, handsome appearance and efficiency are everywhere commended.

No range you have ever handled has given you such points for shop talk.

Our Guarantee Bond is Given with Each Range



THE

Oxford Chancellor Range

has a large oven with drop door, fitted with a patent spring; it makes a shelf upon which the heaviest roast is easily basted.

The Oxford Chancellor Range is constructed of steel plate, interlined with asbestos mill-board, which prevents the heat from radiating and keeps the kitchen cool.

The Draw-out Duplex Grate for hard coal burning is of material advantage, especially when repairs are necessary, as these can be made without disturbing the linings of the fire-box or water-front where one exists.

The Chancellor is beautifully ornamented with nickel finishings, and would sell on its appearance alone.

If you want to carry an article of the highest merit, we recommend the **Oxford Chancellor Steel Range.** We shall be glad to send you complete information on the subject, including prices, terms, etc., if you will write for same

The Gurney Foundry Company, Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal
The Gurney Standard Metal Co., Limited, Calgary, Alta.

AT TORONTO FAIR AND AT LONDON FAIR

IN THE STOVE BUILDING **IN THE MAIN BUILDING**



We are making an exhibit of our Goods.
This exhibit includes the

Walker Pilot Steel Range

This Range justly demands your interest and most careful examination. It is replete with many practical points of convenience and utility not on other ranges, and critical users everywhere vouch for its good results and economical consumption of fuel.

LOOK FOR OUR BANNERS

Do not fail to call. Bring your friends and prospective customers, and let us show them wherein our goods are superior

WALKER STEEL RANGE COMPANY LIMITED.

Grimsby, Ont.

HARDWARE AND METAL

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JOHN BAYNE MACLEAN

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EASTERN PEACE PROSPECTS.

AS we go to press, the welcome news that a basis of peace has been arrived at is confirmed.

We cannot withhold our hearty congratulations upon the receipt of such unexpectedly welcome news. The representatives of both Japanese and Russian Governments cannot be too highly commented upon the remarkably good feeling that has existed between them all through these most difficult negotiations. Russia has always been considered a mighty power and one to be reckoned with seriously. Japan, on the other hand, has suddenly blossomed forth from a position of almost seclusion into a prominent place among the nations; even after making due allowance for the extraordinary manner of Japan's military and naval successes, it can be easily conceived that the dignity of Russia, backed by a history of centuries, needed careful and diplomatic treatment of an unusual kind.

This is the feature which gave the American President an opportunity to distinguish himself as referee in perhaps the greatest war conference of modern times.

Public opinion has met with a decided check in the unexpected surrender by Japan of every point opposed by Russia. No one—not even Russia herself—was prepared for this. That some concession should be made was freely discussed, but not for a moment was anyone found bold enough to advocate such a complete withdrawal.

In the main, Japan is praised for her magniminity as the conquering power, whilst Russia is honored as having obtained the most remarkable diplomatic victory ever accorded a vanquished foe. Anyhow, the approach of the possibility of peace is a universal cause for rejoicing to the civilized world. Commerce can now go forward to the eastern world without fear; the introduction of better conditions which must inevitably follow the change of regime, and the establishment of a confidence hitherto unknown, are all factors which spell prosperity to the world of exporters amongst which Canada is one of the most important.

What, however, were the influences which induced such a complete revolution in the prospects of peace? Are there not factors to be considered not apparent on the surface, and may it not be that on penetrating the many diverse issues at stake some light will be obtained? It is not given to the general public, or even confidential envoys, to know all behind the scenes of the diplomatic world. A significant circumstance, however, and one perhaps not given its true importance, was the fact that as time went on and the conference accomplished little, it was Japan's Emperor himself who ruled events. Previously Japan had made her minimum terms known to Russia, and Russia, after the usual procrastinations, refused points she never expected Japan to concede. There is only one interpretation, viz.: that Russia's policy was for continued war. Why, will probably never be known to the world. It is noticeable, however, that a revised treaty with Great Britain had just been completed by Japan, and it is within reason to suppose that Japan's ally was the speaking factor in such a remarkable surrender. Britain's interests in the East are great; India has been seriously disaffected by Japan's successes. Russia has infinitely more to gain in India than in Manchuria. A disaffected India means Russia's opportunity. The secret of controlling India is their profound respect for the white race; further success of Japan would be the death knell to this. That Japan's successes should not reach the bounds of excessiveness is of universal importance.

What Japan has surrendered can easily be defined as generally of a financial character, with the staunch friendship of the greatest financial power for her ally. What, indeed, is the surrender of an enormous indemnity, the collection of which would, to say the least, be uncertain! The question of Russia's Eastern supremacy is fully covered by the uniting in navel confederacy of two such powers as Britain and Japan.

All points considered, it looks that Japan has risked the world's opinion for British friendship, and what seems like a surrender is in reality a great diplomatic checkmate to Russian ambition.

VALUE OF TRADE NEWSPAPERS.

THE merchant or manufacturer, the industrial or professional, the manager or operator, who assumes to "get on" without the trade newspapers, directly or collaterally bearing on his particular specialty, is seriously handicapped in the stress of competitive strife, says the Boston Herald. Wilfully, though perhaps not wittingly, he deprives himself of sources of information and material for progress and profit, lack of which must inevitably leave him in the lurch. The managing head of every "house," no matter how large the concern, should above all things see to it that each department head, and so many of the working force as by their intelligent interest show that they would profit by technical and professional information—that all these men are provided with the trade papers best fitted to promote the advancement of each in efficiency. This at the expense of the firm, of course, since the firm, in turn, cannot fail largely to profit by such policy. And don't commit the folly of balking at the preponderance of advertising pages. The information that these contain is never less, and often far more, valuable than that found in the "reading

MILLIONS FOR MATERIAL.

WHERE all the material to be used in the construction of the Grand Trunk Pacific is coming from is not yet known, but it has already been estimated what will be required to supply some of the necessary articles for the four thousand five hundred miles of track which the completion of the road will add to Canada's present twenty thousand railroad mileage. It has been figured that it will require 10,500,000 ties, nearly 500,000 tons of rails, 42,000,000 spikes, 5,000,000 bolts, 2,500,000 angle bars and fish plates, guards and tie plates also in the millions. It is estimated 500 locomotives, 30,000 freight cars, and 500 passenger cars will be required. Other items are bridge timber and steel, stations, telephones and telegraphs, water tanks, terminal facilities, fencing, etc., entailing an outlay of millions of dollars. These items are sufficient to warrant the commencement of many new industries at present not in active operation.

WESTERN HARDWARE ASSOCIATION PROGRESS.

SINCE the annual meeting of the Western Retail Hardware Association held in Winnipeg during the Exhibition week, Secretary McRobie has been hard at work in the Estevan section securing new members. He returned to Winnipeg last Saturday for a short stay in the city and called at the office of Hardware and Metal on Monday. He was able to report very gratifying progress, having met with only one refusal since the annual meeting. The following new members have been added to the association roll: I. P. Cheney, M. A. Boyd, Lyleton, Man.; Jas. F. Dandy, Pierson, Man.; F. G. Elliott, W. R. Burke, Gainsboro, Sask.; S. Shannon, Code & Hughes, Carievale, Sask.; E. Crosley, Oxbow, Sask.; McKean Bros., Riddell & Co., Frobisher, Sask.; Estevan Harness and Hardware Co., F. J. Musgrove, Stockwell & Perry, Estevan, Sask.; Macoun Lumber & Hardware Co., Macoun, Sask.; Weyburn Hardware Co., Thompson & Axworthy, Weyburn, Sask.; A. S. Baker, S. Taylor, Yellow Grass, Sask.

* * *

The addition of the names of these solid, substantial hardware retailers to the association membership means an encouraging increase in the strength and influence of the organization. The work is being done thoroughly in every town and district and hence it is necessarily slow. Organization in the Province of Manitoba has not yet been entirely completed, but as the association belongs to the entire west, not merely to Manitoba, Secretary McRobie has decided to devote the coming months to work in the new Provinces of Saskatchewan and Alberta. As is shown by the list above, work in Saskatchewan has already commenced and the early results are gratifying. During the next two or three months Mr. McRobie will visit Arcola, Regina and all towns in that section of the country. He will also visit Prince Albert and Saskatoon and undertake the organization of the trade in those sections. Edmonton, Calgary and other Alberta towns will also be visited in due time. In all parts of the west hardwaremen are anxiously awaiting the arrival of the secretary, but the impatient ones should remember that if the work is to be done thoroughly it can not be hastened. It is essential that in every place organized all the hardwaremen in the town should be included, for one merchant outside the organization can nullify much of the best efforts made.

* * *

Months must elapse before all the trade can be visited, but there is no reason why hardwaremen should wait for the secretary's visit before making an effort to better the conditions in their own towns. The units of the western association, the molecules of which the whole is composed, are the local organizations in the different towns. Let the hardwaremen in the different towns as yet unvisited by the secretary hold private meetings and organize their own local associations. Those associations should be conducted along the same lines as the Winnipeg Association, from which the larger western body has sprung. They should arrange that all their members get a fair agreed price for certain staples, such as wire, nails, and building paper, now sold in most towns at cost or at a loss. And they should arrange to put into effect on November 1 the association remedy for the long credit evil.

* * *

As readers of Hardware and Metal are aware, the association endorsed at the annual meeting a proposal to close all accounts on November 1, and insist upon cash payments until May 1. Thirty days' accounts are to be considered as cash. This plan has the merit of being an absolutely fair proposal for a country in which it is generally recognized that strictly cash business cannot be conducted. It is absolutely fair because it divides the credit burden with the farmer, allows him assistance while he is waiting for his crop to be harvested, and insists upon the payment of accounts and a strictly cash business only during the months when the farmer should have the money obtained from the sale of his wheat.

* * *

In every respect, but one, this is the same plan as that endorsed by the Retail Merchants' Association of Western Canada, a strong association composed principally of grocers and general merchants. The only difference is that the Retail Merchants' Association have shortened their cash period by one month. In many towns the merchants belonging to that association are issuing joint circulars to their customers announcing their new policy. Why should not the hardwaremen in each western town do the same, or—better still—why should they not join with the members of the other association in issuing joint circulars? The aims and objects of the two associations are almost identical, and they should work together in harmony. Certain it is they have a common enemy to fight in the long credit system and they should show that enemy a united front. But there is no reason why merchants should wait for the arrival of the secretaries of their respective associations. They should form their local associations at once.

MUTUAL FIRE INSURANCE.

AT the recent convention of the Western Retail Hardware Dealers at Winnipeg, the matter of establishing a Retail Hardware Dealers' Mutual Fire Insurance Co. in Canada was referred to a committee to investigate and report at the next meeting of the Association. As the question is an important one to hardware dealers in all parts of Canada, the tables given below noting the progress being made in Iowa and Minnesota will be found instructive.

The board of directors of the Iowa Hardware Dealers' Mutual Insurance Association at their semi-annual session at Mason City, Iowa, on July 12 and 13, last issued the following statement of business done up to July 1:

Total insurance written to date		$1,004,459.00
Insurance in force		677,309.00
Insurance written since Jan. 1, 1905		448,675.00
Cash rebates paid to date		1,344.11
Savings to policy holders on insurance written to date		4,060.00
Cash on hand Jan. 1, 1905	$3,290.10	
Premiums collected Jan. 1 to July 10, 1905	6,433.71	9,723.81
Orders paid since Jan. 1	3,345.43	
Cash on hand	6,378.38	
Premiums due	1,337.79	
Cash assets		7,716.17
Cost reinsurance now in in force		2,202.90
Total cost reinsurance to date		3,299.92

The statement of the Board of Directors of the Retail Hardware Dealers' Mutual Fire Insurance Co., of Minnesota, at the close of business, June 30th, 1905, shows the company in a most flourishing condition. The return premium for 1905 is 35 per cent., this return premium having been declared upon all policies expiring during the year 1905. The increase of business during 1904 was 40 per cent. The figures as submitted are in part as follows:

Income in 1905.

Cash on hand Jan 1	$46,424.75
Receipts for premiums	21,904.80
Receipts from interest	1,176.95
	$69,506.50

Losses	$10,425.63
Rebates and cancellations	636.63
Expense	4,421.00
Cash on hand	50,023.22
	$69,506.50

PIG IRON STATISTICS.

THE American Iron and Steel Association has issued the statistics of the production of pig iron in Canada in the first six months of 1905. The figures show a large increase as compared with either of the two halves of 1904, as will be seen by the following table, which gives the production by fuels, in gross tons, in half-yearly periods :

Fuel used—Gross tons—	To July 1, 1904.	To Jan. 1, 1905.	To July 1, 1905.
Coke	111,840	139,831	188,541
Charcoal	8,803	10,468	21,665
Total	120,643	150,299	210,206

The production of pig iron in the first half of 1905 was the greatest in any half year in the history of the Dominion, exceeding by 48,453 tons that of the last half of 1902, the next highest half year, when 161,753 tons were made. It was also greater than the production of any whole year prior to 1901. Down to that year the production of pig iron in Canada never amounted to 100,000 tons in any calendar year.

The production of Bessemer pig iron in the first half of 1905 amounted to 63,785 tons. There was no production of Bessemer pig iron in the first half of 1904, and only 26,016 tons were made in the second half of that year. The production of basic pig iron in the first half of 1905 amounted to 68,378 tons, against 28,981 tons in the first half of 1904 and 41,152 tons in the second half.

The unsold pig iron held by manufacturers on June 30, 1905, none of which was intended for their own consumption, amounted to 35,629 gross tons, as compared with 35,119 tons on December 31, 1904, and 36,868 tons on June 30, 1904. Of the unsold stocks on June 30, 1905, a little less than 6,500 tons were made with charcoal, the remainder being coke iron.

On June 30, 1905, Canada had sixteen completed blast furnaces, of which eleven were in blast and five were idle. Of this total eleven were equipped to use coke and five to use charcoal. In addition three coke furnaces were partly erected on June 30, 1905. Work upon all these furnaces had, however, been suspended for some time.

During the first half of 1905 the total number of furnaces actually in blast for the whole or part of the period was thirteen, of which eight used coke and five used charcoal. The number of furnaces that were idle during the whole period was three, all coke furnaces.

The Dominion Iron and Steel Co., Limited, of Sydney, N.S., had two of its four coke furnaces in blast on June 30. One of the idle furnaces is to resume about October 1.

The Nova Scotia Steel and Coal Co., Limited, of New Glasgow, N.S., operated its new furnace at Sydney Mines, Cape Breton, for 180 days during the first half of 1905, and abandoned its Ferrona furnace at Ferrona.

Messrs. John McDougall & Co., of Montreal, had one of their two charcoal furnaces at Drummondville in operation on June 30. During the first half of the year both furnaces were running, one for twelve and the other for forty-nine days. The idle furnace may resume next Winter.

The Algoma Steel Co., Limited, of Sault Ste. Marie, blew in its No. 1 furnace (charcoal) for the first time on March 1, 1905, and it was running on June 30. Its No. 2 furnace (coke) was in operation during the whole of the first half of 1905. The construction of furnaces Nos. 3 and 4 (coke) was not resumed in 1905.

The Deseronto Iron Co., Limited, of Deseronto, Ontario, operated its furnace on charcoal for 181 days during the first half of 1905, and it was running on June 30.

The Hamilton Steel and Iron Co., Limited, of Hamilton, Ontario, was operating its furnace on June 30. It ran for 150 days in the first half of 1905 on basic and foundry pig iron.

The Canada Iron Furnace Co., Limited, of Montreal, had its Radnor and Midland furnaces in operation on June 30. Radnor (charcoal) ran for 113 days and Midland (coke) for 167 days during the first half of the year. Bessemer pig iron was chiefly made at Midland.

The Northern Iron and Steel Co., Limited, of Collingwood, Ontario, did no work whatever in the first half of 1905 on the furnace for which excavations were made in 1902, but upon which work was suspended in 1903.

The Atikokan Iron Co., Limited, of Port Arthur, Ontario, broke ground early in August for its new blast furnace at Port Arthur. It will be 75 by 15 feet, will be equipped with three Roberts stoves, will use magnetic iron ore from the Atikokan range, which is located about 130 miles west of Port Arthur, and will have an annual capacity of about 30,000 tons of foundry and Bessemer pig iron. Coke will be made in ovens near the furnace. The officers are D. D. Mann, president; J. C. Hunter, vice-president; Hugh Sutherland, secretary and treasurer, and Robert R. Jones, general manager.

REACH OUT THIS FALL.

IT is always time to become an expansionist, but this coming Fall is going to be a good time to reach out. There is a great opportunity to do a big business on a profitable basis. To be sure, there are limitations in many sections both in the west and in the east, but there is always the chance to keep well-pleased customers buying more and more. Keep pegging away even if harvest conditions and prices of products are not just what you would like. Now is the time to gird your loins and to decide upon improvements in your store and store service. The Summer lull should be well utilized.

OUR MEXICAN TRADE.

ANOTHER avenue for Canadian trade has been opened up by the establishment of a direct steamship service to Mexico. This is another evidence of national growth, and it will be considered a matter for congratulation by all the commercial interests of the country.

One of the most hopeful features of the new market for Canadian products is the fact that the Government has for some time been maintaining in Mexico an agent whose faithful reports to the authorities will form an excellent guide for those who wish to avail themselves of this opportunity to increase their business. Experience in foreign trade has taught our business men that it is absolutely necessary to thoroughly understand the needs of a new field before exporting to it. The present opportunity, therefore, promises particularly well, because there will be none of that groping in the dark which characterized some of our earlier ventures—notably in the West Indies.

Canadian manufacturers must not, however, imagine that they are going to have a free hand in the Mexican trade. Far from it. Already good business has been established there by Germany, France, Great Britain, and the ubiquitous Uncle Sam. An effort must be made to cater to the peculiar needs of the people, and in some cases this may entail the making of special lines for Mexico. But there is every assurance that such efforts will be crowned with success, as the Mexicans are said to be awakening to the fact that they are living in the twentieth century, and that twentieth century methods must be adopted in order to ward off poverty and ruin as a nation. We now have an excellent chance to carefully study the demands of a new and important clientele, and we cannot better justify our claim of being a commercial nation than by successfully meeting those demands.

STEEL AND IRON PRICES.

The present prices of the following items of iron and steel compare with one year ago as follows:

	Now.	Year Ago.
Foundry pig No. 2s. Cin. ton	$14.50	$17.00
Bessemer pig, Pitts., ton	15.35	12.70
Grey forge, Pitts., ton	14.00	11.85
Steel billets, Pitts., ton	24.00	21.00
Wire rods, Pitts., ton	32.00	28.00
Steel rails, tons	28.00	28.00

PERFECT IDEA!

Absolutely the Most Up-to-Date and Perfect-Working Range on the Canadian Market.



Greater and Grander Than Ever

Dealers who have inspected our ***Range*** at ***Toronto Exhibition*** are unanimous that we have the best ***Range*** on the ***market.***

FEATURES

Loose Nickel Bands, Medallion and Shelves may be removed instantly for cleaning or when blacking Range.

Direct Draft Damper is operated from the front; the Damper Rod is not exposed to fire, and cannot burn out or warp.

The Main Bottom is corrugated and cemented, preventing unnecessary loss of heat through the bottom of Range and insuring quick baking by the reflection of heat against oven bottom.

Sliding Check Damper gives perfect control of draft.

Double Draft Duplex Grates.

Extension Fire Box.

Cemented Oven Top. Large Ash Pan.

Reliable Oven Thermometer.

Can be fitted with special Gas Attachment, so that back two lids serve as gas burners.

Grate Bars may be removed without disturbing linings.

NO.	HOLES	OVEN	WEIGHT
6284	6 8-inch	19x19x11	400
4294	4 9-inch	19x19x11	400
6384	6 8-inch	21x21x11	500
6394	6 9-inch	21x21x11	500

Guelph Foundry Co., Limited, - Guelph, Ont.

Branches: Toronto, Montreal, Winnipeg, and Calgary.

MARKETS AND MARKET NOTES

(For detailed prices see Current Market Quotations, page 58.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 1, 1905.

ORDERS in all lines are now coming in nicely, and the fall business may be said to have fairly opened up. Wholesalers expect a very big trade this Fall, and if their hopes are realized, the year 1905 will go down in hardware annals as a record breaker. The manner in which business was maintained throughout the Summer months was simply wonderful, and exceeded the fondest expectations of the most sanguine optimist.

Although general hardware is selling very freely, it is not able to keep up to the demand for sporting goods, which goes on without any signs of letting up. Arms and ammunition are, naturally enough, the features of the trade in sporting goods.

Some typical Fall lines are now being inquired for by dealers in all parts of the Province. Among these may be mentioned padlocks and rat-traps, which are in active demand.

The purely city trade has brightened up considerably, since the return of the Summer resort contingent, and the virtual settlement of the building strikes. Shelf hardware is in particularly good demand.

Country trade has been stimulated by the abundant harvest which is enabling farmers to spend money more freely.

American travelers report that prices are stiffening across the line and this strength may soon be reflected in the Canadian market, though no change has yet been made by any of the local jobbers.

Axes—There was a slight cut in axes lately, but the tone of the market has strengthened, and the old price is again quoted by all wholesale houses. Our prices are: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Follow the same general tendency as axes, and the prices given below may be taken as ruling the entire trade. We quote: Axe handles, No. 3, $1.25: No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a doz.

Sewing Machines — The approach of Fall is adding strength to this line, and orders are increasing with the advance of the season. Prices current are: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—As the long evenings are coming on the demand for lanterns is picking up well, and many orders have been shipped during the week just passed. We quote: Cold blast, $4.50; No. 0, Safety, $3.50.

Barb Wire—Only isolated orders are being received for barb wire which indicates that the season is now over. Our prices are: $2.75 for 100 lbs f.o.b. Montreal; $2.37 1-2 f.o.b. Cleveland. Carlots of 15 tons, $2.25 f.o.b. Cleveland.

Fence Staples—Like barb wire this line is an extremely slow seller at this season. Prices are the same as at our last report, as follows: $2.65 per 100 lbs. keg, for bright, and $3 for galvanized; 25 to 50-lb. packages, 25c. extra.

Rivets and Burrs—The good sale found for other lines of general hardware is largely shared by rivets and burrs. We quote: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—As usual, these are among the best sellers in the trade. Our prices are: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Are included in nearly every order that comes in. Prices remain unchanged as follows: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—Conditions reported last week are still existing, though there is less disposition to cut the price. We quote: $2.10 to $2.20 per keg f.o.b. Montreal

Cut Nails—Little activity is apparent in this line. Large orders are few and far between. We still give the following prices: $2.20 per keg, f.o.b. Montreal.

Horseshoes—A big business is now beign done in this line, as country dealers are stocking up for the Fall. Our prices are: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and large, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Still remain the feature of the market, which is especially strong in arms and ammunition. Shot guns and rifles are being shipped out as quickly as possible. We quote: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs.. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Manufacturers who have a large local trade, report an improvement in business since the petering out of the building strikes. The market, however, is rather unstisfactory, and everyone is looking forward to the Fall, to strengthen the market. Prices are as at our last report.

Cordage—Is now moving freely and the quietness which has characterized the market for some time past, has not been felt during this week. There has been no change in prices.

Cement and Firebrick—The week has been without feature, no big sales being noted. Local supply houses are looking forward to taking a share of the business which will result from the G.T.P. contracts being commenced. We quote: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—Though there has been no change in price as yet, the market is firmer this week, and a stiffening in price is predicted. We give prices: 5-16 inch, $4; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—This is a very seasonable line, and good orders are being received from the great apple-producing districts. Our prices are: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—From all appearances, the business in skates will be heavy this winter. Jobbers report large orders already on hand. We quote: 25c. to $2.50, according to quality.

Sleigh Bells—The movement in this line has begun and good shipments are sent forward daily by the wholesale dealers. Our quotations are as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—This is another article which is selling more and more freely

as the Fall approaches. We still give the following prices: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Sept. 1, 1905.

LOADED shells and other ammunition are the goods which are moving in greatest quantity at present, all sporting goods being selling well. Shot guns and rifles are in strong demand.

Builders' hardware is also being shipped in large quantities, building being well advanced and finishings are being required by those engaged in construction work.

General business is fair and the holiday season being over an improvement is looked for. Fall trade is expected to be very active, the good crops having put most dealers in an optimistic mood.

There are no changes in prices this week.

Sporting Goods—Shot guns and ammunition are now moving quite briskly.

Washing Machines—An increasing demand is reported.

Chain—Trade is reported to be normal. We quote as follows: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders—Dealers are well satisfied with their sales. We quote step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire— Demand is active and stocks are being called on heavily.

Wire Nails—Good business is reported owing to the extensive building operations.

Cut Nails—There is a very satisfactory trade being done. Quotations are $2.40 per keg f.o.b. Toronto.

Horseshoes—A seasonable trade is reported. Our quotations now are as follows: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" are: Iron shoes, light and medium pattern, No. 2 and larger, $3.80; No. 1 and smaller. $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller. $4.20; featherweight, all sizes, 0 to 4, $5.50: toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Horse Nails—Trade is active at unchanged prices.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—Trade is fairly good. Some agricultural implements have withdrawn from the market, however.

Cordage—Sorting orders are coming in. but trade is expected to fall off. Our quotations continue as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse: Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Demand is strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 20c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A good business has been done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—The uncertain condition of this market still continues. Prices are altogether too high to warrant continuance. Inspected hides are ½c. firmer than last week. The Chicago market is also ruling high and equally as unsatisfactory. A report to hand from there mentions buffs as being in demand, but dealers had none to offer, and says that no doubt a good lot of western bundles would have brought good figures. Tallow is in very general demand and prices firm. We quote:

Hides, inspected, No. 1 per lb.		0 10½
" " " 2 "		0 09½
Country hides. flat, per lb.	0 09	0 10½
Calf skins, No. 1, selected		0 12
" " No. 2		0 10
Lamb skins and pelts		0 65
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, new clip, per lb.		0 16
Wool-washed fleece	0 25	0 26
Rejections		0 20
Pulled wools, super, per lb.	0 21	0 23
" " extra "	0 22	0 24

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 1, 1905.

A GENERAL upward tendency is noted in the whole metal market. Prices are advancing all along the line, but copper is still the feature. Quotations on this metal are now so high as to be almost prohibitive, and it is very scarce at that.

Tin, also, is advancing strongly, almost every day showing a higher price than the previous one. This is accounted for by a remarkably heavy demand, and the inability to produce the normal quantity. Brokers inform us that tin plates will inevitably advance in the very near future.

Pig lead, during the past week, has shown a daily advance on the local market. but it is predicted in some quarters that the conclusion of peace between Japan and Russia will tend to easier figures.

Antimony has experienced another jump, and its scarcity is a really serious feature of the situation. Even those jobbers who were carefully husbanding their supply are almost on their last pound, and they must soon come into the market for further supplies. Dealers report that even at the exorbitant figures asked orders are being shipped freely, though none of them are large. Buyers are content to get along from hand to mouth, in anticipation of easier conditions in the future.

Canada Plates—No change has occurred in the prices quoted last week. Quotations are: 52's, $2.35; 60's, $2.40; 75's, $2.45; dull polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper— This is the feature of the market. Even at the prohibitive prices quoted below, it is almost impossible to secure it at all, especially in large quantities. A famine is expected in the Montreal copper market. We quote: Ingot copper, 16 3-4; sheet copper, 24 1-2.

Ingot Tin—Additional strength is being gained daily, and prices now are: 36 1-2c. to 37c. per lb.

Pig Lead—Further advances are reported in pig lead and, at time of writing, quotations are from $3.80 to $3.90 per 100 lbs.

Boiler Tubes—The good demand experienced all Summer still continues. We give prices: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Iron—Owing to an increase in freight rates, and the uncertainty of being able to ship orders, some dealers have found it necessary to advance prices, which now stand as follows:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.50	"	"
" (special)	18.50	"	"
Ayresome No. 1	18.50	"	"
" No. 3	17.75	"	"
Summerlee	18.25 to 18.75	delivered	Montreal.
Clarence No. 1	17.75	"	"
" No. 3	17.25	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel—Prices remain unchanged. We quote: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—Trade has been somewhat quiet during the past week. Prices still remain as follows: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2; reeled machinery steel, $2.75; mild,

$2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—A fair trade has been done, and the following quotations are given: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The market is strengthening, and brokers confidently predict an advance. Current prices are: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—There has been no change to report, though the following prices are even firmer than before: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—The price has been again advanced. We now quote: 16c.

Sheet Zinc—This is another line which has advanced during the week. The scarcity is most pronounced, which accounts for the stiffening of the price. We quote: Cask lots, $7.25; small lots, $7.50.

Tin Plates—Though local manufacturers' agents and brokers confidently predict an advance, none has yet occurred. We quote: Cokes, $3.75; charcoal, $4.

Ingot Zinc—The tendency of the market is decidedly upward. An advance has occurred during the week. Quotations now are: 6 1-2c. to 6 3-4c.

Scrap Metal—Iron is more active than last week and prospects are that the price will advance in the near future, in sympathy with the strength of the pig iron market. Fall business is opening up in both wrought and cast iron scrap. The increase in ingot copper has resulted in a corresponding increase in scrap. Prices now are: Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; No. 1 country scrap, 75c. to 90c. per 100 lbs.; old rubbers, 5 1-2c. to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 1, 1905.

COPPER has continued to soar upward and quotations are half a cent higher than last week. Prices have gone above 17c. in New York, and 17 1-2c. is the ruling figure on the local market.

Recent advances on other metals have been held firmly as the general impression is that despite the decrease in demand for certain metals owing to the stoppage of the war the increased industrial activity will more than make up for the falling off.

Antimony appears to have reached top figures and no further increase is reported.

In old materials copper and brass show advances of 1c., a scarcity of supplies being reported.

Pig Iron—Many of the mills are booked ahead with orders and stocks are light. Quotations continue unchanged, as follows:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—There is a very active market. The mills are running to their full capacity. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—The recent advance holds firm. Ingot tin is very scarce, and at the same time buying is active. We quote: 37c. to 38c. per lb.

Tin Plates—The demand has picked up and is now quite active.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass—Conditions are unchanged, business being fairly active. Discounts continue at 10 per cent.

Lead—The market is strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4.00 per 100 lb., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—There is an active demand. Prices are steady: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—As predicted another advance has taken place on ingot copper, owing to a scarcity of stocks. Our quotations are as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—In spite of the excessive prices ruling, there is an active demand for antimony.

Old Material—Copper and brass are quoted 1c. higher, being affected materially by the advance on ingot copper. Stocks are light and supplies scarce. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb., light copper, 12c. per lb.; heavy red brass, 11 1-2c. per lb.; heavy yellow brass, 9 1-2c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Anthracite prices have advanced 10c. We quote as follows: Anthracite in cars at bridges: Grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, August 31, 1905.

Apparently the United States Steel Corporation will pursue a cautious policy in its purchases of pig iron. The company has just bought 25,000 tons of Bessemer pig for delivery during the first half of September, paying for some of the iron on the basis of $14.50 per ton and for some of it up to $15 per ton. It is understood that the corporation has now in blast 92½ per cent. of its total furnace capacity.

Some basic pig purchases have been made in the eastern territory, sales aggregating about 10,000 tons have been effected in the Cleveland district, and some buying has taken place in the Pittsburgh district. So far as known the 10,000-ton lot of Bessemer pig for a plant in the Philadelphia district has not been placed. There have been further sales of low phosphorus iron.

There has been a fair run of orders for foundry iron, and the first indications of some interest on the part of buyers for the first quarter of 1906 are appearing.

The scarcity of steel is becoming more acute, particularly in the Chicago district. The announcement that the steel corporation will build seven additional 50-ton open hearth furnaces and an additional blast furnace at South Chicago is interesting in this connection.

Further heavy sales of steel rails have been effected, the aggregate being about 200,000 tons. Among them are one lot of 50,000 tons for the Santa Fe, and 25,000 tons for the Missouri Pacific, for 1906 delivery, and 10,000 tons additional for the St. Paul, for delivery this year. Orders for 200,000 tons more are pending.

An interesting transaction is the sale of 10,000 tons to the Grand Trunk road made by an American mill for delivery this year, the Canadian mill which had the order not being able to live up to its deliveries.

The increasing frequency with which premiums on structural material have been paid will in all probability lead the makers of beams and angles to advance their price in the near future. If this should be done it will be the first advance which has been made for some time.

Good reports continue to come from the wire trade as to the tonnage being placed. The leading interest has booked about 140,000 tons thus far this month.

There is a fair buying movement in sheets and in tubes, but tin plate is still lagging.

LONDON METAL MARKETS.

From Metal Market Report, Aug. 30, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 48s. 3d., and Scotch warrants at 50s. 6d., making prices, as compared with last week, 10 1-2d. higher for Middleboro, and unchanged for Scotch warrants.

Tin—Spot tin opened weak at £151 2s. 6d., futures at £150 12s. 6d. and after sales of 70 tons of spot and 730 tons of futures, closed weak at £150 5s. for spot,

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and £149 12s. 6d. for futures, making price as compared with last week 5s. higher on spot, and 5s. higher on futures.

Copper—Spot copper opened easy at £72 2s. 6d., futures £71 12s. 6d., and after sales of 400 tons of spot and 700 tons of futures closed weak at £71 10s. for spot and £71 for futures, making price as compared with last week £1 12s. 6d. on spot and £1 6s. 3d. higher on futures.

Lead—The market closed at £14 8s. 9d., making price as compared with last week, 8s. 9d. higher.

Spelter—The market closed at £25 12s. 6d., making price as compared with last week, 17s. 6d. higher.

Nova Scotia Trade News

Halifax, N.S., Aug. 30.

NO improvement in trade is reported. The mid-summer dullness continues. Some orders have been received for guns and ammunition from outside points, and sales of builders' materials are fair. Dealers are looking forward to a good Autumn trade.

The open hearth furnaces at Sydney Mines have been working to their full capacity for the present month, producing the finished quality of steel for which a ready market is found. On Friday last the record pour was made, one of the 40-ton retorts turning out 51 tons in one tap.

A special train of fourteen cars, all loaded with products of the Dominion Iron and Steel Co., was sent out from Sydney last week for the west. The train was made up of ten cars of rails for the Grand Trunk Railway, two cars of wire rods for the Ontario Tack Co. of Hamilton, and two cars of billets for the Montreal Rolling Mills.

The thirty coke ovens at the Winnipeg pit, Sydney Mines, which have been working for the past three years with only one break, are being cooled off preparatory to receiving a thorough overhauling. This plant is built off a German patent, and is the only one of its kind in Canada. These ovens compare most favorably with the more modern American patents; turn out just as good coke, and perhaps a trifle more consistently than the less cumbersome device from across the border.

The hardware stock of W. B. Arthur & Co., who became insolvent a short time ago, was sold by tender last week to Stairs, Son & Morrow, for 65 per cent. of its invoice value, which had been fixed at $22,400. The firm's real estate on Bedford Row was sold to A. L. Melvin for $3,800. The property on Slater street remains in the possession of Mr. Canavan.

Up to the present month the shipments of iron ore from Wabana, Newfoundland, to North Sydney, have not totaled up largely, not more than half a dozen cargoes being landed at the pier, or about 20,000 tons. Nevertheless the output at Belle Isle has far exceeded that of former years for the same length of time. The Nova Scotia Steel Co. are mining and running about 1,200 tons a day, besides using the bank which was piled during last Winter. The greater part of this ore is finding it way across to the Old Country, the proved superiority of the Wabana article making it in

Bar Steel
Cold Rolled
Reeled Machinery
and Iron Finish
From stock or for import. Prices right.

A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen handle our
ANTI-FREEZING PUMPS.
They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.
Do you handle our PUMPS?
Write for catalogue and prices.
The R. McDougall Co., Limited

HARDWAREMEN!
B.C. BRAND DRILL STEEL
is the best on the market.
Write for Particulars to-day
Manufactured by
B. K. MORTON & CO.
SHEFFIELD, ENG.
AGENTS
E. G. PRIOR & CO., Victoria
BAINES & PECKOVER Toronto
CANADIAN REPRESENTATIVE:
D. W. CLARK, P.O. Box 521, TORONTO

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. (tf)

TENDERS will be received by the undersigned executors of the late James M. Martin for the purchase of the good-will and stock in trade of the hardware business of the firm of Martin Bros., of the city of Rossland. An inventory may be seen and particulars obtained from the executors.

Wm. Martin,
W. M. Wood,
Executors. (39)

MANUFACTURERS' AGENT WANTED.

A LARGE firm of bedstead manufacturers in Birmingham, Eng., are open to engage an agent in Canada for the sale of their goods. Address Box 254, HARDWARE AND METAL, Toronto. (tf)

SITUATIONS VACANT.

TRAVELER wanted—An experienced hardware traveler. State experience and with whom employed. Apply Decatur, Bull & Co., Montreal. (35)

SITUATIONS WANTED.

ADVERTISER, aged 24 (in England), thoroughly competent man in manufacture of hide and bone glues, size, manures, etc, requires situation in America or Canada. Best results in all its branches. References. Box G. HARDWARE AND METAL, 88 Fleet St., E.C., London, Eng. (35)

WANTED position of trust by well educated man with 19 years business experience. Reply Box 271 HARDWARE AND METAL, Toronto.

FOR SALE.

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. (38)

A WELL established stove and furnace business in the thriving town of Burlington. Box 65, Burlington. (36)

TENDERS WANTED.

The Assignee of Estate of J. A. Stovel, Edmonton, invites Tenders for the following parcels:

No. 1. Stock of Hardware, etc. - - $20,760.00
No. 2. Accounts and Bills Receivable about - - - - - - - 5,000.00
No. 3. Equity in Buildings and Real Estate, Main Street, Edmonton.

Tenders to be received by J. H. Ashdown, Winnipeg, on or before Tuesday noon, 21st September.

The highest or any Tender not necessarily accepted.

Stock sheets may be seen at the Office of the Assignee, Edmonton; or at the Office of The J. H. Ashdown Co., Winnipeg, and Hardware and Metal, Toronto, Ont.

great demand. Six large steamers have been running regularly between Wabana and Rotterdam, carrying from five to eight thousand tons each trip. Since the installment of the plant the output has doubled itself and present employment to over 1,000 men. About the first of September the company will begin taking their Winter supply of ore to North Sydney.

PERSONAL AND TRADE ITEMS.

Montreal.

Mr. Stewart, of D. G. Kirk & Co., Antigonish, N.S., was in town this week.

Mr. Dowling, of Caverhill, Learmont & Co., is enjoying a well-earned vacation.

Mr. A. H. Campbell, of A. C. Leslie & Co., is enjoying his holidays on the lower St. Lawrence.

Mr. Sweet, of A. Sweet & Co., Winchester, paid Montreal a business visit during the week.

Mr. J. S. Morin, hardware merchant, of Henryville, was in Montreal, on business this week.

Mr. Chas. Millhot, of St. Monique, called on the wholesale hardware dealers in town, this week.

Mr. T. McC. H. Hutchinson, of Drummond, McCall & Co., is unable to be at business this week owing to illness.

Carmel Freres, have bought out the business formerly carried on by Versailles Freres., at 240 St. Catherine street.

Mr. J. A. Bremner, of Alex. Bremner & Co., dealers in cement and firebrick, has recovered from his recent illness.

Mr. Thos. L. Waldon, Winnipeg representative of Caverhill, Learmont & Co., spent a few days this week at headquarters.

Mr. A. C. Leslie, of A. C. Leslie & Co., metal merchants, has returned from the Old Country, and is again attending to business.

The stock of S. J. Grangers, 679 St. Catherine street, has been purchased by J. Joseph Sarrazin, who will carry on the business from this time.

Mr. F. W. Wilkinson, of B. & S. H. Thompson & Co., metal merchants, has returned from a pleasant vacation spent at East Boulton, Lake Memphremagog.

Mr. Gordon Seybold, of Seybold, Sons & Co., wholesale hardware merchants, is out on the road for a week, traveling along the G. T. R. front, as far as Brockville.

During the past week, Caverhill, Learmont & Co., have welcomed back to their fold the following vacation pilgrims: George McGowan, George Goldthorpe, and John E. Brown.

Mr. E. J. Rowlands, of Alex. McArthur & Co., manufacturers of building paper, has returned from his vacation which he spent in the west, visiting Hamilton, London, St. Thomas, and other cities.

Mr. John McAvity, of St. John, N.B., was in town early this week and he went west with his son, Mr. A. G. McAvity, manager of the Canadian Buffalo Forge Co., whose marriage took place in Toronto on Wednesday.

Mr. Wm. Karley, of Karley & Gibson, hardware merchants, Athens, Ont., was in Montreal for a few days this week visiting the many places of interest in the city. When met at the St. Lawrence Hall, he remarked that his visit had been very interesting. He looks forward to a prosperous trade in his section this Fall.

Mr. Feeney, manager of the Canada Saw Co., Limited, Ottawa, was in Montreal during the week, completing arrangements for the new factory of his company, which is to be erected at St. Henri. The enlargement of the plant will be very considerable, and the new premises will be a great acquisition to the industries of Montreal's suburbs.

The factory of Henry Walters & Sons, axe and tool makers, Hull, Que., is very busy these days, shipping orders to all parts of the Dominion. The business is under the immediate supervision of Mr. Walters, jr., who has developed it well, during the past few years. He is a graduate of McGill University, and has applied his trained mind to the important commerce of making fine axes and tools. He stated to a representative of Hardware and Metal, that his science course at McGill had been of the greatest service to him in business.

Toronto.

Mr. W. F. Finkheiner, Milverton, was in Toronto a few days this week.

Mr. Gilpin, of Gilpin Bros., Orillia, visited Toronto during the past week.

Mr. Wm. Good, of the Canada Paint Co., has returned from his vacation.

Mr. Joseph Myers, Stratford, called on Toronto plumbing supply men this week.

Mr. E. Eakins, hardware merchant, Brechin, spent a few days in Toronto this week.

Mr. T. W. Humphreys, mayor of Parkhill, was a caller on Toronto jobbers this week.

Mr. Sydney, of Christie Bros., Owen Sound, spent a few days in Toronto this week.

Mr. James Clark, Brechin, visited Toronto this week and called on the hardware jobbers.

Mr. Dickenson, of Dickenson & Allan, Hamilton, called on Toronto plumbing supply houses this week.

Mr. F. Anthony, who is building up a fine hardware trade at Norval, visited Toronto a few days ago.

Mr. S. P. Gourlay, well-known to Ontario plumbers, renewed acquaintanceships in Toronto this week.

Mr. Skinner, of Anderson & Skinner, hardware merchants, Keene, spent a few days in Toronto this week visiting the exhibition.

Mr. Sigmund Samuel, of Samuel, Benjamin & Co., Limited, has returned from a three months' tour through Great Britain and the continent.

C. M. Cutts & Co., Toronto, have taken out a permit to build two stores and

dwellings on Dundas street, at a cost of $15,000.

Mr. Victor Lee, brother of Mr. A. B. Lee, president of Rice Lewis & Sons, Toronto, died on August 24, after a long illness. Mr. Lee was well-known to the hardware trade and his many friends will regret his early demise.

Messrs. A. F. Hawke, Grimsby; A. Bechtel, Baden; G. A. Binns, Newmarket; Mr. Nicholson, of Nicholson & Robertson, Napanee, and Mr. Adolph, of Adolph & Bonnett, Listowel, were visitors at the offices of the Sherwin-Williams Co., in Toronto this week.

Mr. T. H. Hamilton, general manager of the Canadian Oil Co., Limited, entertained 40 of the office staff last Saturday afternoon on the launch Indiolo. At Long Branch games and races were participated in and supper was served at Meyers restaurant at Sunnyside, the Humber and the Island being visited in the evening.

Mr. T. G. Dexter, of H. S. Howland, Sons & Co., Toronto, has returned from a trip up the lakes. Mr. Dexter was favorably impressed with the growth of Port Arthur and Fort William since his last visit and with the favorable prospects for these towns as shipping centres. Everywhere Mr. Dexter found the merchants to be optimistic as to the possibilities for a large Fall trade. He noticed large stocks of lumber being carried in the yards, however, and as there was little indication of activity in its removal, he considers it possible that some stocks will be carried over, this causing a temporary depression in the lumber districts.

Elsewhere.

Mr. W. R. Hobbs, hardware merchant, Tillsonburg, is spending his vacation on a farm near Simcoe.

Mr. James G. Stewart is leaving Wingham to engage in the hardware business at Auburn.

Mr. Harry J. Peter, of the plumbing firm of Peter & Sylvester, Stratford, was married on Tuesday to Miss Maggie S. Ball, of the sme city.

Mr. T. G. Jackson, Whitby, having sold his hardware business to Mr. W. M. Pringle, has disposed of his new block to a Sarnia gentleman for $4,000.

Mr. D. Milne, of Sarnia, of the well known firm of Mackenzie, Milne & Co., hardware merchants, ship chandlers, and dealers in artesian well supplies, has returned from a trip to the coast.

Mr. H. V. Lawlor, who carries the grips with samples of "English" paints and acts as western commercial missionary for Henderson & Potts Co., Limited, of Montreal and Winnipeg, returned to the city last Saturday from a trip in the Southwestern part of Manitoba. Mr. Lawlor is looking forward to the second week in September, when he expects to hold down the manager's chair in Winnipeg during the absence of Mr. J. Irwin in Montreal. As this is not a society column and is not headed "On dit," Hardware and Metal refrains from making any formal announcement as to the object of Mr. Irwin's eastern trip, but it may safely be stated that it is not entirely—nor indeed principally—connected with paints and varnishes.

Have you drummed up "Metallic" Building Materials yet to the farmers in your district?

Many of them are going to put up some barns or other farm buildings, sure, or perhaps going to re-roof some old ones or put on siding.

It ought not to require much talk, when backed by samples, to show them why sheet metal is the right stuff for roofing or siding, and why the "Metallic" brand is best. He's been reading our ads. Suggest it to him and show our catalogue.

Samples—If you haven't them—sent free. Profits on our line are large—no stock to carry—catalogue makes the sale.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We manufacture:
"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

PERSONAL THANKS.

The following, addressed to Col. MacLean, president of the MacLean Publishing Co., is from Mr. E. K. Spinney, Yarmouth, N.S., past president of the Maritime Board of Trade:

"I cannot refrain from again expressing my personal thanks for your generosity in the liberal manner in which you reported the proceedings of the annual meeting of the Maritime Board of Trade at Yarmouth.

"You have also received the official gratitude of the delegates to this meeting by their vote of thanks unanimously passed by them at the close of the session. Your representatives were all men of unquestioned high standing in their profession, which is an extraordinary compliment.

"I sincerely regret the absence of your esteemed self as I feel certain you would have enjoyed some features of the programme."

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Sept. 1, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

A LARGE part of the western wheat crop is already cut and as conditions continue favorable, the largest wheat yield in the history of the country will very soon be safe from harm. A year of unprecedented prosperity now seems assured and the trade are in the mood to buy liberally.

* * *

The Pease-Waldon Co. have leased the big store at 268 Portage avenue formerly occupied by Pengelly & Co. and they are now fitting up the premises for office purposes and for the display of their "Economy" heaters and "Florence" boilers, etc. It is expected that the new premises will be ready for occupation by September 15th. The old premises on Lombard street will be retained in the meantime for storage purposes.

* * *

Mr. T. L. Waldon, the western manager of Caverhill, Learmont & Co., is in the east this week on a holiday and business trip. He will visit Montreal, Toronto and other eastern cities.

* * *

The Gurney Foundry Co. are planning to build a large new warehouse in this city, but nothing definite has yet been decided. The steady growth of their western business has rendered their present Lombard street premises inadequate.

* * *

Prices are unchanged throughout our entire list this week. Business is very active in all general lines.

Screen Wire Cloth—Very little selling now. The price is still $1.55 per 100 square feet.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, per roll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Lanterns—Selling in large quantities for Fall trade. Prices, as recently announced by the wholesalers, are as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Business is fairly active. Prices continue as follows:

Barbed wire, 100 lb	$2 85
Plain galvanized 6 to 8	3 39
" 9 2 50	2 90
Plain galvanized 10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire 10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire 14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. The price is steady since the recent reduction to $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is very active at following unchanged prices:

Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.— There is a heavy demand now for light cartridges and general lines for Fall shooting. We quote discounts as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge	
black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is active and prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	12 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam...	$3 00	$4 20
28 " "V" crimp.....	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square....	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge.....	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24.....	3 25
Canada plate, 20 x 28.....	3 50
Canada plate, full polished.....	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch.....	....
" ¼ "	2 45
Black iron pipe, ⅜ inch.....	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal.....	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light.....	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2 lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2 lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net

Canadian Paris Green—50-lb. drums, 17c.; bulk, 18c.; in 1-lb. packages, 20c.

Paints and Oils—General business is very active at unchanged prices. We quote :

White lead (pure).....	$6 00	6 25
Bladder putty, in bbls.....		0 02½
" " in kegs.....		0 02¾
Turpentine, pure in barrels.....		0 96
Less than barrel lots.....		1 01
Linseed oil, raw.....		0 62
Boiled		0 65

Window Glass—We quote:

16-oz. O.G , single, in 50-ft. boxes—	
16 to 25 united inches.....	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz.C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

TRADE MARK

This design a guarantee of quality

WATERPROOF WRAPPING PAPER

For Express and Long Distance Packages. Put up in rolls 36 in. wide, 250 and 300 yards in a roll. Clean paper on both sides—waterproof substance in the centre—therefore it will not soil or stain delicate goods, as ordinary waterproof paper will. Practically odorless. May be used either for case lining or wrapping packages.

SAMPLES AND PRICES WITH PLEASURE.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

MALTHOID ROOFING

USED ALL OVER THE WORLD,

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

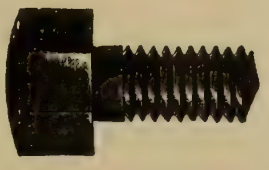
SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal
Ceilings, Cornices, Etc.
WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

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There are various methods employed in tempering springs. The up-to-date concern is

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PAINT, OIL AND BRUSH TRADES

NINGPO VARNISH.

UNITED STATES Vice-Consul Cloud, Hangchau, China, calls attention to what is known among foreigners in this country as "Ningpo varnish," made from the sap of the "varnish tree" (Rhus vernicifera or Vernix vernicia), which grows very extensively in western and southwestern China. The name was originally given because varnishers from Ningpo were more skilled in its preparation and use than others.

The sap is gathered in the interior and brought to Huichoumin in the southern part of Anhui Province, where it is refined and then distributed to all parts of the Empire. It is sold by the retailer in the raw or pure state—that is, the pure, refined sap, and in the prepared form, which is a mixture of the refined sap with certain proportions of "wood oil." It is in the proper blending of these that the skill of the varnisher is shown, as the color desired, the wood to be varnished, moisture of the atmosphere, and temperature are conditions that enter into the problem. The uses of the varnish are manifold. Wherever varnish is desired the Ningpo kind is used, and is so far superior to the ordinary varnish of commerce as to be in a class by itself. It is particularly adapted to floors, tables, cabinets and such articles as are in constant use. It is also excellent for furniture of all kinds, as it does not scar easily and may be scrubbed with boiling water without the slightest injury to the very high polish of which it is capable.

The greatest drawback to its use is the danger of "lacquer poisoning" to the workmen who use it. This is similar to "ivy poisoning," and when the sap is fresh is regarded as rather dangerous. Once the varnish is dry there is no danger whatsoever. It may be used in any climate that has a rainy season or wet weather. The varnishing is always done during the wet season and is allowed to dry slowly as the moisture of the atmosphere decreases.

The market value of the pure sap, after refinement, is about $1.15 Mexican coin (about 53 cents) per catty (1 1-3 pounds avoirdupois), while the mixed varnish may be had for $0.56 (about 27 cents) per catty. It may be mixed ready for use before shipment, and does not deteriorate when once it has been properly blended. Something like a hundred years ago the Ningpoese had a monopoly of the varnish trade; but in some unaccountable manner they have lost it to the Huichau firms. Practically all the varnish used at the present time comes from Huichau, as its monopoly depends on a knowledge and skill which the Huichau people seem to be able to guard most effectively.

The supply of the crude sap would seem to be unlimited, as the trees from which it is derived are found in great abundance in all the middle western and southwestern Provinces. With proper methods of gathering the sap and of refinement it should be made one of the most profitable industries of China. So far as I am able to learn but little or none of it is exported to America.

POINTERS FOR PAINTERS.

MANY of our city painters have more or less trouble in paint peeling from galvanized iron. This is more often true in cases where galvanized iron is new.

This trouble can be avoided by coating the iron over with a wash of the following mixture:

Mix a solution of one-half ounce each of nitrate of copper, chloride of copper and salammoniac in one quart of luke warm water, and, when dissolved well, add to this mixture one-half ounce of crude hydrochloric acid. (This mixture should be made in a glass or earthen jar, as the chemicals will eat a tin pail.) After this mixture has been applied with a wide flat brush, let it stand until it forms a white powder over the iron, and when dry you must brush or dust the surface, removing all the whitish powder. Then paint with the following mixture:

Mix pure red lead with one-third linseed oil, and two-thirds turpentine, and have paint rather thin, keeping it well stirred from the bottom of pot. This priming should not dry with much more than an egg shell gloss, and should stand for at least seven days before the next coat is applied.

Second and third coat with any color of paint you choose to use, and you will find your job will stand well without the usual trouble of peeling.—Painter and Decorator.

ORIGIN OF OIL AND GAS.

There are two rival theories as to the origin of natural gas and oil, says the Engineering and Mining Journal. One (the organic) is that the products in question are the result of the decay and distillation of organic matter contained in the rocks; the other (the inorganic) is that the oils and gases are the results of the reaction between descending water and metallic carbides in the depths of the earth. These metallic carbides are supposed to exist in the deeper layer and it must be said that there is much in their favor. Most practical men adhere to the "organic" origin of oil and gas. Probably most chemical geologists would accept a theory uniting the inorganic and organic explanations.

WASHING GLASS SAND.

IT is a very interesting sight to watch the process of crushing, washing and drying sand for the manufacture of glass, says a writer in the Margantown Post, who gives the following description of the methods employed by a local company:

The sand shot down from the cliff with powder crumbles almost like sugar; then is dumped into cars and sent down the mountain side by means of incline and drum, more than 1,800 feet to the mill. There self dumping appliances discharge it into a giant bin from which it pours steadily into the grinders made of a great hopper and two immense revolving wheels on a pivot. From this it passes through a screen into the first washer—a mass of sand almost as fine as sugar.

The washers are eight great screws slanting upward and drawing the sand up with them against a stream of pure mountain water which constantly carries the dirt and impurities through channels prepared below. As fast as the sand reaches the head of one screw it is caught by another and so on until the head of the final screw is reached, where the water is almost cut off and the sand drops into a bin. Then it is caught up in an elevator and dumped headlong into the great revolving cylinder of the dryer.

The drying process is unique but very interesting; partly because it is novel, partly, no doubt, because you can watch it without getting so badly splashed. From a furnace fired with coke and resembling a small sized sample of another and after life, the heat is carried through an interior flue of the great drying cylinder, which slowly revolving, carries the sand forward, permitting it to dry as it goes, until upon reaching the tail end, the sand is very dry, and very hot. That done, the process is complete. The sand is then ready for shipment, and is carried away by a system of little elevator buckets to a bin for shipment.

A very large part of the local company's immense tract is comparatively worthless as a silica or glass sand, for one or more of several reasons. If the sand is filled with small white pebbles or gravels, it is very inferior, because no amount of screening or washing will take the pebble out; again, parts of the sand ledge are filled with ferric acid oxide, or particles of iron ore, and when a part of the grain of silica cannot be removed Or, if there is too great percentage of alumina and clayish-substances the sand is worthless. The first of these deleterious elements produces what glass men call "blisters" and "stones"; the sec-

ond gives it a greenish color, and the third produces bad blass generally, sometimes one effect and sometimes another.

U. S. FLAXSEED MARKET.

OCTOBER flaxseed dropped down close to the export basis when it sold at Duluth on Aug. 21, to $1.08. The observer who views the market from a distance finds it difficult to understand this weakness. Receipts at Duluth and Minneapolis are nothing as yet and give no tangible evidence of the expected big crop of seed. That it will come in a flood in October seems assured from present reports of the condition of the standing flax. It is this promise of a big crop that has made everybody so eager to sell that prices have slumped below $1.10. Now the question is, will the market go lower or will exporters and the American company step in and take all offerings below present figures.

Our impression is that the crop is likely to be marketed unusually early and that after the bulk of it has been taken care of prices will advance. The reasons for this opinion are the already heavy sales for October delivery, covering nearly all that is likely to come to market during that month; and the tendency of farmers to sell flaxseed rather than wheat when the former is high and the latter low, as is the case at present. The early marketing of the crop will break the price, as it is evidently doing now, and it may result in some peculiar conditions later on, especially if seed is exported that could be absorbed in this country.—Paint, Oil and Drug Review.

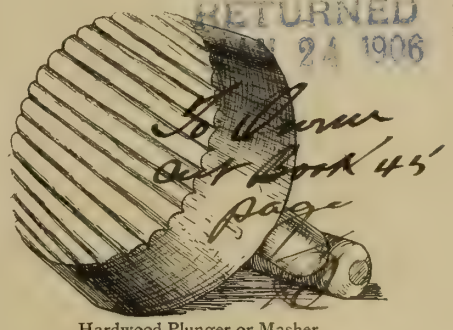
NEW WHITE LEAD PIGMENT.

THIS pigment, according to its inventors, Heyl and Wultze, is a kind of precipitated white lead of the type formed by the action of carbonic acid on solutions of lead. Up to the present it was necessary, in order to obtain such precipitates, to employ basic solutions, such as those furnished by dissolving litharge in neutral lead acetate. It was also known that a precipitate of lead carbonate could be formed by the prolonged action of carbonic acid on neutral lead acetate (solution of lead saccharate), but that the product was crystalline and had little covering power. The inventors find, however, that with the aid of carbonic acid neutral lead saccharate will give a precipitate of excellent covering power, superior to ordinary white lead in this respect, the necessary condition in the preparation being that the carbonic acid is forced into the solution of lead saccharate under pressure. The yield is also increased by the use of dilute solutions. In point of composition the new product approaches ordinary lead carbonate, containing as it does 16.05 per cent. of carbon dioxide, whilst the pure carbonate should contain 16.49 per cent., and ordinary white lead only contains 11.36 per cent.—Rev. Prod. Chim.

Most any man can do business when there is lots of it to be done. It takes one of brains and hustle to keep trade going in dull times.

STRAINING AND SEEDING PRESS.

THE 4-S-Food Press Co., 70 Warren street, New York, are manufacturing Stocking's simplex straining and seeding press, shown in the accompanying illustrations. The set consists of four pieces—No. 1, general straining pan; No. 2, seeding pan; No. 3, plunger of hardwood, and No. 4, enamelled-ware



Hardwood Plunger or Masher.

handled receiving pan. The enamelled receiver is 9x5½ inches and holds about three quarts. The straining pans, of block tin, have strainers of perforated metal, perfectly smooth both sides, for easy cleansing, instead of being made of



Driving and Feeding Press.

wire cloth. One of the strainers for general use has perforated sides and bottom, the holes about 1-16 inch diameter, the other pan for straining fruit being perforated at bottom only and having much smaller holes. The plunger or masher with corrugated bottom is 4 x



Sectional View of Press.

3½ x 1½ inches in size, with a bevel or flare of the same angle as the straining pans, as seen in the sectional view, Fig. 2, which greatly facilitates the filtering or straining processes. It is said a gallon of stewed pumpkin can be strained in 60 seconds, 2 quarts of apple sauce in 30 seconds, and soups, broths, gruels, gravies, etc., very rapidly.

"Compete or Perish"

is the inexorable law of the land. The Canada Paint Company respectfully desire to call attention to the fact that they are now making arrangements to **keep** their old customers and **make** new ones for the Fall of

1905

and the year of

1906

and beyond !

Progressive Hardwaremen will please remember that we are without a doubt

First Hands

for all painting materials. Our volume of business is growing steadily year by year. We make systematic departures out of the time-worn, beaten track to assist our customers, and a pot of paint bearing our name speaks for itself and does not require exhaustive efforts to sell it.

We **compete** for small or large orders from the trade, and invite enquiries.

THE CANADA PAINT COMPANY, LIMITED

Paint and Varnish Makers.

PAINT AND OIL MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 1, 1905.

THE words "quiet but satisfactory" will just about describe the condition of the paint and oil markets of the Province during the past week. Generally speaking, there has been no change in prices, though some firms have advanced certain lines whose raw material has experienced a raise in price.

Gum shellac has advanced and those manufacturers who had neglected to stock up at the old price have been compelled to raise the price of shellac varnish, in order to protect themselves against a positive loss. Those who have stocks on hand, however, are not disposed to force the prices above the figures quoted in our price list.

In spite of a report from the west that turpentine has gone up, no change has been made in the eastern market. Linseed oil is firm at the prices we gave last week, and it is not expected that there will be any further drop in the near future.

Outside of this, the trade is without feature.

Turpentine—No change has been announced in the price of turpentine, though it is still very strong in the local market. Our quotations are: Single barrels, 89c. per gallon. Two barrels or over, 88c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—The market has recovered its steadiness, and it is not expected that there will be any further drop, if present conditions continue. We give prices: Raw, one to four barrels, 49c.; five to nine barrels, 48c.; boiled, one to four barrels, 52c.; five to nine barrels, 51c. f.o.b. Montreal. Net 30 days.

Ground White Lead—A good demand is reported for the season. Prices are unchanged, and we still quote: Best brands Government standards, $5.35 to $5.50; No. 1, $5.10 to $5.25; No. 2, $4.75 to $5.00; No. 3, $4.50 to $4.75, all f.o.b. Montreal.

Dry White Lead—Good orders help to maintain the strength of this market. Our prices are: Barrels, $5.25; 100-lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—Though not remarkable, the sales of this article denote a healthy condition. We quote: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)—Orders are being received in good volume, and considering the season, the trade is very satisfactory. Our prices are: Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—Last week's conditions are still good. Prices are: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral— Our quotations are as follows: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—A fair trade is still being done, in spite of the season being so far advanced. We quote: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4,25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—Owing to the big advance in shellac gum, some manufacturers have raised the price of varnish, but this lead has not been universally followed. The lowest prices quoted now, are as follows: Pure white in barrels, $2.30 to $2.50; pure orange $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—No change is to be noted either in price or in the condition of the market. We still quote from $1.20 to $1.40 per gallon.

Castor Oil—Following the lead of the manufacturers, jobbers have advanced their prices slightly during the week. Present quotations are: 8 1-2c. to 9 1-2c. according to lots.

Litharge—We quote: Ground, in casks, 5c.; in less quantities, 5 3-4c.; flake litharge, casks, $5.50; smaller quantities, $6 per 100 lbs.

Refined Petroleum—The cool weather of the past week has had the effect of stimulating the trade, and this, added to the fact that the nights are growing constantly longer, makes dealers confident that the annual Fall awakening is at hand. As yet there has been no change in price.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 1, 1905.

NO changes in prices are reported this week other than a slight weakening in turpentine, the advance of 4c. last week not being held firmly. The ruling figure now is 92c. for single barrels. There is very little on the market, however, and prices are not likely to fall much lower than at present. Linseed oil is firm at the prices quoted last week.

White lead has not advanced any as yet, but continues very heavy and in some quarters there is considerable talk of higher prices. Mixed paints are very



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They wear on the job—not off.



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care Mason & Hickey.
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STANDARD RADIATOR ENAMEL

A beautiful and durable finish for Radiators, Steam, Gas and Water Pipes, and Metal Work of every description. Prepared especially to withstand extremes of heat and cold, will not crack, peal or blister under the severest tests. We offer these goods to produce either a "gloss" or a "flat" finish as may be desired. All colors and quantities.

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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**
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What kinds do you handle? Are you and your customers satisfied? Perhaps we can give you a better article at a fairer figure. Our SCOTCH GLUES will be found of exceptional strength, and equal to many glues for which much higher prices are charged. Let us send samples.

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There can be Trade without much BUSINESS about it.

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The Manufacturers List Co., - - - Toronto.

TWO REASONS

Why you should seriously consider the idea of enlarging your stock of **ISLAND CITY** brand of **Varnishes and Paints.**

FIRST REASON—Easy to put on, and when on dries in so short a time that the average man prefers to use it.

SECOND REASON—Although it dries in shorter time than any other manufactured Paint, it does not crack or blister. It is then natural that when **once used, always used.**

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"Anchor
AND
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Liquid
Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

We know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.

BRANDRAM BROS & CO
BRANDRAM'S B. B. WHITE LEAD
REGISTERED TRADE MARK
MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

active, business done during August having been higher than any previous year.

The glass situation is very peculiar as rumors of another strike in Belgium are prevalent. It is said that the glass workers will lay down their tools again in October and exporters who are criticized for failing to make shipments promptly lay the blame for the delay on the recent strike and point out that if another occurs they may be unable to make shipments at all. Glass continues firm at $3.80, but conditions seem to be ripe for an advance.

White Lead—Ex Toronto, pure white $5.50; No. 1, $5.02 1-2; No. 2, $4.65; No. 3, $4.40; No. 4, $4.15 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 92c.; 2 to 4 barrels, 91c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Prospects for a good Fall trade are excellent. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass— Glass is very firm at present prices (see current market quotations), and an advance is expected.

WINDOW GLASS—MONTREAL.

Conditions this week are described as being worse than ever, very little glass having been received by local dealers, of late. A small quantity is on hand, but, even yet, it cannot be said that jobbers have caught up to their orders. Matters are still further complicated this week by the announcement from Belgium that another strike is threatened by the glass workers, to take place in October. Consequently, manufacturers will not undertake to guarantee delivery on orders now being booked, until November, at the earliest, and not even then if the threatened strike eventuates. It is said that the shipments coming to Canada are small compared with the imports into other countries, owing to the better price commanded by glass in other markets. Still, every ship from England and the continent brings its quota of glass to the large Canadian dealers, and they are thus enabled to supply small orders, while refusing large ones. There is no change in prices but the difficulty is to get the goods at any figures. We quote : First break, 50 ft. $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break. 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50 seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

CANADA PAINT CO. AT PLAY.

For the thirteenth times in the history of the Canada Paint Co. their annual picnic was a great success. It was held Saturday, Aug. 19, at Otterburn Park, Montreal. The weather was fine and the programme elaborate, while all things seemed to harmonize to make the event one of real merrymaking and old time rejoicing. Over 500 people attended. What was particularly noticeable was the excellent behavior of everyone, even though no restraint was placed upon enjoyment. The football games delighted all and the list of events recorded tells eloquently of how thoroughly the programme was carried out. The officials were: Judges, Messrs. J. Campbell, D. Robillard and D. Munro; starter, Mr. T. Emo; floor manager, Mr. Paul Jones; committee, Messrs. F. Thibault (chairman), H. Hawkins, S. French and G. Edington; secretary, Mr. E. Coleman; treasurer, Mr. F. Bell.

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is preferred by skilled painters because of its fineness of texture, covering capacity and great durability. Acknowledged to be more permanent than Nature's Greens.

Insist on it once and you will always use it.



Be sure this label is on the can and take no other. See sample cards.

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SKEDDEN BRUSHES



are made in the **Skedden** way—the best way. The stamp on every brush tells you that. It's a guarantee of worth, you cannot get along without **Skedden** brushes.

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Humbug In Selling Horse Nails.

Abe Lincoln was about right, when he expressed his opinion of "Humbug" in this oft-quoted saying :—"You can fool all the people some time, and some people all the time : but you can't fool all the people all the time."

"Humbug" has been a feature in disposing of, and in statements made regarding some kinds of Horse Nails sold in Canada. For example :—a certain manufacturing firm hailing from the United States have been pushing the sale of their second grade Horse Nails in this market for some time. This particular brand of nails is sold in the United States at one half the price of their regular goods, and is recognized by the trade as a competitive low-priced nail. The inference may safely be assumed that they are only one-half as good. And yet some of our Canadian buyers are led away by a little "Humbug" to pay more for this second grade brand than for the old reliable "**C**" brand, **made in Canada by Canadian labour for forty years from the best material known or used in the world for making Horse Nails —Swedish Charcoal Steel.**

How is it done? We will let you into the secret. **By cutting the price in the small sizes, of which small quantities are sold, and increasing the price of the staple sizes, of which the largest proportion is sold.** An example will show how it works out. Take size No. 4, and our experience shows that for every pound we sell of that size, we dispose of 100 pounds of No's 8 and 9 combined.

Just see how this works out :—

We sell "C" brand First quality. Per box					They sell "Black Prince" Second quality. Per box	
@ $6.00	$24.00	4 Boxes, 100 lbs.,	No. 4.		@ $4.00	$16.00
@ 2.75	60.50	22 " 550 "	No. 8.		@ 3.00	66.00
@ 2.50	45.00	18 " 450 "	No. 9.		@ 2.90	52.20
	$129.50	1,000				$134.20

Difference in favour of "C" brand for every 1,000 lbs. or 40 boxes, $4.70, say 12c. per box.

Don't fool yourself by thinking "Yankee Doodle" is giving you small sizes at cut prices without getting it out of you.—That is only a little "humbug" in selling Horse Nails to the unsophisticated Canadian. Buy the old reliable "**C**" brand. Pay a fair price, and get the best, and "Made in Canada."

CANADA HORSE NAIL CO.
MONTREAL
Established 1865.

The Standard Ideal Sanitary Co. Limited

MANUFACTURERS OF

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HEATING AND PLUMBING

PLAIN TALKS ON PLUMBING, HEATING AND VENTILATION

A Series of Practical Articles Written in Plain Terms, Devoid of Technical Phrases, Algebraical Signs, etc., so as to be Easily Understood by all Interested in these Subjects.

By M. J. Quinn, Mechanical Superintendent for the Ontario Government.
[Registered in accordance with the Copyright Act]

Article XIII.

HINTS ON HOT WATER HEATING.

As promised in a previous article, we prepare now to deal with the work of actually installing the piping system, and will begin with the boiler, which, if of the horizontal sectional type, such, for instance, as the "Daisy," will be put together section by section as indicated by the numbers found at a point near the back of each casting, section No. 1 being placed next the fire-pot section.

The planed iron surfaces on the sections and the "water leg" being carefully cleaned off and given a thin coat of graphite and oil, which permits the rubber washers to easily find their "bed" Red lead is often used instead of graphite, and makes a good joint, but, because it is very difficult to remove, should a section have to be replaced, it should not be used.

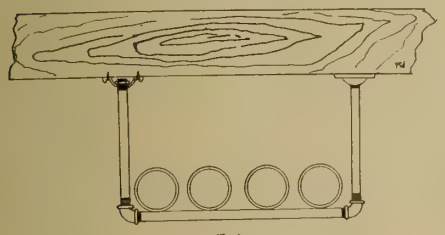


Fig 1

Having put the boiler together in its proper position, first having made sure that the grate section is set on a good foundation, and is level, cut the pieces of pipe which run vertically from the headers to supply the mains, taking care that the elbows on the top of all flow and return mains are brought to the same level, and, for the sake of appearance, it is well where no pipe larger than 2-inch is used to have them all of one size; for instance, if there are two 2-inch mains and one 1½-inch main taken off the boiler, the best appearance would be obtained by running up three 2-inch mains and putting on the top of one of them a 2 x 1½-inch elbow.

As was said in a previous article, the height of these elbows, or the distance between them and the ceiling, will depend upon the length of run, and in consequence of that the necessary rise in the mains before they reach the riser to the radiator farthest away from the boiler.

The various radiators having been placed, proceed now, if it has not already been done, to bore the holes through the floors in the proper positions, so that for every pipe that leads from the basement to the upper floors there will be a hole bored through the ground floor into the cellar.

Having the holes as a guide, and having in front of him the plan of the piping, indicating sizes, etc., the fitter will be able to take the necessary measurements of the pieces which, when screwed together, will constitute his "mains"; and in taking the measurements he must bear in mind that except in a few cases the openings in the flow and return must not come opposite each other, but be far enough apart to allow the branch connections to be taken off side by side on the same level and preferably 3½ or 4 inches centre to centre.

The branches are always taken off the top of the mains (both flow and return) either by having them turned to look straight up and using a close nipple and a square elbow, or by turning the opening in the "T" to an angle of 45 degrees, looking in the direction in which the branch is to run, and using a close nipple and a 45 degree elbow.

The latter plan is the better, for the reason that with a 45 degree elbow the branches can be kept down much nearer the level of the mains, and in that way allow more head room, and, in addition, there is only about one-half the friction in a 45 degree elbow that will be found in one of the square pattern.

As the fitter progresses with the putting in of the mains, he must put up temporary hangers, which are best made out of three pieces of board nailed together, one horizontally, supported at each end by a piece nailed to the joist overhead after the mains are completed, and before any of the branch connections are run he must go over them with a level, blocking them up or lowering them on the temporary hangers as may be required, until a correct grade is established from end to end, having, as has been said, a rise of at least an inch in every ten feet from the boiler to the most extreme ends, and, so far as this rise is concerned, it applies to the branches as well as the mains.

It is best to put up the permanent hangers as soon as the work of leveling is completed, and these hangers may be one of many designs in use, but the best kind, in the opinion of the writer, is that made of ⅜-inch gas pipe similar in form to that shown in Fig. 1, in which the horizontal piece at the bottom is just long enough to reach the outside edges of the mains which it supports, and the vertical pieces have a moderately long thread on the lower end with a lock nut screwed on the upper end inside the hanger plate, the upper thread being screwed to or threads through the locknut and well riveted, so that when the whole fixture is secured to the joists overhead the vertical pipes may be screwed down a thread or two into the elbows, drawing the latter up so that the horizontal pipe may take the strain; the locknuts are riveted on so that they will not "unscrew" when the vertical pipe is being turned into the elbows.

When putting up hot water or steam pipes, care must always be taken that they are not bound in any way, as for instance, by having the ends run tight against a stone or brick wall, for the reason that when heated they expand a greater or lesser amount, and if free movement is prevented they will "buckle up" in places and probably break the fittings connecting them together.

After completing the mains, the branches are run to each floor, a floor or ceiling plate being provided where the pipes pass through the floor and ceiling. Ceiling plates having a setscrew to fasten to the pipe are the best. The connections to the various radiators are made by means of union valves and union elbows, or by ordinary valves and elbows and right and left-threaded nipples, the nipple used in the elbow being ⅜-inch longer than that required for the valve.

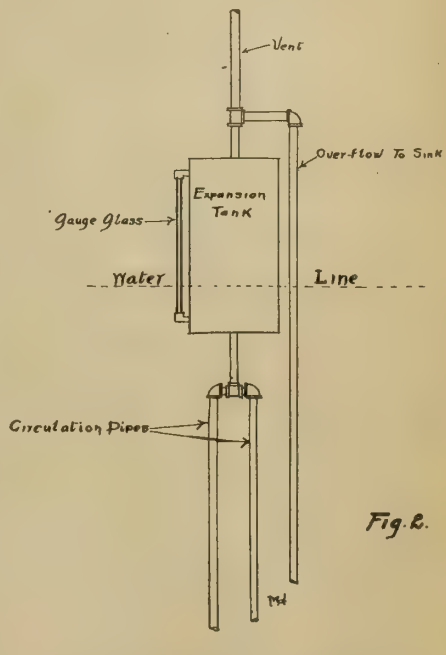


Fig. 2.

A small sheet galvanized iron tank, called an expansion tank, must be connected to the system and placed above the highest radiator. This tank is used for receiving the increase in the bulk of the water in the whole system, caused by its expansion by heat, and is so arranged that when the temperature in the system is lowered, the water may pass back again into the pipes. With this object in view a connection is usually run from the "return" of the nearest radiator to the bottom of the tank.

When, however, the tank is so situated that it is likely to freeze, a circulation

must be kept up, and this is done by means of connections such as those shown in Fig. 2, where the "circulation pipes" are 1-inch pipes, connected to the flow and return of the nearest radiator and together, and to the tank as shown.

The "overflow to sink" is connected to the top of the tank in the manner shown, with a pipe taken out of the top and extending up say a couple of feet; the object of the vent is to prevent the water in the "overflow" from syphoning the water in the tank and collapsing it. The overflow may, of course, run to any fixture as well as the sink.

A gauge glass indicates the amount of water which should be in the tank when the temperature of the system is at a moderately low point, so that with reasonable expansion or contraction the water line can always be seen.

A "feed cock" must be provided for filling the system, and, while it may be connected to any pipe which affords a passage to the boiler, it is most convenient to have it near the expansion tank.

A blow-off cock must also be provided and placed on the boiler at the lowest point. It should be of larger size, say 1¼-inch or 1½-inch, and connected directly or indirectly to the drain.

It will go without saying, of course, that all of the pipes in the basement should be covered, in order to prevent the escape of heat, for the reader may be sure that every unit of heat so escaping will, just to that extent, affect the heating surface upstairs, and the writer has found that, everything considered, ¾-inch hair felt is the best covering for a hot water system, the felt to be tied round and round with good cord and then covered with strong factory cotton, neatly sewed on with white cotton string, the seams, as far as possible, to be kept out of sight.

The boiler should also be covered with asbestos plaster or other good non-conductor about 1½ inches thick.

PROBLEMS CONFRONTING THE PLUMBER.

Extracts from a paper read before the National Association of Master Plumbers, Atlanta, Ga., June, 1905, by J. J. Wade, Chicago.

TWENTY-THREE years ago the National Association of Master Plumbers of America was formed. I had the distinguished honor—and I say it not self consciously, but rather in great pride—to christen the organization with the name it now bears. The infant of a score of years ago has developed to the giant, but you who watched over the young days of her career and who guided her to her present high place in the esteem of men, must still be mindful of the necessity of extending to our organization a strengthening arm, and a voice which in its encouragement will continue to inspire the plumbers of America to make this body of men a fit setting in its splendid ambitions for the loyal and progressive quality of its membership.

We gathered together to promote our social and commercial welfare, but that our basic principle was to educate the mind of the plumber in the progressive methods which scientific discoveries would compel him to adopt; that we were desirous of centralizing the intelligence and influence of our members against imposition, injustice and encroachment upon our individual rights; that we would aid original investigation and the invention of sanitary appliances; that we would foster a spirit of harmony and co-operation between the master and the journeyman for the advancement of our mutual interests and the advocacy of a distributive justice; that we would encourage any and all legislation whose object was to promote the health of the people, and we resolved to secure for our members fair and equitable treatment in their dealings with the manufacturers and supply houses.

How well we have accomplished our objects, a mere glance at the pages of trade history will suffice to satisfy even the most critical mind. And if among all of our aims and accomplishments, there is a particular source of encouragement and congratulation, it lies in our success in the passage of sanitary laws. Twenty years ago, but two cities, New York and Washington, had laws to govern the practice of plumbing. Today the State itself has almost universally taken up the question of sanitary legislation, while our cities have followed its lead by the adoption of municipal ordinances. As a result of the enactment of these sanitary laws, we plumbers of Chicago point with pride to a reduction in the death rate of our city from 30 in 1,000 to 10 in 1,000, while a recent bulletin of the health department declares that typhoid fever—pre-eminently a filth disease—has all but disappeared from our midst.

Much Yet to Be Done.

But our labors are not completed. There is much yet to be done to further our aims and our interests. We but pause a moment to confirm our faith in our organization and to strengthen our ambitions for the future by a glimpse at an honorable past. We have demonstrated to the tradesmen of our land that we will, by our combined efforts, resist invasion of our rights as individuals, and that an attack upon the humblest member of our organization will establish the knowledge that an injury to one is the concern of all.

Our relations to the manufacturer are, in the main, friendly. But, here and there, in their ranks, there is the disreputable manufacturer or jobber who, with one hand, sells direct to consumer, and, with the other, to the weak-kneed master plumber, who is too low in spirit to resist this assault on his right to protection. As a rule, these dishonest plumbers have no knowledge of sanitary plumbing. They just know enough to pick up some cheap material to assist the avaricious jerry builder and the greedy landlord. They install these filth traps in buildings rented to helpless victims, who are assured that the plumbing is strictly first-class. These are the men who bring disgrace to our trade. I sincerely trust the day is not far distant when they shall be legislated out of existence by the passage and enforcement of the strictest possible laws governing the installation of plumbing goods.

The Mail Order House.

A new and portentious danger threatens our trade, not generally recognized, but none the less real. It lies in the competition of the mail order house. I am informed that the volume of business by these houses in Chicago alone last year, amounted to $1,500,000 in the sale of goods sold usually by the plumber in the ordinary course of business.

What does this mean? It means that the manufacturer's best customer will no longer be the plumber, but the mail order house. It means that legitimate trade channels are no longer respected. It means that the mail order house will soon launch upon the manufacture of enameled ware, brass goods, etc. To protect our interests in this unjust encroachment on our rights, I would suggest the adoption of three preventive measures. First, to abolish the rule forbidding the sale of goods which we do not install. This would at least be of benefit to the plumbers in the country districts, because they could then sell indiscriminately to all purchasers. This suggestion might sound heretical to my comrades, but in my judgment it is the part of wisdom to make tradition keep step with conditions; but should tradition fail, progress should take its place. My second suggestion to ward off this evil is by recourse to legislation. The absorption by these moneyed plants of trade interests is a peril—however regarded. Even to speak of the hope of obtaining legal protection therein approaches the absurd, but do not forget that nothing of good was ever accomplished except by a constant, vigorous and well founded agitation. My third and last suggestion would be the adoption of means to bring about a more uniform price list. This may be accomplished by the publication by this association of a catalogue of plumbing staples, a separate edition being made for the four geographical divisions of the country—the prices being adjusted to fit the conditions which prevail—relative to freight, etc., in each division. It is a well established fact that prices as printed in the catalogues of jobbers and manufacturers often give to prospective customers a wrong impression of the plumbers' profits, because the net cost of goods to the plumber, after the freight, cartage and storage charges have been figured, is in excess of the list price shown in the manufacturer's catalogue. In my humble opinion, it would be entirely possible to compile a catalogue of prices which would more nearly represent an equitable profit to the plumber, and, therefore, I believe that the publication of a well printed and illustrated catalogue would meet

Ramsay's Creosote Stains

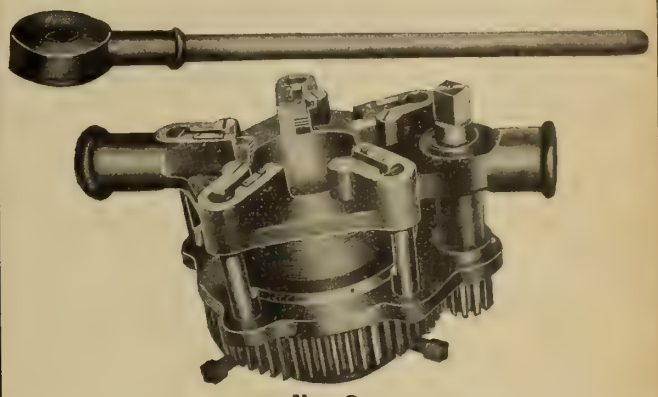
These Stains are becoming more popular every day. Have you seen a set of our samples? If not, why not drop us a card to-day and ask for prices and samples? You may require these any day. Many buildings will call for Ramsay's Creosote Stains this Fall.

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The "Toledo" Adjustable Threading Device

A new principle in hand-power pipe-threading.
Threads pipe from 2½ inch to 4 inch, inclusive



No. 2.

This tool weighs but 60 lbs., is strong and durable, yet light enough to permit of its being carried from place to place on outside work.

Ask your jobber about them; if he don't know write us for Catalogue and Discounts.

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WRITE US YOUR REQUIREMENTS

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WILLIAM STREET, - TORONTO

with a demand which would warrant its compilation.

Plumber's Relation to His Trade.

Having made these suggestions, I trust you will bear with me for a few moments in a discussion of the plumber in his relation to his trade.

It has been demonstrated by experience that all the work of a people is done better and more efficiently according as the individual is encouraged by the hope of individual advancement as his personal reward. Our achievements in the mechanical world are affirmative, but it is easy to describe our material progress by negatives. We have not riches. We have not the testimonials to the results we have achieved commensurate with the efforts we have expended. We have not the commendation of communities, nor the people's applause to mark our wonderfully progressive steps in the introduction of safeguards to the health of the individual, nor do we receive from society that recognition which the plumber by his devotion to the germination of improvements in sanitary science so richly deserves. About all we do have is the case of mind and that consciousness which reveals to us the knowledge that we have at least accomplished something when with bent back and sweating brow we cut our portion of the smooth road over which humanity marches forward from generation to generation.

In the early days, circumstances forced us to be broken on the wheel necessity compelled us to drive. But times have changed. The men of other trades have accumulated wealth, but still we plod on in the same old grind of the treadmill, because the plumber figures to get the job instead of figuring to get the profits; because the plumber figures his profit on the net cost of his material and labor, instead of on the gross cost; because every man of us is driven to the extreme limit in his estimates on work to be done by the excessive, the unreasonable, the unwarranted and the unfortunate methods of competition in the plumbing trade, which finds us furnishing estimates for work on a 10 per cent. basis of profit, when the running expenses attendant upon the completion of the same approach a 12 or 15 per cent. basis.

For this evil there must be a remedy. Competitors in other lines of business have met it and have overcome it. The life of our trade depends upon a successful solution of this problem. Particularly do I advocate the discussion of ways and means in committee cogitations to emove this most gigantic obstacle to our financial welfare.

VENTILATION IN ENGLAND.

THE ventilation of the main building of the new Birmingham University is done in a very thorough manner, says an English exchange. Fresh air is brought in from the outside walls at floor level, where there is provided a louvre register controlled by levers and quadrants, and on its way to the room the air can be warmed by passing over the heated surfaces of the radiators. In most of the blocks these registers are provided for fresh air inlet in nearly the whole of the window recesses, where there are no radiators. The extraction of the air from the blocks is provided for by electrically driven propeller fans of two feet diameter. In the semi-circular window frames these are as near the ceiling as possible. A continuous current motor is used in combination with the fan; it is mounted on strong cast iron frames with wrought iron adjustable arms. The blades of the fan are made out of hard sheet brass fitted with long phosphor bronze bearings. The whole of the moving parts are admirably balanced, and run with a minimum amount of friction. The ventilation of lecture rooms and museums will be done on very similar lines, the fresh air being brought in at the floor level, and the vitiated air extracted by fans working in the corridors. In the great hall the fresh air is brought in by a large fresh air shaft from the top of the building, and is connected to fresh air ducts leading to the several radiators for the dining rooms. The whole of the heaters,



Signboard on Lookout Mountain, Erected by H. Mueller Company at time of Plumbers' Convention at Atlanta, Georgia.

steam, condensed, hot water warming, and hot water service pipes not intended to be used for the purpose of radiation will be covered with plastic asbestos non-conducting composition to a thickness of about two inches. The radiators are fitted with detachable plates or cast-iron cheeks, placed between sections in such a way as to give ample space for the introduction of fresh air under the base of the radiators or between the sections, from the outside wall above the floor. The plates are made removable for dusting purposes or sweeping under the radiators. Those radiators which are fitted in the great hall are placed in preference in batteries or stacks in the centre of the hall, in a duct directly under the floor; these are in addition to the ventilating radiators on the outside walls. Fresh air in ducts is also introduced to these stacks of indirect radiators, passing out through warm air outlet gratings in the centre of the hall. The heaters used for hot water warming and hot water service are upright and horizontal type, the outside shells being made out of three-eights boiler-plate. The heaters are fitted with solid-drawn copper tubes, which give perfect freedom for expansion and contraction. The general arrangement of the details is on the latest and most approved principles.

ALUMINUM RADIATOR PAINT.

AS a preliminary to painting a radiator with aluminum paint, says the Decorators' Gazette, clean all grease, sand and dirt, being sure to wash all greasy spots with benzine. When the iron is clean take any good bronzing liquid and stir enough aluminum bronze into it to make a paint that can be easily spread with a camel's hair brush. Apply one or more coats, as the case may require. If you prefer to make your own bronzing liquid, take equal parts of gold size japan and light-colored baking varnish and mix them well. To each liquid ounce of this mixture add three ounces of turps. Shake well in a bottle and it is ready for use. If the aluminum paint doesn't give you sufficient lustre apply a coat of baking varnish to your radiators, and when it gets tacky dust the dry bronze on with a camel's hair brush or tuft of cotton, spreading a large sheet of paper on the floor under the radiator to catch the surplus bronze, which can be used again.

NOVEL HEATING SYSTEMS.

Not long since ten existing stalls in the roundhouse of the N. Y., O. & W. R. R. Co., at Middletown, N. Y., were equipped by the B. F. Sturtevant Co., of Boston, Mass., with a system of heating and ventilation particularly designed to rapidly remove the snow and ice from the running gear of the locomotives during the Winter season. This house has recently been doubled in size, making twenty stalls in all, with nearly three-quarters of a million cubic feet of space. It is stated that during the past Winter when the thermometer was from 5 to 20 degrees below zero, engines could be thawed out in from one to two hours, although completely covered with snow. In the old roundhouse which this superseded, and in which the pits were equipped with steam pipes, it required from five to six hours to accomplish the same result.

HOW TO POLISH METAL.

A liquid metal polish formula was recently given as follows in the Blacksmith and Wheelwright: Take 8 ounces of Spanish whiting, which must be perfectly free from grit and put it into 1 quart of gasoline. Shake up the whiting and gasoline well. The whiting will settle immediately, leaving the liquid as clear as water. To remedy this and, further, to make it a better polishing agent, add to each quart of the mixture 32 drops of oleic acid—no more, no less. Shake again, and the whiting will not settle. Apply to gold, silver, nickel, brass, glass or any kind of metallic surface with a piece of cotton flannel, rubbing well. Polish with a piece of same cloth.

Most of the silver in the Cobalt region is on the surface, and consequently there is no need of blasting. All that is necessary is to split the rock and pick it out with crowbars.

For a Man with the Discrimination You've Got—the best can't be too good

Those tradesmen who have made the greatest success in business have learned from experience that "the best only" is the most paying principle and is invariably the cheapest in the end.

Knowledge of this fact makes us feel sure that you will derive unlimited satisfaction from adopting

The NATURO Closet



It is not only better than other Closets but the rest cannot be compared with it, for the NATURO possesses points of merit peculiar to itself and lacking in all others. First and foremost—it is a means of creating and sustaining good health ; then again its construction is such that cleanness is unavoidable.

These and more facts in its favor are easy of proof and cause the NATURO Closet to sell at sight with good profit to the plumber and a steady increase of business that is sure to follow its introduction.

For further particulars, drop us a line.

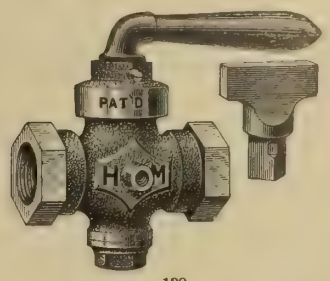
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Salem, N.J.

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No. 49 Stop and Waste Cock



c-139

It is an easy matter to calk or solder a casting which shows a leak under a hydraulic test, but such a casting is still defective and may cause trouble at any time.

In testing Mueller Stop Cocks the castings that show a defect are condemned. The only cocks that are marketed are those which show no signs of leaking under 200 pounds pressure, and which we are sure will give our customers no trouble.

Mueller Stop Cocks are made in solid handle, socket head and patent cap patterns in all pipe connection styles. The cock illustrated is the patent cap pattern, iron pipe style.

Each cock bears the Mueller trade mark and is *unconditionally guaranteed.*

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in sizes from 4 inches to 24 inches.

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PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, September 1, 1905.

SALES in all lines continue excellent, satisfaction being expressed at the week's business. The predicted advance in brass goods has not materialized, as the manufacturers have not yet issued their new prices. Jobbers, however, have been compelled to cancel prices on some special lines, and there will no doubt be a general advance, following the publication of the new manufacturers' lists.

The steady advance of tin as well as pig lead has raised the price of solder, which cannot now be manufactured at the prices quoted a fortnight ago. We give, this week, figures that may be taken as the minimum at time of writing. A still further advance may be noted, in half-and-half, if the metals composing it continue in their upward trend.

A remarkable feature of the month of August, just completed, has been the steadiness of lead pipe at a price which was not to be expected, in view of the uninterrupted advance of pig lead. Even now, it is hard to say whether or not it will respond to the tone of the pig market, though it may be safely affirmed that, if pig lead continues to strengthen in price, the figures on pipe will have to be revised before long.

Aside from those mentioned, there has been no change in prices during the week, the condition of the market remaining as it was at our last report. The usual Mid-summer dullness was avoided by the supply houses, this year, and everything points to a record-breaking Fall business. The greatest confidence in the outlook is expressed in all quarters.

Range Boilers—Business continues brisk, good sales being made at the same figures as have been quoted for some weeks. We give prices: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The firmness of this article at the prices given before the jump in pig lead is one of the surprises of the month. Our quotations are: Discount 30 to 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c. per hundred lbs. extra.

Iron Pipe Fittings—No change can be noted in the condition of the market. We give prices: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—An increasing demand is reported from all parts of the country. Prices still remain as follows: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—Our quotations of last week may be taken as still ruling the market. Orders of good size are being received daily. Our prices are Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—The advance in tin and pig lead has resulted in a sharp jump in the price of solder, which now stands: Bar solder, half-and-half guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, September 1, 1905.

DESPITE high prices in the metal markets, no changes have been made as yet in brass or lead goods. All lines are very firm, however, and the exceptional demand for goods all Summer has not allowed stocks to become large. While advances are expected on lead pipe and possibly on brass goods, it is unlikely that any changes will be made until the differences existing between the supply houses and master plumbers have been straightened out.

The supply houses report a record business being done, trade being far larger than at this time last year. Demand for all classes of goods is brisk.

Lead Pipe—The looked-for advance has not yet taken place. We quote as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 30 and 5 per cent.

Soil Pipe and Fittings—Demand is very keen, but supplies are plentiful We quote as follows: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Buying is heavy and prices continue very firm. Our quotations are as follows: Cast iron elbows tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent.; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers— The large amount of building has caused general activity in buying. We quote as follows: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallons, standard, $6; extra heavy heavy, $9.50; 52 gallons, standard, $11; extra heavy, $14; 66 gallons, standard, $18; extra heavy, $20; 82 gallons, standard, $21; extra heavy, $24; 100 gallons, standard, $29; extra heavy, $34; 120 gallons, standard, $34; extra heavy, $40; 144 gallons, standard, $47; extra heavy, $55.

Iron Pipe—Some dealers look for an advance. Prices are firm. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Last week's prices hold firm. Our quotations are as follows: Bar solder, half and half, guaranteed. 19 1-4c.; wiping solder at 17 1-2c., and refined 17 3-4c.

Enameled Ware—Demand continues exceedingly strong for Canadian ware, but manufacturers keep well up with their shipments. Our quotations are as follows: Baths, rolled rim, 5 feet, 2 1-2 inch rim, 1st quality, $17.50. special, $15.50; 3 inch rim, 1st quality, $19.00, special, $17.00; 5 1-2 feet. 2 1-2 inch rim, 1st quality, $19.00, special, $17.00; 3 inch rim, 1st quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, 1st quality, $2.45; special, $2.

H. Norman & F. Cosette, plumbers, Ottawa, have dissolved partnership, and the business will be continued by H. Norman.

Thos. Kiddie has resigned his position as general manager of the Tyee Copper Co.'s smelting works at Ladysmith, B. C., to accept the position of general manager of the Crofton smelter. The capacity of the Crofton smelter will be increased.



DOLLARS

There is a difference between

Sterne's Asbestos Stove and Furnace Cement

at a price and other cements at the same price—a difference in the dollars paid for grade. Too little paid in our case; too much in other cases.

Which are you doing?

G. F. STERNE & SON, MANUFACTURERS, BRANTFORD, ONT.

We Make

accurate fitting **Fire Bricks** in a multitude of styles. Prices low. We also make

Furnace and Stove Cement and Stove Castings

We would like to correspond with you, give you our catalogue, forward you our prices. Write.

JONES BROS., - Bracondale P.O., Ont.

Is there a Hardwareman

who does not know the value of the

METALLIC ASH SIFTER?

Such a hardwareman should write to us without delay. There is big territory to work up and a mighty good sifter to talk up. Nothing on the market as good. Nothing on the market so proportionately low-priced. Our Booklet tells the story. It's free.

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power

ARE THE BEST.

Highest Quality Grooming and Sheep-Shearing Machines.

WE MAKE THEM.

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Wiebusch & Hilger, Limited special New York representatives, 9-15 Murray Street.

SEAVEY MITRE BOXES

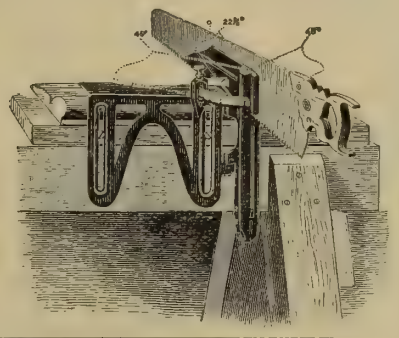
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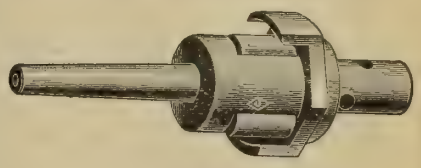
Any Cross Cut or Hand Saw can be used.
Any width or depth of moulding can be cut with Seavey Boxes

Ask your dealer or jobber for SEAVEY MITRE BOXES, or write us.

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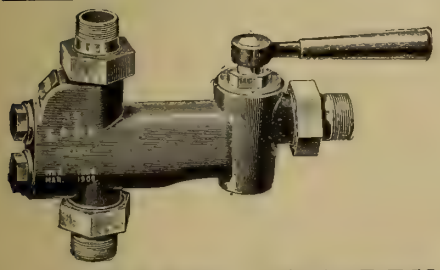
JARDINE'S

Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.

HESPELER - - - ONTARIO



EASY INJECTORS

A Double Tube Machine at Single Tube Price.

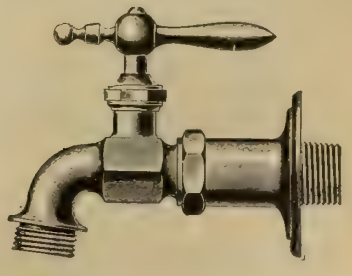
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GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

ALL PARTS Made to steel gauges and are always interchangeable.

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GLAUBER, CLEVELAND, OHIO, U.S.A.

COIL CHAIN

also B, BB & BBB

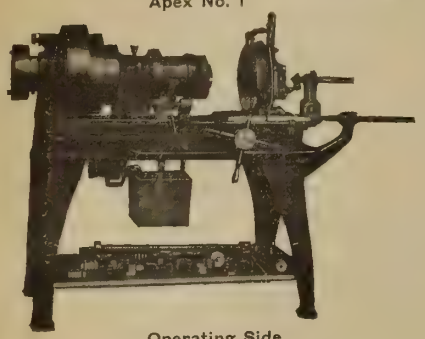
TIN, TERNE AND CANADA PLATES

J. A. HENDERSON,
Board of Trade Building, MONTREAL

Agent for ***T. W. & J. Walker***
Wolverhampton

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

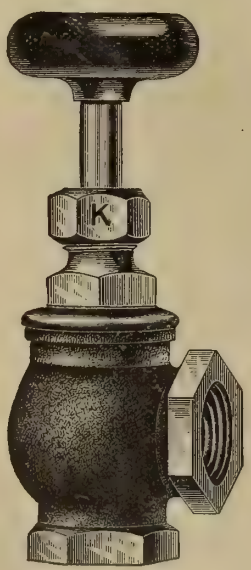
The Threading Gauge is a feature that no other machine has; it works automatically and releases the chasers when the desired length of thread has been cut. The chasers are five in number and can be sharpened by grinding, and readily replaced by chasers cutting any style or pitch of thread. This machine has acapacity, of from ¼ to 2 inches inclusive and is especially adapted for making nipples.

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Kerr's Standard and Jenkin Disc Radiator Valves

are perfectly constructed, and of beautiful design. Like all "Kerr" specialties, strictly high-grade.

The KERR ENGINE CO., Limited

WALKERVILLE - ONTARIO

PROPER VENTILATION.

VENTILATION is a term applied to the method by which a due supply of fresh air is maintained in buildings and other confined places. The word was invented about 200 years ago by Dr. Desaguliers, a well-known scientific man of that time, who devoted a great deal of time and money and skill toward improving the sanitary conditions of buildings, which at that time were considered very bad. He invented a "fanning wheel," or, in other words, an "air propellor," which was worked by manual power, and the man who worked it was called the "ventilator." The word has since been divorced from its original meaning, and is now used to signify an opening in a building through which air may, or may not, pass, according to circumstances.

Everybody knows that a fresh supply of air is necessary for all living things, even for plants and vegetation. To cover the head with a cloth for a short time produces a sense of oppression, and on its removal a feeling of relief is experienced. The heat of the person's breath causes oppression. People often say of a crowded building "it is too hot," whereas the discomfort is caused chiefly from the impurity of the atmosphere.

Dwelling houses, too, suffer from lack of proper ventilation. It has often been remarked that we are apt to prize but lightly what we possess in abundance, and it is a fact that cannot be denied that the two most important foods on which human life depends, viz., pure air and pure water, are by the great majority of us least esteemed. These two foods, more especially the former, are so abundant that we need pay very little attention to obtain them. We should recognize the importance then of supplying every building and habitual dwelling with proper ventilation. In thousands of houses in our great cities the most elementary principles of ventilation are systematically ignored.

People who would take the greatest care not to drink polluted water are yet careless of breathing impure air, and seem to forget that one may be quite as dangerous as the other—personally I am of opinion that impure air is really more dangerous than impure water, since the air is taken directly into the lungs and comes in contact with the blood more speedily than water which enters the stomach. I do not propose to write with medical authority at all, but simply from a little observation of my own. I believe that ventilation is an exact science, admitting of exact results, and everybody should be induced to believe the fact that bad air is detrimental to health.—Robert Bennett in the Canadian Architect.

PAINTING EXHAUST PIPES.

The Pacific Coast Gas Association recommends the following paints as being able to withstand anything up to a red heat: Lampblack, 3 pounds, graphite, 3 pounds; black oxide of manganese, 1 pound; Japan gold size, 1 pint; turpentine, 1.5 pints, and boiled linseed oil, 1 pint. Powder the graphite and mix all the ingredients to a uniform consistency. Give two coats. Or, black oxide of manganese, 2 pounds; graphite 3 pounds, and terra alba, 9 pounds. Mix and pass through a fine sieve, then mix to required consistency with the following compound: Sodium silicate, 10 parts; glucose, 1 part, and water, 4 parts.

AN IMPROVED PIPE WRENCH.

AN improved pipe wrench has recently been invented, which may be quickly adjusted to take various sizes of pipes or nuts, and which will act with a maximum of power without unduly mutilating or marring the article gripped. Furthermore, the gripping jaws will be readily disengaged from the article when pressure is released from the handle.

A portion of the handle terminates in a Y-shaped jaw, in which a serrated steel piece is set. A yoke strap on the handle carries a pawl which engages teeth formed in the upper edge of the handle. The strap also carries a pair of arms, which at their outer ends are pivoted to the rear yoke head. The latter is connected by two links with the forward yoke head, which at its lower end carries a jaw pivoted thereto. In use, to adjust the wrench to any desired article, the pawl is lifted by depressing the end, then the jaws are moved against the article. On releasing the pawl the spring presses it into engagement with the teeth on lever. Then, when the lever is moved, the jaws are brought together with a powerful gripping action, due to the leverage of the yoke heads and links. The wrench has a wide range of adjustment, which is limited only by the stops coming in contact with the yoke strap. The inventor is Mr. Patrick F. Duross, of 57 North Pierce street, Flushing, New York.

DRYING BY FAN BLOWERS.

The necessity of ample air and good circulation in drying is emphasized by the following statement made at a recent meeting of the American Society of Heating and Ventilating Engineers: "The philosophy of drying or evaporating moisture by heating air rests upon the fact that the capacity of air for moisture is rapidly increased by rise in temperature. If air at 52 degrees is heated to 72 degrees its capacity for moisture is doubled and is four times what it was at 32 degrees. For each 15 pounds of water required to be evaporated per hour in a drying room 1 horsepower of boiler, 130 square feet of steam pipe and 14,000 cubic feet of air are required under good conditions." Although 20 years ago Baldwin, in his book "Steam Heating for Buildings," stated that "it is not profitable to dry by forcing air, as with a fan or blower, in connection with steam coils," it is true that since then drying by fan blowers has practically superseded all other methods.

PLUMBING GOSSIP.

A system of sewers and electric lighting is being installed at Indian Head at an estimated expenditure of $150,000. The electric lighting is to be in operation this Fall, and it is expected that the sewer system will be ready next Spring.

James Ballantyne expects to commence work at once on his new plumbing plant and warehouse in the western part of Winnipeg.

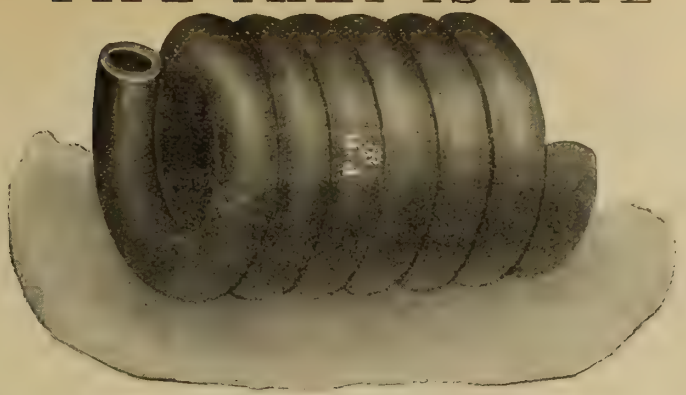
PIPE THAT IS PIPE

THIS IS OUR BRAND

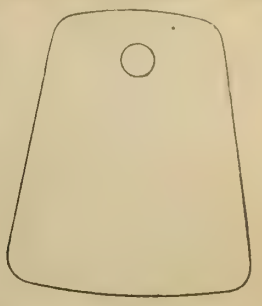
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

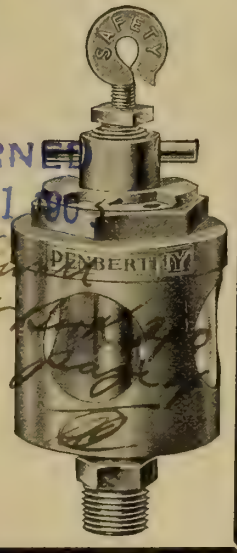
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Reliable *in Action*



AUTOMATIC INJECTOR

"SAFETY" CRANKPIN OILER



works with Automatic Shut Off. When engine stops the oil stops feeding. Can be regulated to any amount required.

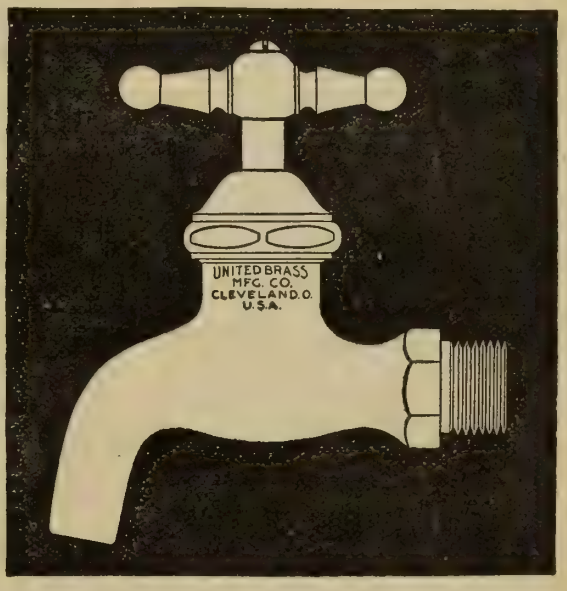
ALL KINDS OF OILING DEVICES.

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United Compression Work used by Leading Plumbers **Everywhere**

Unite with United Brass Goods Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.

WM. STAIRS, SON & MORROW, LIMITED

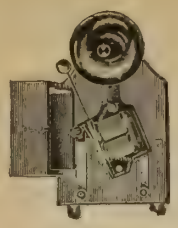
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The Eastern Canada Plumbing Supply House

Plumbing Goods sold to Plumbers only.

Plumbing Materials and Steam-Fitters' Supplies of all kinds.

Office and Warehouse, 174 to 190 Lower Water Street



BUY A BELL THAT IS A BELL!

REGAL WOOD BOX BELLS

Are unrivalled---All up-to-date
Dealers buy them---Prices low.



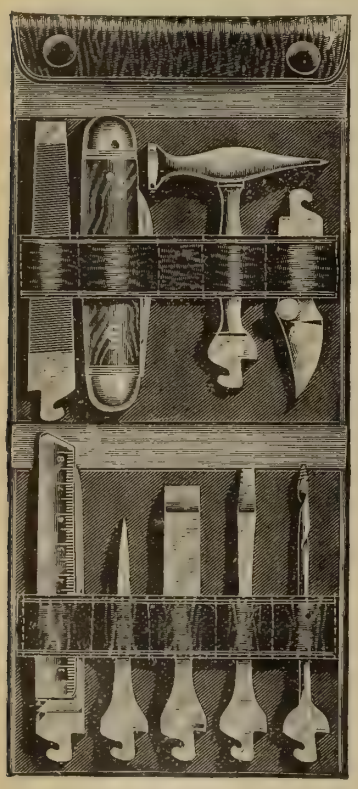
Just Give Them a Trial

MUNDERLOH & CO., - MONTREAL

Cannot Rust Always Ring

POCKET TOOL KIT.

ADOLPH KASTOR & BROS., 109 Duane street, New York, are marketing the A. K. & B. interchangeable tool kit here shown. The combination includes a wide range of handy tools for individual and amateur use, not only about home and civilization, but in the woods, camping, shooting or other outings, automobiling, cycling or wherever a person, lay or professional, requires any one of a well assorted number of practical, serviceable



Interchangeable Tool Kit.

tools. The knife, which is the foundation of the set, has a stout blade in one end and is fitted at the opposite end to receive any of the various tools. The knife closed is $3\frac{3}{4}$ inches long and its greatest thickness is $\frac{5}{8}$ inch. It has wood scales, brass rivets, strong German silver bolsters and is iron lined. At the tool end is a strong steel rivet for engaging the tang of the various tools, which are sufficiently large to be of practical use, while the ample knife stock furnishes necessary purchase and leverage. When using a tool the slot in the tang is hooked into the end of the knife in a partially closed position, when by forcing backward as a knife blade is opened the pressure of the strong steel back spring keeps the tool rigidly in place. The case is of substantial russet leather and when folded is held together by two enamelled spring glove buttons. Its dimensions are $4\frac{1}{4}$ x $4\frac{1}{4}$ inches, the thickness varying from $\frac{1}{2}$ to 1 inch. The tools are said to be made of best English steel, hand forged, full polished, and are guaranteed. Besides the knife there is a double cut $3\frac{1}{2}$-inch file, with four filing surfaces, as well as a $\frac{3}{8}$-inch screw driver blade at the end. Then a tack hammer, with $\frac{5}{8}$-inch face and tack claw; can opener, $3\frac{1}{2}$-inch saw, sheathed in a graduated metallic rule case; reamer, awl and scrube, $\frac{1}{2}$-inch wood chisel, screw driver, 3-16-inch blade at point, and $\frac{1}{8}$-inch gimlet. When the file screw driver blade is in position ready for use the tool is 7 inches long over all, and the others are in proportion. Each kit is neatly packed in a telescope paper box, $4\frac{1}{2}$ x $4\frac{1}{2}$ x $1\frac{1}{4}$ inches.

TAP AND DIE GRINDER.

A RECENT product of the works of the Greenfield Machine Co., Greenfield, Mass., is a tap and die grinder embodying new features. The tap-sharpening attachment consists of two centreheads mounted on a swinging arm, which carries the tap across the face of the cup emery wheel. The arm swings at an angle with the face of the wheel, permitting the tap to be ground at any angle. The tap is indexed by means of a rigid tooth rest and held in place on centres, one of which is attached to a spring lever, allowing the tap to be removed quickly. Means are provided for holding a tap, which has the end broken off, or one without centre holes as shown in cut below. The work is brought towards the wheel by means of the hand wheel at the front of the machine. Chucking reamers can also be ground on this fixture. Will hold from $\frac{3}{8}$-inch hand taps to $1\frac{1}{4}$-inch machine taps.

NOVEL USE FOR WIRE FENCING.

Wire netting in Australia answers a purpose which, fortunately, it is rarely called upon to serve in this Canada of ours. The rabbit has become such a pest in that colony that pastoralists and other farmers have been put to great expense in order to keep these vermin away from their properties. It is said that millions of miles of wire netting have been constructed, in the agricultural districts, and as each mile costs about £35, it will be seen that the situation is indeed a serious one. Experience is teaching that even after this extraordinary expenditure, the young rabbits come through the larger meshes, with ease, and it has been found necessary to adopt a mesh not larger than one and one-quarter inch in order to insure satisfactory results.

STOVES, RANGES AND FURNACES

The newest makes in the Canadian Market are ours.

All jobbers or dealers who handle stoves will make money by communicating with us.

See our catalogues; read our description of the Standard Oak and the Souvenir Range. Sent free on application.

Our goods sell without being talked. Try them to-day.

OTTAWA FURNACE AND FOUNDRY CO. Limited

OTTAWA, ONTARIO

DEATH OF DAVID W. McLAREN.

One of the most popular business men in Montreal passed away last Friday when Mr. David W. McLaren, head of the J. C. McLaren Belting Co., succumbed to a brief illness at his residence on Dorchester street. He was the only son of the late J. C. McLaren, and was 43 years of age, being a native of Montreal. Since his father's death he has conducted the business with the utmost skill and prudence, and he has always enjoyed an enviable reputation in the business world.

The late Mr. McLaren was also widely known in the city as a liberal contributor to charitable purposes, and throughout his life he was known as a man of exceptionally wide views. The funeral, which was private, took place to Mount Royal Cemetery last Monday afternoon.

The last of the new spans of the steel viaduct (No. 3) over the Don east of Leaside on the C.P.R., have been put in. As soon as this one is completely finished, work will be started on viaduct No. 4.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

Fall and Winter Sellers

Time for Trade to
ORDER NOW
to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY
FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM
IS YOUR BATHROOM CHILLY?
SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58, or send for Catalogue.

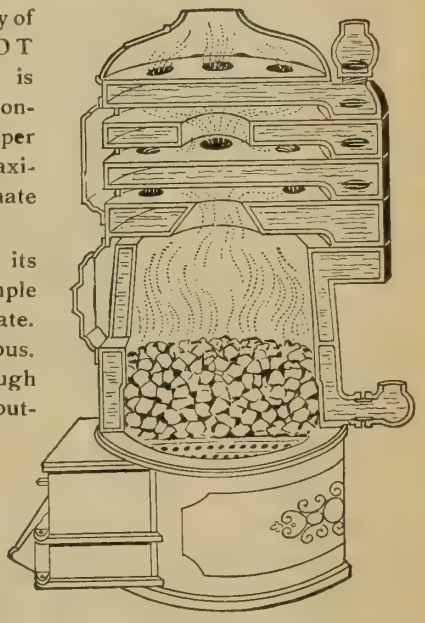
WALTER CROSE, MONTREAL — Sales Agent for the Dominion

OXFORD BOILERS and RADIATORS
SUPPLY
A PERFECT HEATING SYSTEM

Superior Construction The heating capacity of the OXFORD HOT WATER AND STEAM BOILER is greatly enhanced by the improved construction of the Fire-pot, whose upper walls overhang the fire and give a maximum heating capacity and proportionate saving of fuel.

The Hollow Triangular Grate Appeals to users as its form gives an ample air space and makes it easy to operate. The ash-pan is exceedingly commodious. Any grate bar can be taken out through the ash-pit door by removing two outside screws.

Iron to Iron Connections The iron to iron push nipple connections which are used throughout obviate the use of washers or gaskets, a fact which will appeal to you as of great practical value.



OXFORD HOT WATER and STEAM RADIATORS

are built of cast iron, are rust-proof and, used with OXFORD BOILERS, form a complete, durable and efficient heating system.

They Cannot Leak No gaskets or washers are used, but all connections of radiator loops are metal to metal, made with the Oxford Steel Push Nipple, which will not loosen or wear out.

The OXFORD gives the highest degree of radiated heat and distributes it evenly in all parts of the building.

Send for handsomely illustrated catalogue which tells the whole story.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

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Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

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Vancouver, B. C. Satisfactory service given.

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Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses for our goods for best results. Or, if they have not not them, write direct to

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North West Machinery & Iron Co.
LIMITED

WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.

Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,

18 CHAPEL ST., LIVERPOOL, ENGLAND

Cable address, "Pearce," Liverpool. A. B. C. Code

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One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

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In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID

Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

MONTREAL BRANCH C. M. A.

AT the annual meeting of the Montreal Branch of the Canadian Manufacturers' Association, held last week, the new executive was chosen as follows: Chairman, Jeffrey H. Burland, the Canada Engraving & Litho. Co., Limited, elected by acclamation; vice-chairman, D. Lorne McGibbon, the Canadian Rubber Co., of Montreal, elected by acclamation.

Executive committee: J. H. Birks, Henry Birks & Sons; S. S. Boxer, the Watson-Foster Co., Limited; W. P. Coleman, Canada Car Co., Limited; C. W. Davis, the Williams Mfg. Co., Limited; J. S. N. Dougall, McCaskill, Dougall & Co.; Geo. E. Drummond, the Canada Iron Furnace Co., Limited; Geo. Esplin, G. & J. Esplin; S. W. Ewing, S. H. Ewing & Sons; Robt. Gardner, Robt. Gardner & Son; Chas. B. Gordon, Dominion Textile Co.; J. T. Hagar, J. & T. Bell; J. J. McGill, ex-officio; Wm. McMaster, the Montreal Rolling Mills Co.; Robt. Munro, the Canada Paint Co., Limited; Hon. J. D. Rolland, Rolland Paper Co.; G. W. Sadler, Sadler & Haworth; Clarence F. Smith, the Jas. McCready Co., Limited; W. T. Whitehead, the Colonial Bleaching & Ptg. Co., Limited; D. Williamson, Diamond Flint Glass Co., Limited.

NATIONAL CONSTRUCTION CO.

THE National Construction Co., who, according to current report, are to build the western division of the new transcontinental railway from Winnipeg to the Pacific Coast, were incorporated at Ottawa in November last, with authority to carry on a general contracting and construction business throughout Canada. The capital stock was placed at $250,000, divided into $100 shares. The incorporators were Messrs. Joseph Hobson, chief engineer of the Grand Trunk Railway; Robert S. Logan, general manager of the Grand Trunk Pacific Railway; Henry W. Walker, general auditor of the Grand Trunk Railway; Frank Scott and Henry Phillips, all of Montreal.

HARDWARE MEN:—Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.** *TWEED, Ontario* Limited



THE BANNER COLD BLAST LANTERN

ALWAYS LEADS GREAT LIGHT WIND PROOF.

Note Improvements for Season 1905.

We make twelve different styles of Lanterns in Tin, Antique Copper and Solid Brass.

For Sale by all Prominent Jobbers Throughout the Dominion.

ONTARIO LANTERN & LAMP CO.
LIMITED

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

J.C.M.

Galvanized Sheets for Corrugating are best. Submit your enquiries by mail or cable to

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND.

A PERMANENT and Handsome Roof.



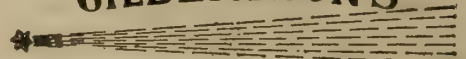
Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

ASK YOUR JOBBER FOR

GILBERTSON'S



COMET

Brand Galvanized Sheets

They are carefully selected. They are soft, smooth and well galvanized. Price lower than for other high-grade brands.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

FAIRBANKS Renewable Asbestos Disc VALVES



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Cat Book
Page 37

The Best Valves That Money and Skill Can Produce

You Are Cheating Yourself



RETURN
SEP 1 19

if you have not inquired into the merits of Fairbanks Valves, because if you want the Best, and think you have the best when you are using some other make of valves than "Fairbanks" you are laboring under a false impression.

When you buy Fairbanks Valves
You Know You Have THE BEST.

Their many points of superiority have been fully demonstrated by the severe test of actual service, and for this reason Fairbanks Valves are specified by the leading architects and engineers everywhere.

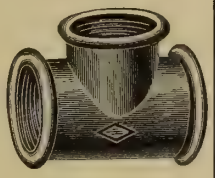
SEND FOR VALVE CATALOGUE.

THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL TORONTO VANCOUVER WINNIPEG



TRADE MARK REGISTERED



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

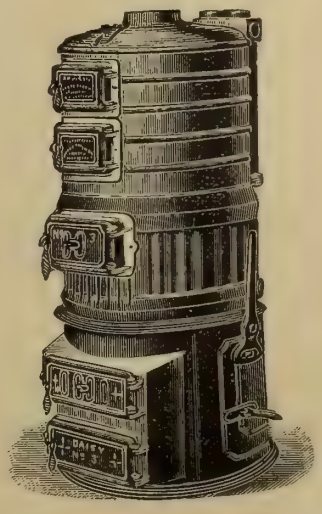
Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

Wrapping Paper ALSO

Now that you have considered buying our **Building Papers,** do not forget that we also manufacture all kinds of **Wrapping Paper. Inquire, there is something in it.**

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Sept. 1, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50
Allaway's Best"—Standard Quality.	
I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright Bessemer Steel—

I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 50 7 75
" " 26 "	8 00 8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B. K. Morton & Co.—		
"Alpha" high speed	....	0 65
" annealed	....	0 70
"M," Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" " annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	....
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	....
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10⅝ oz. Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "	....	5 60
" 5-16 "	....	4 45
" ⅜ "	....	3 85
" 7-16 "	....	3 70
" ½ "	....	3 55
" 9-16 "	....	3 45
" ⅝ "	....	3 35
" ¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 00
Planished copper sheet	24 00
Planished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	....	7 00
Part casks	....	7 25

LEAD.

Imported Pig, per 100 lb	....	4 00
Bar, " "	....	4 80
Sheets, 2½ lb. sq. ft., by roll	....	0 06½
Sheets, 3 to 6 lb.	....	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	....	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra	1st quality			Special
4 and 4½ ft. 3 in. rolled rim			$18 00	16 00
5 feet	"	"	19 00	17 00
5½ "	"	"	20 50	18 50
6 "	"	"	23 25	21 25
Plate E II				
4½ feet	2½ in.	"	16 75	14 75
5 "	2½	"	17 50	15 50
5½ "	2½	"	19 00	17 00
Plate 123 E, lavatories	1st quality			8 90
" 123 E, "	2nd "			7 50
" 127 E. "	1st "			5 70
" 127 E, "	2nd "			4 80
" 128 E, "	1st "			5 60
" 128 E, "	2nd "			4 70
" 129 E, "	1st "			5 40
" 129 E, "	2nd "			4 50
Sinks 18 x 30 in flat rim, A quality				2 45
" " " " " B "				2 00

IRON PIPE.

Black pipe—	Per 100 feet.
¼ inch	2 75
⅜ "	2 04
½ "	2 06
¾ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	9 00

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings— Standard bushings 50 and 10 and 10 per cent.; headers, 60; flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in., 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c.
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock net	1 75
No. 4 " "	1 75
No. 7 Fuller's	2 10
No. 4½, " "	2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND EBONY HANDLED RAZORS



FULLY WARRANTED

Manufactured from finest Clauss hammered steel.

Hardened by our secret process,

Honed and set ready for use.

Crocus-finished back, tang and shoulder.

High blue-polished blades.

CLAUSS SHEAR CO.

169 SPADINA AVENUE

WRITE FOR TRADE DISCOUNT **TORONTO, - ONTARIO**

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators' Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	....	$5 25
Genuine, 100 lb. kegs, "	....	5 50
No. 1, 560 lb. casks, per cwt	....	5 00
No. 1, 100 lb. kegs, per cwt	....	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07½
No. 1	....	0 06½
No. 2	....	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65
Bladders in kegs, boxes or loose	1 75
25-lb. tins	1 90
12½ lb. tins	1 80
Bladders in bulk or tins less than 100 lb.	2 05
	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, size 2, 70c.; size 3, 40c. each.		$1.20
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.

C. B. Caps American, $2.60 per 1000.

Rim Fire Pistol, discount 30 p.c., American.

Rim Fire Cartridges, Dominion, 50 and 5 p.c.

Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.

Central Fire Pistol and Rifle, list net Amer.

Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.

Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.

Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.

Brass Shot Shells, 55 per cent.

Primers, Dom., 30 per cent.; American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00
Bench Axes, 40 per cent.		
Broad Axes, 25 per cent.		
Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25
Underhill American Bench Axes, 40 p.c.	

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.

Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.

Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.

Standard, 60 and 10 per cent.

No. 1, not wider than 6 in., 60, 10 and 10 per cent.

Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.

Rockford, discount 50 and 10 per cent.

Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5
Nuts, square, all sizes, 4c. per lb. off.	
Nuts, hexagon, all sizes, 4½c. per lb. off.	
Stove Rods per lb., 5½ to 6c.	

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.		1 85
Ready roofing, 2-ply, not under 45 lb. per roll		0 90
Ready roofing, 3-ply, not under 65 lb., per roll		1 15
Carpet Felt	per ton	45 00
Heavy Straw Sheathing	per ton	35 00
Dry Sheathing	per roll, 400 sq. ft.	0 40
Tar "	" 400 "	0 50
Dry Fibre	" 400 "	0 40
Tarred Fibre	" 400 "	0 50
O. K. & I. X. L.	" 400 "	0 70
Resin-sized	" 400 "	0 45
Oiled Sheathing	" 600 "	1 00
Oiled "	" 400 "	0 70
Roof Coating, in barrels	per gal.	0 17
Roof small packages	"	0 52
Refined Tar	per barrel	5 00
Coal Tar	"	4 00
Coal Tar, less than barrels	per gal.	0 15
Roofing Pitch	per 100 lb. 0 80	0 90
Slater's felt	per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent

Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American	per doz. 1 00	1 50
Bullard's	"	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.

Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33	per gross 7 50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump	per cwt. 0 60	0 65
Red	0 05	0 06
Crayon	per gross 0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.

Warnock's, discount 70 per cent.

P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English	per doz. 2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation	per doz.	5 00	9 00
man	"	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Cothouse	per doz. 0 55	1 00
Axle	" 0 22	0 33
Screw	" 0 22	1 00
Awning	" 0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Christmas Dinner

without Plum Pudding is no more complete than a Hardware Store without a stock of Paterson's Building Papers and Wire Edged Ready Roofing.

You'll increase your profits and avoid arguments by handling our goods because we make the material your customers want.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to 100	....	....	....	18 00
96 to 100	....	....	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanleys, discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic per doz. 1 10 1 20

Sledge.

Canadian per lb. 0 07 0 08½

Ball Pean.

English and Canadian, per lb. 22 0 25

HANDLES.

Axe, 2nd growth, per doz. net	3 00	4 00
Store door	per doz. 1 00	1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American per doz. 1 00 1 25

Plane.

American per gross 3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" " 5-in., "		0 06½
" " 6-in., "		0 06
" " 8-in., "		0 05½
" " 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.

Screw hook and hinge—		
6 to 10 in.	per 100 lb.	4 50
12 in. up	....	3 25
Spring, No. 20, per gro. pairs	....	10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { Head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star per doz. 3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50
American, 60 and 10 to 65 and 5 per cent.		

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt, 10½-in., 14-in. cut	$ 8 50	to $11 00
Star, 9 -in.	" 6 00	to 6 50
Daisy, 8 -in.	" 5 25	to 5 75
Philadelphia, 7½-in.	" 6 00	to 7 50
Woodyatt, 10½ in., ball bearing	13 25	to 18 00
Grass Boxes	1 75	to 2 00
King Edw'd 12-in., 14-in. cut	9 00	to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.
Russell & Erwin, steel rim ...per doz. 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00	9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

1 pint in tins	per gross ...	7 80
½ " "	"	9 60

PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.



Wrought Steel One-Piece Screens

For use in Front of Steam Pipes.
Furnished in any length up to fifteen feet.
Width of face from six to fourteen inches.

Hart & Cooley Co.

New Britain, Conn., U.S.A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood.....per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's	3 60	10 00
Wilkinson's	....	12 50
Carbo Magnetic	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65	....	13 00
Griffon Safety Razors	....	13 50
Griffon Stropping Machines	....	13 50
Lewis Bros. "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal	0 11
Pure Manilla	0 14½
"British" Manilla	0 11
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ¼ inch 0 25	0 28
Russia Deep Sea	0 16
Jute	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet.....per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's). 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000 7 50
"Eureka" tinned steel, hooks " 8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's...per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.
Hack, complete.....each 0 75 2 75
" frame only.....each 0 50 1 25
S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.
" buck, New Century.....$6 25
" " No. 1 Maple Leaf..... 5 25
" " Happy Medium..... 4 25
" " Watch Spring..... 4 25
" common frame..... 4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24	....	0 85
" 18 x 30	....	1 00
" 18 x 36	....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews' 4 50 11 50

SOLDERING IRONS.

1, 1½-lb.....per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned	80 and 20
" " (in kegs)	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned	75 and 12½
Zinc tacks	35
Leather carpet tacks	55
Copper tacks	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned	65 and 10
Clout nails, blued	65 and 5
Chair nails	35
Patent brads	40
Fine finishing	40
Lining tacks, in papers	10
" " in bulk	15
" " solid heads, in bulk	75
Saddle nails, in papers	10
" " in bulk	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers	90 and 10
" bulk	40
Clinch and duck rivets	45

TAPE LINES.

English, ass skin.....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's.....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's	....	0 13½
Brook's	....	0 12½
Pipe Vise, Hinge, No. 1	....	3 50
" " " No. 2	....	5 50
Saw Vise	4 50	9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.
Diamond, Famous, Premier, discount 50 and 10 per cent.
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge	$2 15
10 "	6c. extra.
11 "	12c. "
12 "	20c. "
13 "	30c. "
14 "	40c. "
15 "	55c. "
16 "	70c. "

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Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No 23, $7.65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
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Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
Waggoner Ladder Co., London, Ont.

Wrapping Papers.
Canada Paper Co., Toronto.
McArthur, Alex., & Co., Montreal.

FERROSTEEL REGISTERS

WE MAKE ALL LINES

All Cast
Modified Steel
All Steel

Quality everlastingly the best
Prices everlastingly the bottom

OUR { **ALL CAST** Are time tried and worth proven.
MODIFIED STEEL The novelty success of 1904.
ALL STEEL Orders accepted for September delivery.

THE FERROSTEEL CO., 34 Michigan St., CLEVELAND, OHIO



HOLLOW-WARE

PRESSED, STAMPED, and MACHINE-MADE

ENAMELLED, TINNED, GALVANIZED and JAPANNED

We manufacture every description of Hollow-ware and we guarantee that every piece is made wholly on our own premises. Our average weekly capacity, is over 700,000 pieces, of Tinned, Galvanized and Enamelled ware. Our Enamelled ware is of superior durability and finish, and is guaranteed free from any poisonous substances.

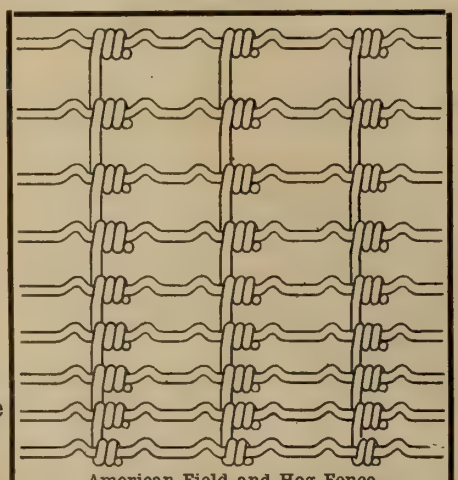
Let us have your name for our illustrated lists

The **Welsh Tinplate & Metal Stamping Co., Ltd.**
LLANELLY, WALES

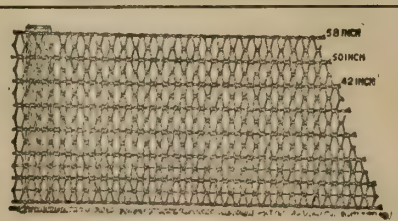
Galvanized Steel Woven Wire Fence

HIGH CARBON

The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



Ellwood Field and Lawn Fence

We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us
THE CANADIAN STEEL AND WIRE CO., LIMITED
WINNIPEG, MAN. HAMILTON, ONT.

Have you any call

RETURNED
JAN 29 1906

J. NICKLIN & CO
MAKERS
BIRMINGHAM.

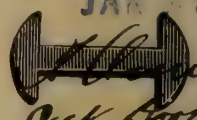
FOR

BRASS STAMPED LABELS?

We make these goods in all sizes and designs to order. Let us have your enquiries for Stamped Brass Goods, such as :

RETURNED
JAN 06

Curtain Rings and Hooks,
Mill Band Fasteners, etc.



Cut Book 46, page 5

We will be glad to quote for special lines or submit samples of regular lines.

LOOK FOR THIS TRADE MARK—

REGISTERED SAJONIC TRADE MARK

J. Nicklin & Co.,

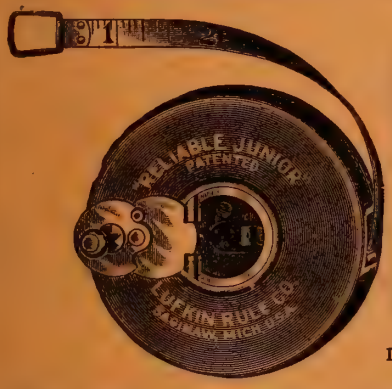
Canadian Agent,
F. P. ROGER, Carlaw Bldg., TORONTO

BIRMINGHAM, ENG.

IRON STEEL

Bars in Flats, Rounds, Squares, Ovals, Half-Ovals, Half-Rounds and Bands. Also Wrought Washers.
GOOD QUALITY. PROMPT SHIPMENT.

London Rolling Mill Co.
Limited,
LONDON, CANADA.



LUFKIN MEASURING TAPES

Steel, Metallic, Linen, Pocket, Ass Skin, Pat. Leather, Bend Leather, Etc.

ARE THE BEST AND MOST POPULAR TAPES IN THE WORLD.
YOUR STOCK IS NOT COMPLETE WITHOUT THEM.

LUFKIN RULE CO., Saginaw, Mich, U.S.A.

London Office and Warehouse—48 Lime St. New York City Branch—280 Broadway.

For sale by ALL PROMINENT CANADIAN HARDWARE JOBBERS.



"Open Ring" Pattern

Niagara Cow Ties

Possess certain obvious advantages which have brought them into exclusive use throughout all the great dairying sections in Canada and the United States. We have made these Cow Ties for many Fancy Dairies in the past, and they have now become a regular item of the Hardware Dealers' Stock.

The SWIVEL is malleable and is muchstronger than any Steel Swivel, while its action is so free that it never sticks on account of rust.

The TOGGLES used on our Cow Ties are forged from BESSEMER STEEL, by a patented process.

The TOGGLES are so arranged as to always hang at right angles to the Chain, which prevents their becoming unfastened from same.

In a crowded stable this method of fastening confines the animal more and obviates all danger of being stepped upon when lying down.

ONEIDA COMMUNITY, Limited
NIAGARA FALLS, ONT.

PFLUEGER'S Fishing Tackle

Hooks, Flies, Trolls, Spinners, Phantoms, Reels, Furnished Lines. Everything in Fishing Tackle.



NOTICE—Free to Any Dealer in Sporting Goods, Sent Express Prepaid, 155-Page Illustrated Catalogue No. F23, Metal Fish Sign and Window Transparency in 8-Color Lithograph.

The Enterprise Mfg. Co.
AKRON, Ohio



Est. 1868. Inc. 1895.

Black Diamond File Works

G. & H. Barnett Company

PHILADELPHIA

Twelve 

Medals

Awarded
By **JURORS** at
International Expositions
Special Prize
Gold Medal at Atlanta, 1895

Copy of catalogue sent free to any interested file user upon application.



WALTER GROSE, Montreal, SELLING AGENT FOR THE DOMINION.

The Fisk
Detachable Motor Tire



Has its greatest elasticity at the sides, where it should be, giving unusual resilience.

Has a tread of extraordinary strength and toughness, giving great durability.

Has a firm and solid base so that the tire can be run flat, if need be, with little injury and with safety.

Easy and quick removal or attachment, with a common wrench.

Absolute freedom from creeping or rolling.

Manufactured in Canada solely by

THE GUTTA PERCHA & RUBBER MFG. CO.

OF TORONTO, LIMITED.

Head Offices:
47 YONGE STREET, TORONTO

Branches—MONTREAL, WINNIPEG, VANCOUVER.

COIL CHAIN

Black Tested
Short Link

(BRITISH MANUFACTURE)

FOR PRICES TO IMPORT APPLY TO

B. & S. H. THOMPSON & Co.

LIMITED

53 St. Sulpice Street, MONTREAL

AGENTS:
United States Steel Products Export Co.
American Sheet and Tinplate Department
NEW YORK

SADLER & HAWORTH

"Extra" *"Standard"*

HIGH-CLASS

IT PAYS US TO MAKE
Good Belting
IT WILL PAY YOU TO BUY IT.

LEATHER-BELTING

"Diamond" *"Agricultural"*

WAREHOUSES & FACTORIES AT
MONTREAL *and* TORONTO.

CIRCULATES EVERYWHERE IN CANADA
Also in Great Britain, United States, West Indies, South Africa and Australia.

HARDWARE AND METAL

A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, SEPTEMBER 9, 1905 NO. 36

BUTCHERS' KNIVES
JOHN WILSONS
CELEBRATED
"PEPPERCORN AND DIAMOND"
BRAND CUTLERY.
TRADE MARK
BUTCHERS' STEELS
Canadian Agents: DORKEN BROS. & CO., Montreal

FLEUR DE LIS

"FLEUR DE LIS"
GALVANIZED IRON

Equal to any but "Queen's Head."
Every sheet guaranteed.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.
A. C. LESLIE & CO., MONTREAL Managers Canadian Branch

Canada's Most Expert Radiator Manufacturers



Don't link yourself up to a poor line of Radiation.

SOVEREIGN RADIATORS are best in design and construction—and fine Castings—don't use Castings that look like Scrap-iron when you can get good ones for the same price—you won't have to send back half of each job to be repaired when you use the "SOVEREIGN"—that's something!

SCREWED NIPPLES, full size

Taylor-Forbes Company, LIMITED.

21 Richmond St. TORONTO
Head Office and Works: GUELPH
9 De Bresoles St. MONTREAL

Classified List of Advertisements on Page 67.

NEW MODELS

SPORTING GUNS and RIFLES

NEW MODELS



LOADED SHELLS



MARLIN RIFLES

RETURNED SEP 8 1905
To Owner
Cut Book 39
page 97



SAVAGE RIFLES

RETURNED SEP 8 190



RETURNED SEP 8 1905

SHELLS



SHOOTING COATS



RETURNED SEP 8 1905

SHOT GUNS OF ALL KINDS



RETURNED SEP 8 1905

HATCHETS

Write for Catalogue and Prices.

RICE LEWIS & SON

LIMITED

TORONTO.

ALWAYS READY FOR USE



Full Hollow Ground $2.00 Each
Double Concave for extra hard beards, $2.50
Send for free book, "HINTS TO SHAVERS."

The CARBO MAGNETIC RAZOR

No Honing! No Grinding!

No Smarting after Shaving. With ordinary careful use will

KEEP AN EDGE FOR YEARS WITHOUT HONING.

Booklet coming—if you will ask for a copy, with trade discount.

FOR SALE BY LEADING JOBBERS.

FIRM OF
A. L. SILBERSTEIN, MAKERS OF "Griffon" Cutlery

459-461 BROADWAY, NEW YORK.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

in

Smokeless and Black Powder.

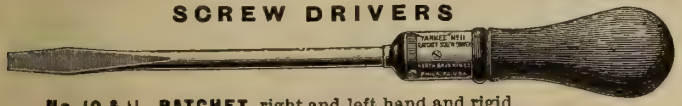
THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

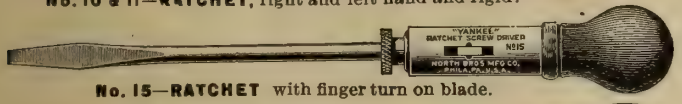
OTTAWA, ONT.

Other Tools are very Good Tools, but **"YANKEE TOOLS"** ARE BETTER

SCREW DRIVERS



No. 10 & 11—**RATCHET**, right and left hand and rigid.



No. 15—**RATCHET** with finger turn on blade.



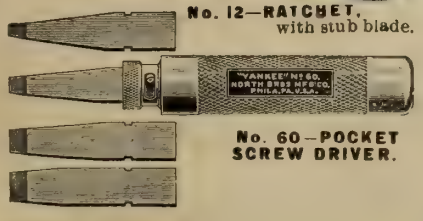
No. 30—**SPIRAL RATCHET**—right aud left hand and rigid.
No. 31— " " (heavy pattern)
No. 20— " " right hand only.



Chuck and 8 Drill Points, for spiral ratchet screw driver.



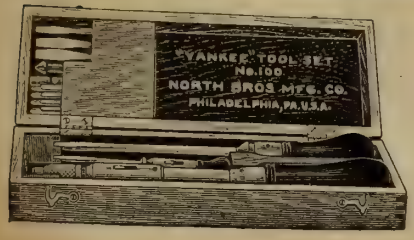
No. 12—**RATCHET**, with stub blade.



No. 60—**POCKET SCREW DRIVER.**

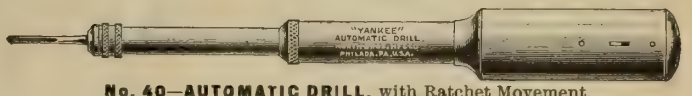


Countersink, for spiral ratchet screw driver.

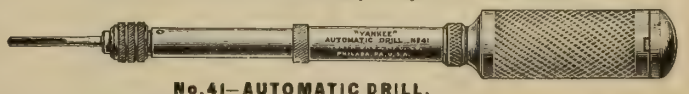


The NEWEST, CLEVEREST and QUICKEST SELLING TOOLS of the KIND.

DRILLS



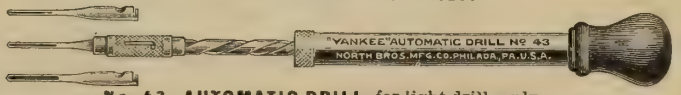
No. 40—**AUTOMATIC DRILL**, with Ratchet Movement.



No. 41—**AUTOMATIC DRILL.**



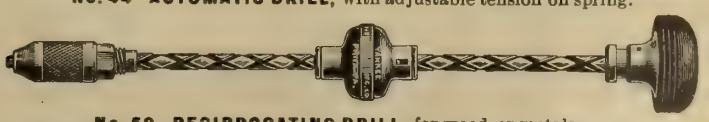
No. 42—**AUTOMATIC DRILL.**



No. 43—**AUTOMATIC DRILL**, for light drills only.



No. 44—**AUTOMATIC DRILL**, with adjustable tension on spring.



No 50—**RECIPROCATING DRILL**, for wood or metals.

SOLD BY LEADING JOBBERS

SEND FOR OUR NEW "YANKEE" TOOL BOOK

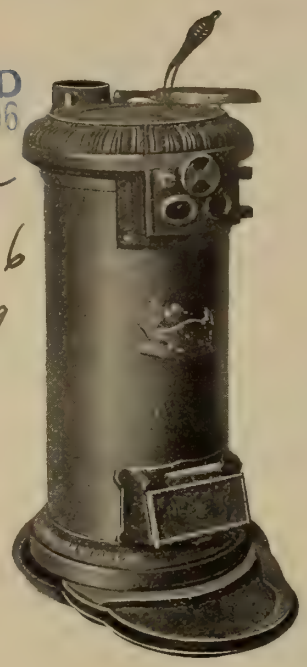
NORTH BROS. MFG. CO.

PHILADELPHIA, Pa.

THE BEAVER SLOW COMBUSTION STOVE

4 SIZES

RETURNED
FEB - 9 1906
4. Canada
Book 46
page 39



No.	Diam. of Steel Body.	Height.	Weight.
2	9½ inches	27 inches	90 lbs.
3	11¾ "	31¾ "	125 "
4	13 "	34½ "	165 "
5	15¾ "	37¼ "	210 "

A POWERFUL HEATER.

BURNS A MINIMUM AMOUNT OF FUEL.

Lined throughout with Fire Bricks. The body is made of cold rolled steel and the base and top are cast iron.

Has nic el-plated tea-pot stand and is very neat and compact in appearance.

WRITE FOR PRICES.

The Thos. Davidson M'f'g Co., Limited

MONTREAL

CANADA PLATES

Ordinary

18 x 21 x 60 sheets
18 x 24 x 52 sheets
18 x 24 x 60 sheets
18 x 24 x 75 sheets
20 x 28 x 40 sheets

All Bright

18 x 21 x 60 sheets
18 x 24 x 52 sheets

From Stock or For Import

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

Modern Retail Hardware Methods

have reached such a high place, that no dealer can afford to run any risks. He can afford to sell nothing but the best goods to his best customers.

We illustrate this week a few of "Hurd's" Axes and Hatchets; the quality and finish of which cannot be surpassed by any in America.

The name "Hurd's" is a guarantee of quality, and, what's more, we sell them at a price that ma es them popular.

We want you to stand right behind "Hurd's Goods," and remember that we stand right behind you.

By this we do not mean that we warrant "Hurd's Chopping Axes," as the price we charge will not stand it; but we guarantee them to be the best axes sold in Canada.

We do warrant "Hurd's Bench Axes" and "Hatchets," and will replace any defective ones free of charge.

Axes, made in Michigan, Dayton, Three Rivers, wedge and half-wedge patterns, in polished solid steel, bronze and charcoal finish.

Bench Axes, extra full weight, crucible cast steel bit, polished and bronzed.



RETURNED
SEP 8 1905

MICHIGAN PATTERN.

GOLD BRONZE FINISH. EXTRA QUALITY REFINED CAST STEEL. POLISHED BIT AND POLL.

SOLID STEEL. FULL POLISHED. EXTRA QUALITY. FANCY ETCHED.

REGULAR WEIGHTS.

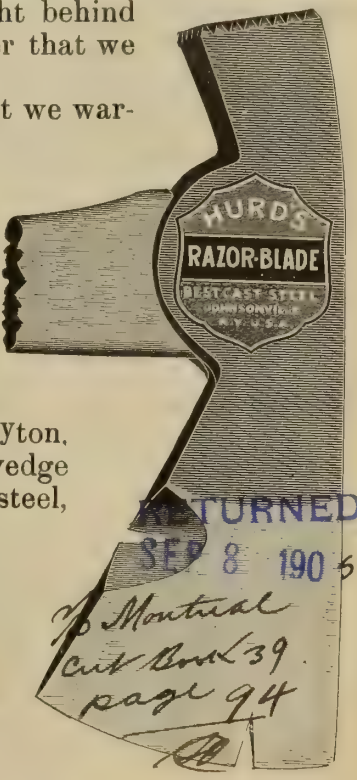
3	to	3½	lbs.
3¼	"	3¾	"
3½	"	4	"
3¾	"	4¼	"
4	"	4½	"
4	"	5	"

RETURNED
SEP 8 1905



HURD'S BARREL HATCHET, No. 25.
STRAIGHT BLADE, 2⅝-in. CUT.
GOLD BRONZE FINISH.
EXTRA QUALITY RAZOR BLADE
OF BEST CAST STEEL
CHECKED SQUARE HEAD.

BENCH AXES					
No.	2	3	4	5	6
Width cut in.	4½	5	5½	6	6½



RETURNED
SEP 8 1905
To Montreal
Cut Book 39
page 94

HURD'S BARREL HATCHET, No. 2 C
CURVED BLADE, 2⅝-in. CUT.
GOLD BRONZE FINISH.
EXTRA QUALITY RAZOR BLADE
OF BEST CAST STEEL.
CHECKED SQUARE HEAD.



Charcoal Finish, Superior Quality, Solid Steel.

RETURNED
SEP 8 1905

WRITE FOR PRICES
Lewis Bros., Limited
Importers and Distributors
ALWAYS ADDRESS THE HEAD OFFICE AT
MONTREAL
TORONTO OTTAWA
VANCOUVER CALGARY

The Browning Automatic Shot Gun

12 GAUGE ONLY



Single Trigger Automatic Repeater 5 Shot

The Sportsman's Favorite

IMMEDIATE SHIPMENT

WRITE FOR PRICES AND CATALOGUE

E. F. WALTER & CO., 166 and 168 McGILL STREET **MONTREAL**

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

DON'T TRUST TO



LUCK

BE SURE OF YOUR DINNER

By using ALUMINUM WARE

Even if the potatoes boil dry, those next to the pot do not impart a burnt taste to the others, under ordinary circumstances.

CATALOGUES TO TRADE ON APPLICATION

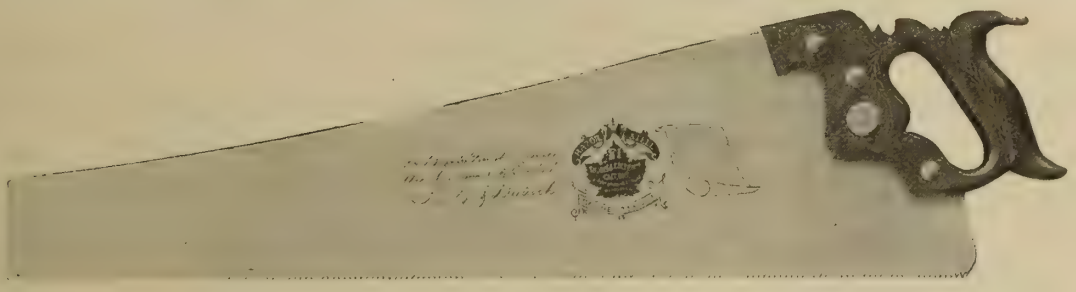
CANADIAN ALUMINUM WORKS, LIMITED

CHAMBLY CANTON, QUE.

H. C. EADIE, Montreal Sales Office, 22 St. John St., MONTREAL

Canada Leads the World in the Manufacture of

HIGH-CLASS SAWS



No. 81

The best and cheapest Hand Saw on the market, quality, temper and finish considered. Every saw warranted. Carved applewood handle. Patented, Wave finish blade.



No. 1 Maple Leaf Lance Tooth Cross-Cut Saw, and the No 0 Racer are tempered under our secret process.



No. 0 Narrow Racer Cross Cut Saw

If you want saws that will sell and give your customer satisfaction, you will stock the Maple Leaf Saws.

Manufactured by **SHURLY & DIETRICH, - GALT, Ontario**

GOLD MEDAL AWARDED 1904

WILKINSON CUTLERY

MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

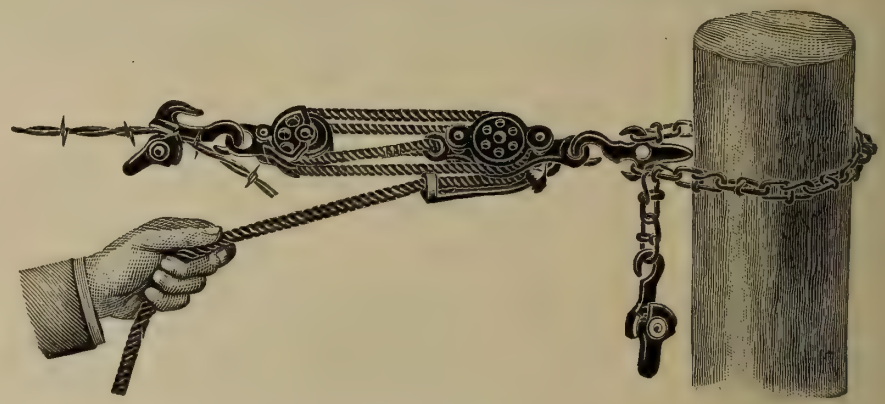
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

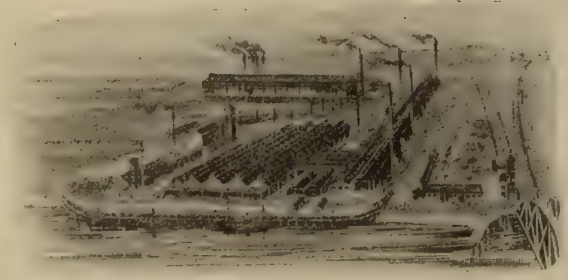
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



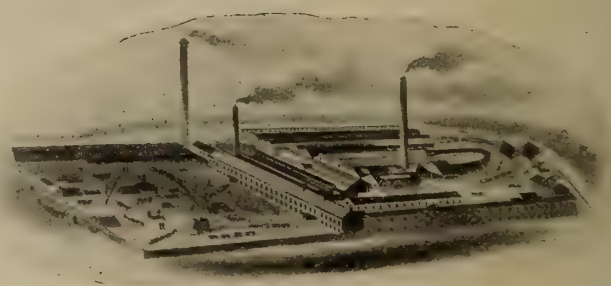
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

Agent: F. Hankin, Montreal

RETURNED
SEP 8 1905
To Montreal
Cut Book 39
Page 95
20

EDGE & SONS
CRUCIBLE STEEL WIRE ROPE

In stock ¼, 5/16, ⅜, 7/16, ½, ⅝, ¾, ⅞ and 1 inch diameter.



This rope is made of 6 strands of 19 wires each, with a hemp centre, and is strong, tough and pliable.

It is made of a fine quality of ENGLISH CRUCIBLE CAST STEEL, specially prepared for rope purposes, so as to give great tensile strength.

The "BULL-DOG" clamp says, "What we have we'll hold." Guaranteed to be as strong as the rope.

ETURNED
EP 8 1905

If you have a call for rope or clamps do not neglect to WRITE US.

Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants, - - Montreal, Canada

F. & W.

FOUNDED 1809 INCORPORATED 1904

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
JR & S ALL THE ROUND JR & S
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



14540.—FRUIT DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts



31197.—E.P.N.S. CAKE BASKET

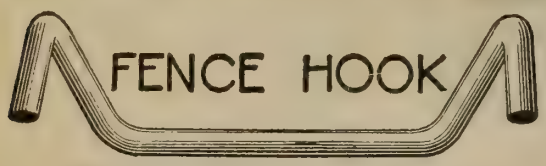
Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE

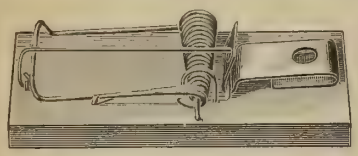
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



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GLAZIERS' DIAMONDS

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43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

ALSO Lead Vices, Carbon Tools, Etc., Etc.,

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Ahead of all others in quality and workmanship. If sparks of fine quality, set by experts, are what you require, buy Diamonds of A. Shaw & Son's make.

Canadian Agent

GODFREY S. PELTON

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CELEBRATED **HEINISCH** SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 155 Chambers St
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SEYMOUR SHEARS

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

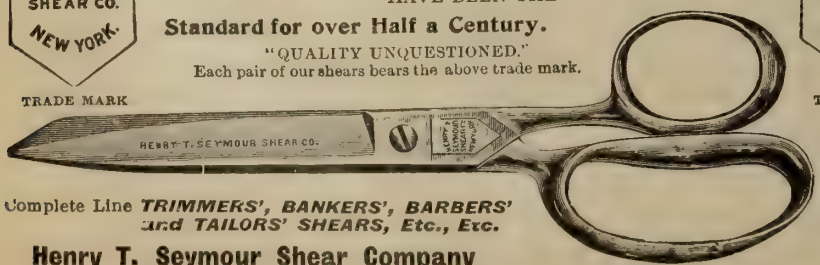
Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK.

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Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

Persons addressing advertisers will kindly mention having seen their advertisement in Hardware and Metal.

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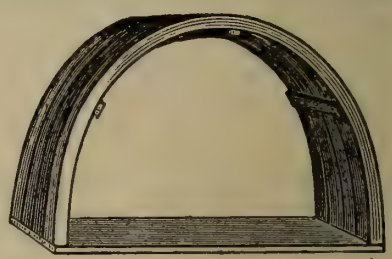
Have you ever realized the advertising value in your Show Windows, and that you could talk to the thousands of people passing your Store with bright, attractive Show Cards? We can supply Show Cards and Price Tickets at low prices. Write for our Catalogue which shows you as well hundreds of other styles of Signs.

THE MARTEL-STEWART CO.,

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MONTREAL, - CANADA



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prompt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

MAPLE LEAF

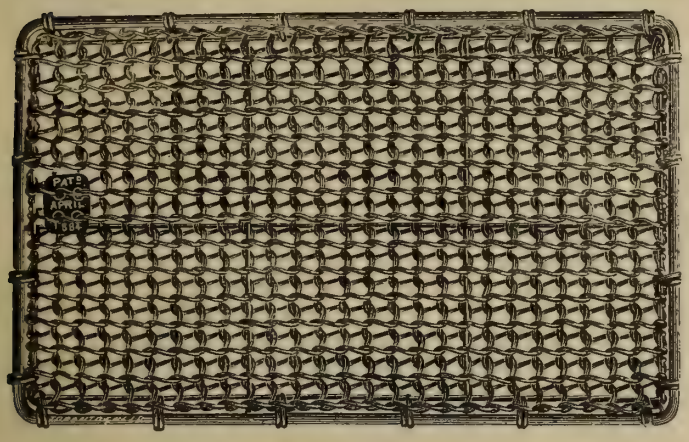
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DOMINION BELTING CO. LTD.

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Wire Door Mats



The most durable, cleanest and perfect sanitary Mat made.
Has been on the market for 20 years.
All sizes and shapes made to order.
For stock sizes see catalogue.

THE B. GREENING WIRE CO.
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HAMILTON, ONT. MONTREAL, QUE.



WHY DILLON STAYS STAY

When the temper of a stay is too high it is affected by wrapping, yet many wire fences are made with "high-temper" stays on the fallacy of "greater strength." When such stays are weighted down, say, between posts, there is a friction that does not stop at bending. It stops at nothing short of a break. You never heard of a break in a **DILLON HINGE-STAY** and never will. See the cut. "Dillon" stays are of Medium Temper, and are hinged, which ensures absolute elasticity as well as strength, therefore, will neither bend nor break. All other stays are now gauged by "Dillon" stays. Pretty good proof this of "Dillon" superiority—good enough proof for any Hardwareman or farmer either.

THE OWEN SOUND WIRE FENCE CO., Limited
Owen Sound, Ont.
MESSRS. CAVERHILL, LEARMONT & CO.,
(Eastern and Western Agents,) Montreal and Winnipeg

DOMINION WIRE MANUFACTURING CO.
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ANNEALED WIRES
FOR BALING
HAY, STRAW, PULP, RAGS, EXCELSIOR

WIRE NAILS

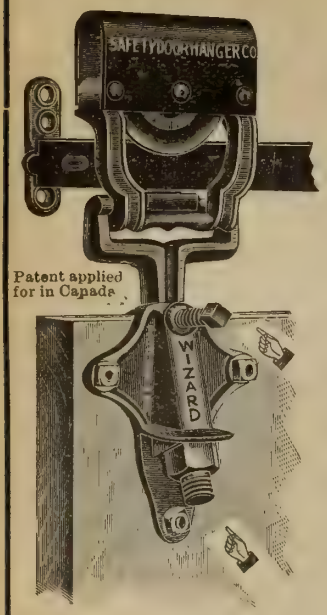
FLAT HEAD
ROUND and OVAL HEAD **SCREWS** BRIGHT—BRASS
BRIGHT and BRASS

TINNED WIRE for Mattress, Broom, Bolting and Binding

STEEL WIRE HOOPS

COPPER WIRE—ALL—BRASS WIRE

MADE IN CANADA



Patent applied for in Canada

THE
WIZARD ADJUSTABLE
Flexible Door Hanger

Takes Regular 1¼" Flexible Hanger Track.

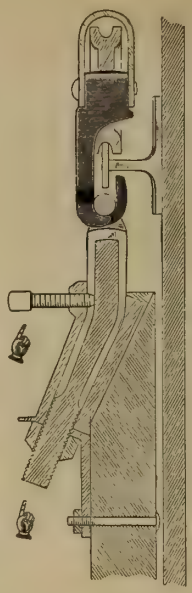
Lateral Adjusting Screw.

DEALERS!
You will not have to carry a special track if you handle
THE WIZARD ADJUSTABLE

Vertical Adjusting Nut.

Ask Your Jobber or Write Us.

Safety Door Hanger Co.,
HAMILTON, ONT.



SOL-A-RINE
The Great Polish



For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say: "Sells better than any other."
Send for Circular
H. F. FALKINER,
60 George St., TORONTO

OAKEY'S
The original and only Genuine Preparation for Cleaning Cutlery. 6d. and 1s. Canisters
'WELLINGTON' KNIFE POLISH
JOHN OAKEY & SONS, LIMITED
MANUFACTURERS OF
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.
Wellington Mills, London, England
Agent:
JOHN FORMAN, 644 Craig Street
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They Sell



Every Time

FLOWER POTS, FERN PANS, SAUCERS, BASKETS, ETC.

There is a big trade in these. We have the goods ready to ship and the prices are right. No. 3 assortment. Pots and Saucers; 6-7 inch, 50-6, 50-5, 36-4. Special price, including crate, $4.40 net. Special orders filled.

THE FOSTER POTTERY CO.,
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STANLEY RULE & LEVEL CO.,
NEW BRITAIN, CONN., U.S.A.

IMPROVED CARPENTERS' TOOLS

SOLD BY ALL HARDWARE DEALERS.

H. & R. SINGLE GUN
Automatic and Non-Ejecting



Simplest "Take Down" Gun Made

12 and 16 Gauge, Steel and Twist Barrels
20 Gauge, Steel Barrel

Superior in Design, Workmanship and Finish and the most popular Gun on the Market.

HARRINGTON & RICHARDSON ARMS CO.
Catalog on request **Worcester, Mass., U.S.A.** Also makers of H. & R. Revolvers

Cooper's Improved Patent One-Piece Stove Pipe Elbows

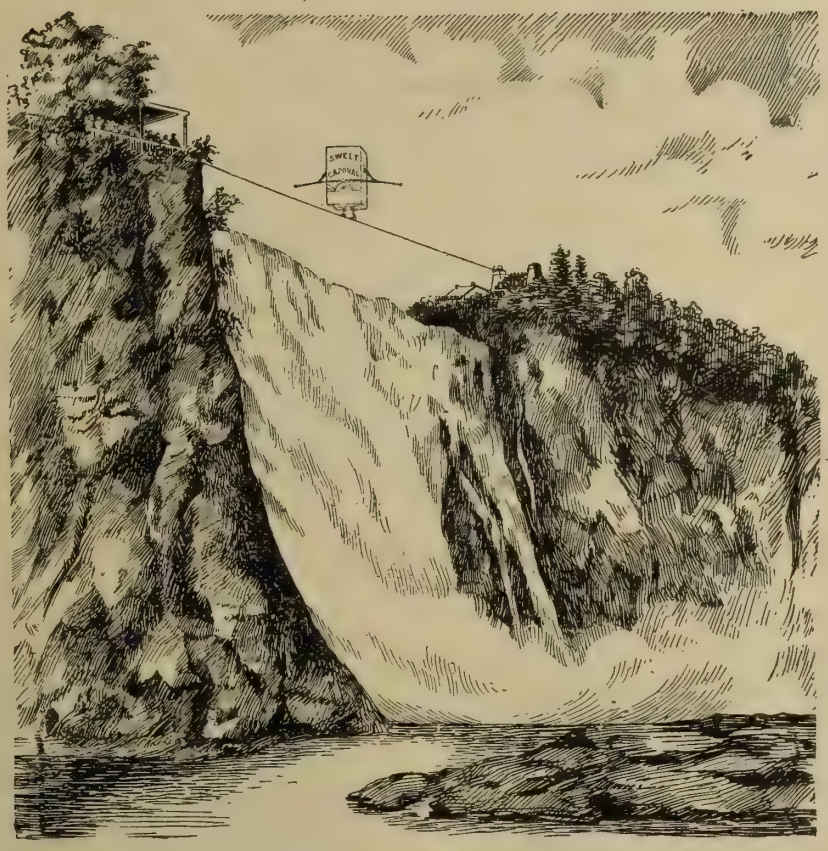


The Heaviest and Best Elbow on the market. Measures 23 inches long at the back.
Send in for sample dozen.
Polished or Common.

E. T. WRIGHT & CO.,
Sole Manufacturers and Patentees.
HAMILTON and MONTREAL.

Professor Hardy, the Famous Tight Rope Walker

Uses Our Cordage



PROFESSOR HARDY CROSSING MONTMORENCY FALLS

(We publish the above by special permission of the American Tobacco Co., Limited)

Where great risks are taken and lives are at stake, you may depend on our Rope as being the most reliable on the market.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

BRANCHES:

W. A. C. HAMILTON, Toronto, Ont.; MERRICK, ANDERSON & CO., Winnipeg, Man.; MacGOWAN & CO., Vancouver, B.C.; CONSUMERS CORDAGE CO., Limited, St. John, N.B.; F. H. ANDREWS & SON, Quebec, P.Q.; GEO. WOOD, London, Eng.

SORT UP YOUR STOCK

Are **You** short on

RUBBER THRESHING BELTS AND AGRICULTURAL SUCTION HOSE?

We have the best values in Canada to offer you in these lines.

In **Threshing Belts** our **Special Stitched Belt,** "The Canadian," is exclusively the best selling belt offered in the Dominion this season. It's a **cheap belt** as to **price—but that doesn't mean poor quality.** Our **Trade Mark** is on it—**a guarantee of satisfaction.**

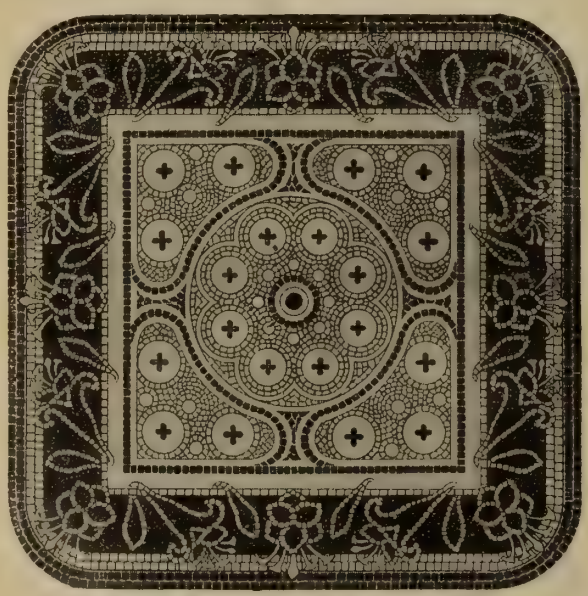
Write our nearest Sales Branch for illustrated literature, describing fully the above specialties.
Don't wait—write TO-DAY.

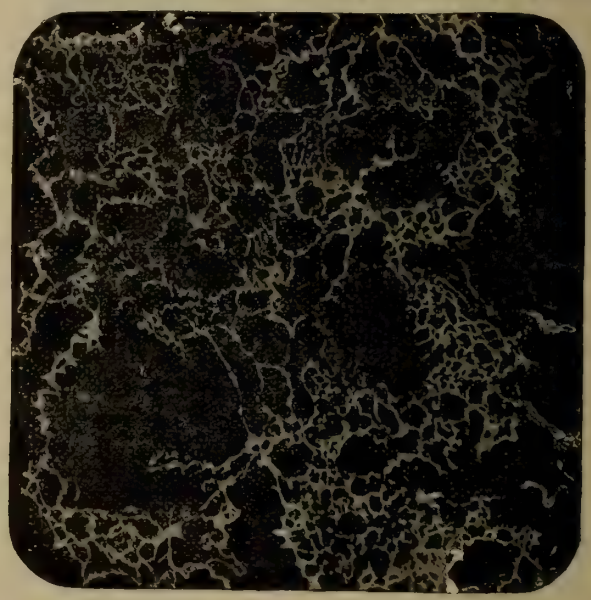
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THE CANADIAN RUBBER Co OF MONTREAL.

LIMITED





KEMP'S ELITE AND ONYX STOVE BOARDS

Will please your customers and bear you a good profit. Elite boards are made both wood and paper-lined; 12 sizes. Onyx wood-lined; 12 sizes. Prompt shipment.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. AND METAL CO.,
McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

CANADIAN MANUFACTURERS IN ENGLAND

By W. L. E.

CANADA'S OPPORTUNITIES IN GREAT BRITAIN AND FRANCE

ONE thing that impressed me a great deal while in Great Britain with the Canadian Manufacturers' Association was the unique position that Canada at present occupies in both Great Britain and France. To both countries Canada is attached by the ties of kindredship. In Great Britain they refer to Canadians as brothers; in France as confreres. Great Britain welcomed us with open arms, and entertained us for about four weeks in a most lavish manner. In France our official visit was confined to four or five days. The possibilities of entertainment were, in consequence, more limited than in England. But



President George on deck.

the welcome was none the less cordial. During the four or five days they provided all the entertainment and pleasure that we were capable of digesting. And running through the public and private remarks of business and public men of France with whom we were brought in contact were sentiments warmer and deeper thon we dreamed of. In Great Britain sympathy toward Canada is based on what we are politically in relation to the Motherland; in France on what Canada once was politically in relation to that country. Then on the top of it all is the entente cordiale between Great Britain and France.

Naturally, in view of the sentimental relationship between Canada and Great Britain and France, the conditions are happy for the extension of trade between



In this group will be seen Messrs. T. H. Estabrooks and R. D. Emmerson, St. John, N.B., Mr. H. P. Allen, London, Ont., J. W. Scott, Mount Forest, and P. Clarkson, Montreal

these two countries and the Dominion. Wherever we went in Great Britain or in France evidences of an interest in Canadian trade matters were to be seen. Naturally, their first thought was Canada as a customer; but there was also expressed a pronounced desire to purchase Canadian products.

* * *

Travel the wide world over and I do not believe there is any country in the world whose prospects for increased



In this group can be seen Messrs. J. P. Steedman and G. W. Sweet, Hamilton, E. J. Davis, Toronto, C. D. McAlpine, Halifax. Mr. W. W. Thompson, London, is showing his back.

trade with other countries are as bright as those of Canada with Great Britain and France. In other words Canada is in the position of having customers abroad who are actually desirous of giving her products a preference as long as quality and price — and particularly quality—are right.

* * *

Under these circumstances it is obviously the fault of Canadians themselves if the opportunity offered is not grasped. It is true our export trade with what might be termed Canada's two mother countries has grown rapidly during the last ten years, that with Great Britain showing an increase of over 70 per cent. and that with France about 90 per cent.; but the difference between what these countries buy and what we can sell them is very great. What we supply is merely a "drop in the bucket."



Messrs. Allan and E. J. Davis, Toronto, and R. D. Macdonald, London.

Canadians are by no means unaggressive; but it dawned upon most of us while abroad that there was room for more aggressiveness. The field is there. What it wants is cultivation. The quality of the merchandise we send across the ocean is not always as uniform as the tastes of the people demand, and particularly those of the British people. Possibly there are some who may be inclined to pooh-pooh this idea. But seeing is believing. And some of us saw and believed. Then there must be promptness in filling orders and in answering correspondence. There is sometimes good and sufficient reason for not being able to promptly fill orders; but there is

no excuse for neglect in answering correspondence. It causes irritation, and irritation is not good for business. We often hear complaints on this side of the Atlantic in regard to the disinclination of manufacturer in Great Britain to adapt themselves to the requirements of the Canadian market. One of the complaints of importers in Great Britain against some of the manufacturers in Canada is of a similar character. I know of the representative in London of one large Canadian concern who is taking a trip to Canada nearly altogether for the purpose of trying to instruct his principals in ways and means of meeting the requirements of the British trade. Another has but recently returned to Great Britain from a similar mission. If those in Canada who are unconcerned about such matters were conscious of the concern a great many people in Great Britain have who wish to see the development of trade between the Mother Country and her colonies, they would awake to their duty in the matter.

* * *

One of the first things Canadians should do who desire to do business with Great Britain, or who are ambitious to do more with that country than they are now doing, is to make a journey there. Get into touch with the men with whom they want to do business, listen to their suggestions and learn from personal contact and observation what the actual requirements of the market are. It is only by this way they can become cognizant of the actual situation. They can never learn by correspondence or through other persons. They must see and learn for themselves; and it is the easiest and cheapest way in the long run. Their ways are not our ways any more than ours are theirs. And with customers so promising it is folly indeed not to learn how we can best please them.

PARCELS POST PROPOSITION PUNCTURED

Address by National President W. P. Bogardus, Before the Michigan Retail Hardware Association Convention.

THERE is perhaps no question so vital to the retail trade, no matter what line it may be, as the question of post parcels, a question whose ramifications reach out to all lines of trade and affect all kinds of retailers; and it is one of the questions that will not be settled until it is settled right.

Theoretical post parcels is a dream of certain theorists who look on the Government as a power organized for their protection and upbuilding, a power whose duty it is to care for their individual welfare and success, forgetting that the Government under which we live is a political Government devoted solely to the advancement of our political interests; not in any way a business Government established for the purpose of making money, but established for the purpose of protecting the political rights of the people, such as life, liberty and the pursuits of happiness. To take any other position means that we depend on our Government to help us make a living. Some may say that we do this when we ask for a tariff. But that is hardly fair, for tariffs are made for the country and not for individuals; for the development of industries that will add to our population by increasing the opportunities for work, stimulating immigration, that our land may be tilled, our factories may resound with the busy hum of whirling wheels, our mines yield their wealth and the white wings of our commerce dot every sea.

It is argued by some that the parcels post is for the greatest good of the greatest number; that the consumers will receive the benefit, and as they are the largest majority therefore the enlarged post parcels will be a national benefit. In the development of this idea it is proposed that all the needs of the consumer shall be supplied by transportation facilities furnished by the Government, and so there will be no need of express service or other private means of transportation, for the Government will assume the transportation of all goods and will take care of all of the commerce of the country.

A New Scheme.

The new scheme suggested by the postal reformers is under the plea that it is a movement of the Manufacturers' Association of New York. In the furtherance of this project there has been issued and sent broadcast over the country a little folder, sometimes blue and sometimes green, purporting to come from the Manufacturers' Association of New York (who these manufacturers are or who are the officers of the association is not stated) urging those who receive the folder to sign their names to a portion of the folder and send it to their Congressmen, and this is what they want sent:

"1. Letters and sealed packages at 1 cent. per ounce or fraction.

"2. All mailable matter at a rate high enough to direct the large bulk of merchandise to natural channels of distribution, but low enough to serve the useful purpose of a parcels post."

In 1904 a measure was introduced in Congress by the postal reformers proposing to carry a pound for a nickel and 11 pounds for a quarter, and in favoring this law they argued as follows: "To the American to-day the most important department of public intelligence is the advertising department. . . . The cent a pound publishers' post makes this news available. Any attack on this service is an attack on every business advertiser in the publishers' columns. The Postmaster-General's proposed increase from 1 to 4 cents per pound in the tax on the circulation of the magazine press would not only do a grievous wrong to the publishers and to the reading public; it would seriously damage the business interests of the country."

This year in arguing for the two rates of postage, they say: "The products of industry and agriculture follow the natural channels of distribution via the transportation lines to wholesaler and retailer. There is one exception. The publishers of second-class matter have a special channel of distribution direct to consumer, provided by Congress—namely, the United States mail. Their product is taken in bulk, without stamps, at 1 cent per pound, while the product of every other industry is compelled to pay 16 cents per pound and stamp each package. The result is that 67 per cent. of the total matter carried is of the second class, which produces less than 4 per cent. of the total revenue. The subsidy to publishers in second-class mail rates precludes the press from printing these facts."

Last year it would be a grievous wrong to increase the tax to the publishers. This year they demand equitable laws that will do away with "the waste and abuse" that prevails "under the laws now operative."

Printed Matter Not Merchandise.

To refer to class magazines and newspapers as mere merchandise is neither fair nor true. The standing of our country among the nations of the world is largely due to the facilities we have enjoyed to gain knowledge and information by the almost universal distribution of the newspaper and magazine that comes daily, weekly and monthly to our homes.

Proposed Plan is Unreasonable.

With one cent postage on letters and only one other class of mail matter, our mails would be burdened with such an amount at so unprofitable rates as to seriously cripple the entire system. Besides there is no equity in sending merchandise a long and short distance at the same price. It costs more to send merchandise a thousand miles than it costs to send it one. Now if that is true then the act of the Government carrying any merchandise in the mails is radically wrong. It is not fair to charge no more for a long haul than for a short one, for the long haul gets transportation for less than it is worth. It is not just to the short haul to pay as much as for the long haul, for then the charge is excessive. It is not equity for an average to be struck between the cost of the long and short hauls, for then some are favored at the expense of the others. To carry out the proposed modification of the postal laws would result in throwing the large majority of retail trade to the large cities. But, says the advocate of the new ways: "See what low prices the consumer will get." Is it always profitable for the consumer to get the lowest prices? Does not the consumer pay too much, no matter what the price, when he destroys his home market? Does the consumer gain anything when he sends his money away

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.

from home; when he has no selection of the goods he buys; when he has to take what is sent him whether it pleases him or not? When he contributes to the wealth of great city stores, who never in any way help him to bear the burden of his taxes, who are interested in none of his home improvements; who add in no way to the tax duplicate of his community, who never buy any of his products, and so keep the money he has paid out in circulation in the community where he lives, but are ever a drain on his resources. Do you say that the low prices given the consumer compensate for all these drawbacks? Will the enlarged post parcels be a good thing for this country if the results follow as they have followed in other countries where it has been thoroughly tried in the concentration of business in the large cities? Is there any business sense in the Government undertaking to carry merchandise at five cents per pound through the mails when it costs sixteen cents per pound for transportation and the other necessary expenses for handling? Can we endorse any line of action on the part of the Government that looks to its entering into active competition with the citizens in business enterprises?

Post parcels is a delusion, the scheme of radical men who look to countries governed by monarchs and kings for their inspiration, and who are willing to have our Government supply our wants and minister to our comfort. It is not favor that we want but a fair chance to earn an honest living in competition with our fellows.

STEEL BARRELS FOR SHIPPERS.

The Chicago Hardware Foundry Co., North Chicago, Ill., is shipping its small castings in steel barrels weighing 48 pounds empty, and the company is given a very favorable return freight rate on empty barrels. When a barrelful of castings is shipped it is locked and the consignee is sent a key for unlocking. A tally of the contents of each barrel is chalked on the under side of the hinged lid for convenience in checking invoices. The shippers inform us that the system, while involving some expense at the outset, is economical in the long run, as it prevents many claims for shortage in count and also preserves the castings from damage in shipment. The barrels used by the company are furnished by the Cleveland Wire Spring Co., Cleveland, Ohio.

INCREASE IN CARRYING CAPACITY

Canadian Pacific Railway officials announce that the contract for double tracking the road from Fort William to Winnipeg has been let to Foley Bros., who will commence work immediately near Kenora, Ont.

As a result of this double tracking, and the reduction of the maximum grade to four-tenths of one per cent. for both east and west-bound traffic, it is stated that no less than thirty per cent. will be added to the hauling power of every locomotive on that section of the road.

It is estimated that about forty miles out of the entire distance of 427 miles will have to be completely diverted, and a new roadbed built. Three tunnels will be enlarged to accommodate the two tracks, and, between Eagle River and Telford, a good part of the road will have to be cut out of the rock.

This is a very expensive undertaking, and one of great difficulty, but it is necessary to increase the carrying capacity of the Canadian Pacific, from Lake Superior to the wheat fields of the west.



EVADING QUEBEC TAX.

MONTREAL customs officers are authority for the statement that the law recently passed by the Quebec Government imposing a tax of $300 on foreign commercial travelers doing business in Quebec is driving away much business that formerly was transacted in Montreal and other cities and towns throughout the Province.

Representatives of European and United States houses object to pay such a high fee, and various methods of evading the law have been devised. The customs officers have discovered that considerable business with Montreal houses is being done at Ottawa. The scheme that has been extensively adopted is for travelers to take quarters in Ottawa and invite Montreal merchants to take a free trip to the capital as their guests. This generous invitation is accepted, and the Montreal man gets a pleasant and at the same time profitable outing. The Ottawa hotel gets the extra patronage. The railways get the same fare as if the traveler went to Montreal. The traveler in fact may pay a little more for the merchant's ticket than he would for his own, but he saves the freight on his samples. The Ottawa cabman drives them around instead of the Montreal cabman and Ottawa's charms are viewed and advertised instead of Montreal's. This is made possible on account of there being no tax on travelers in the neighboring Province.

Again, foreign firms rent small offices in Montreal in which their representatives display their goods, and, having such local offices, they are exempt from the special tax.

A HARDWAREMAN'S JOKE.

An elderly man who poses as one of the best hardwaremen of Western Canada, was recently accosted in a Vancouver store by a young maiden of about twenty summers, who wanted to purchase a coat hanger. After she had made her request known to him, he drew himself up to the full height of his stature and importance, and with a solemn shake of the head, said in deep, sonorous tones: "No, ma'am, I am sorry we have none, but here are some fine pant hangers."

CATALOGUES, BOOKLETS, ETC.

When sending catalogues for review, manufacturers would confer a favor by pointing out the new articles that they contain. It would assist the editor in writing the review.

National Stoves and Ranges.

MOFFAT STOVE CO., Weston, Ont. have just received their annual catalogue No. 12, from the printers. The volume comprises 80 pages and cover, also including a copy of the guarantee given to every purchaser of stoves and ranges made by the Moffat Co. The book is an interesting one and should be in the hands of all stove dealers. Mention Hardware and Metal when writing.

Fire Arms Card.

Purvis Bros., Sudbury, are enclosing in their letters a neat card announcing the prices on a special importation of guns, rifles, revolvers and ammunition. The idea is up-to-date and should be a business getter.

Page Woven Wire Fence.

Wire fencing is neatly illustrated and well described in two booklets being supplied the trade by the Page Wire Fence Co., Limited, Walkerville, Ont. All classes of goods are dealt with and prices are given. Mention Hardware and Metal when sending for copies.

Camp Steel Ranges.

"Walker" camp steel ranges for lumber, railway and construction camps, hotels, boarding and farm houses, are illustrated and written up in a folder just sent us by the company. Prices are given on the various styles. Other advertising matter is included, describing the "Walker Star," a small steel range; the "Walker Pilot Steel Range," etc. Stove dealers desiring to get in touch with these lines should mention Hardware and Metal when writing.

BUSINESS CHANGES.

Ontario.

McLean & Tupling, blacksmiths, Southampton, have assigned to G. E. Smith, and a meeting of creditors will be held Sept. 12th.

Quebec.

The assets of L. Monarque, harness maker, Montreal, have been sold.

J. H. Blais, tinsmith, Napierville, has assigned. Is offering to compromise.

H. A. Depocas has been appointed curator to J. E. Gratton, plumber and roofer, Montreal.

Nova Scotia.

E. Archibald, harness dealer, Truro, has assigned.

Manitoba and N.W.T.

Howard & Snow, painters, Battleford, have moved to North Battleford.

A. L. Legarce, hardware merchant, Duck Lake, has advertised his stock to be sold by Sept. 12.

The stock of J. A. Stovel, hardware merchant, Edmonton, has been advertised for sale by tender up to Sept. 21.



TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

912. A Manchester firm would be glad to obtain Canadian quotations c.i.f. Manchester, for ash turned for hockey blades, sizes 19 1-2 inches by 2 1-4 inches by 2 inches.

920. A Lancashire manufacturer of tinned and lead coated sheets wishes to extend his trade to Canada, and would gladly correspond with Canadian users of same.

928. A firm in a position to export in a large way such goods as bronze powders, barytes, china clay, dry color, French chalk, ochres, siennas, oxides and other chemicals, desires to correspond with buyers in Canada.

929. A Nelson (New Zealand) commission and general merchant desires to get into touch with Canadian manufacturers of furniture, stoves, curtains, sewing machines, hollow-ware, bicycles, etc.

NEW USE FOR METAL.

One of the uses of expanded steel lathing which, although practised in the United States for the past twelve years, has not been generally introduced into Canada, came before our notice this week. The Order of Sulpicians, who have charge of the administration of Notre Dame church, have been compelled to renew their cement pavement (which is about 100 feet long by 50 feet wide), in front of the church, owing to the extreme action of the frost, cracking the surface. In relaying this pavement they have introduced the expanded metal, as a bond which is expected to prevent any cracking in the future. The experiment was tried some three years ago on cement and concrete walks in the town of Westmount, and it has been very satisfactory, the sidewalks which were treated being themselves evidence of the substantial qualities attained by the introduction of the steel mesh.

CARBORUNDUM EXHIBIT.

An interesting exhibit and demonstration of the specialties made from carborundum was one of the features of the past two weeks at Messrs. Rice Lewis & Sons, Toronto, who are agents for both carborundum wheels and specialties in Canada. The wheels are now well known to the machinery and hardware trade throughout America, but it is only recently that the small stones for sharpening tools, knives, razors, etc., have been pushed before the attention of the trade.

Mr. Ernest W. Taylor, New York representative of the Carborundum Company, Niagara Falls, has been at Rice Lewis' during the past fortnight distributing samples of carborundum on paper and in small stones and demonstrating the powerful sharpening qualities of the stones by sharpening the dullest knife in a few seconds.

The Rice Lewis Company reports a very large sale of carborundum wheels.

H. S. HOWLAND, SONS & CO. LIMITED

HARDWARE MERCHANTS

Only Wholesale — 138-140 WEST FRONT STREET, TORONTO — Wholesale Only

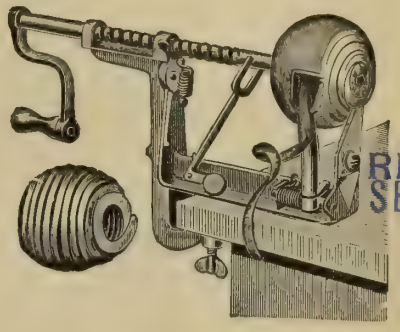
Apple Parers



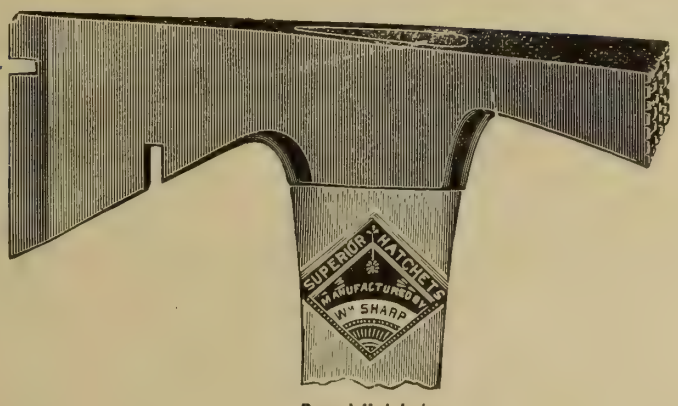
"New Lightning" Apple Parers.



"Rocking Table" Apple Parers.



"Little Star" Apple Parers.



Barrel Hatchets.



Fruit Picker.



Diagonal Cutting Plyers—for Fruit Packers.



No. 1 Fruit and Apple Barrel Header.

H. S. HOWLAND, SONS & CO., LIMITED

GRAHAM NAILS ARE THE BEST.

We Ship Promptly. Our prices are right

Factory: Dufferin Street, Toronto, Ontario.

When Your Customer Says :

"I want you to put in for me a heating plant that will be first-class in every respect," this reply will meet all the demands of the situation :

"Then I will use the

PEASE ECONOMY"

From your standpoint the installing of a Heating Apparatus presents two desirable opportunities—first, to add to your profits and, second, to please your customer and thus gain a permanent hold on his trade. How much easier to accomplish this when you use a Heater that is time-tested and sure—one that the great majority of our people know to be the best !

We can supply your every need in Heating Apparatus and we invite your inquiries.

Pease Foundry Co., Limited
TORONTO

Pease-Waldon Co., Limited
WINNIPEG

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

CANADIAN-BUILT locomotives are being purchared by the Grand Trunk Railway for its Canadian lines. The road has recently added to its equipment on the western Ontario lines 15 ten-wheel passenger engines and ten compound Mogul locomotives for freight service. These have been built and delivered by the Locomotive and Machine Company of Montreal. Still another 15 Mogul locomotives have been constructed and handed over by the Kingston Locomotive Works. It is the policy of the Grand Trunk's present management to use only Canadian-built engines on its Canadian lines. These are declared by W. Kennedy, mechanical superintendent of the road, to be carefully and strongly constructed, and to be admirably adapted for service on roads in the Dominion.

The Brantford Electric & Operating Company are installing a new steam plant.

The Dominion Copper Co. expect to build a new smelter in the Boundary district in British Columbia.

The Pittsburg Coal Company's new docks at Port Arthur are to have a capacity of over 1,000,000 tons.

The works of the Canada Saw Works at Ottawa have been closed and the plant and machinery will be removed to Montreal.

The American Radiator Company has placed $45,000 insurance on the Cockshutt buildings being bought by them at Brantford.

It is stated that the Grand Trunk have plans prepared for improving traffic facilities at London, which will mean the expenditure of $2,000,000.

Seattle capitalists propose to build two large sawmills on the west coast of Vancouver Island, one at Mosquito Harbor, Clayoquot Sound, and the other at Nootka Sound.

King Bros., Ltd., tanners, Whitby, are enlarging their works by the erection of a large leech house, 60x75 feet and three stories high. Much new mgchinery is also being installed.

The Colonial Portable House Company, Ltd., has been formed at Vancouver, capitalized at $10,000, to manufacture portable houses patented by Archibald Rowan, Vancouver.

The Western Electric Co. proposes to erect a factory 50x200 feet at Waterloo if the town guarantees their bonds for $16,000 for 20 years. Electric meters and trunk finishings will be manufactured.

Six carloads of bridge material are being forwarded from Amberg, Pa., via Vancouver, to Dawson for the construction of the Klondyke Mines Railway bridge across the Klondyke river at Dawson.

The Dominion Government has received a reply from the Imperial authorities in answer to the request to remove the embargo on Canadian cattle. The British Government, on a report of the British Board of Agriculture, has declined to do so.

The Hydro-Electric Commission, which is composed of Hon. Mr. Beck and Messrs. P. W. Ellis and George Pattinson, M.P.P., has handed in its report to the Government on the application of the municipality of Kenora to utilize the water-power of the vicinity.

Mr. D. H. Ross, Canadian agent in Melbourne, has cabled to the Department of Trade and Commerce that the Commonwealth Government had decided to re-enact the law adding the inland freight charges on goods from Canada and the United States to all invoices of shipments destined for Australia.

The Nova Scotia Steel & Coal Co. has just made a large contract with the Montreal Sugar Refinery for 25,000 tons of picked coal as a first instalment. The company expects to be raising coal at the new colliery in a few weeks. It is expected that the company's total output for 1905 will be the largest in its history.

A congratulatory banquet will be tendered President W. K. George, of the Canadian Manufacturers' Association, by the Montreal braoch of the association, on the evening of Saturday, Sept. 16th next, in recognition of the way in which he presented the views of the Canadian manufacturers during the recent British tour of that body.

The London Tool Company have awarded the contract for the framework of their new building, but whether it will be built in London or Hamilton remains to be determined. The framework is of steel, and may, of course, be placed anywhere. It will have dimensions of 110 feet by over 300 feet, so that the importance of the works may be readily estimated.

The Plymouth Cordage Co. are preparing to erect their plant for the manufacture of binder twine at Welland, Ont. Building operations will be commenced in the Fall. The plant will employ 500 men, and Frank Holmes, assistant treasuerer of the company, will be Canadian manager. The company have already contracted with one of the power companies for 1,200 h.p. The American plant of the firm is at North Plymouth, Mass.

The Westinghouse interests have bought a site on the Niagara frontier, on which they will build a great plant for the manufacture of electrical machinery. The site selected is on the Niagara gorge, below Niagara Falls, on a table land near the historic Devil's Hole. The Ontario Power Company's transmission line crosses the Niagara river at that point. The power company is said to be associated with the Westinghouse people in the deal.

According to a Pittsburg report, the billion-dollar steel trust has obtained possession of a club that will be of great assistance to beat competitors in the armor plate business into submis-

sion. Andrew F. Mitchell, employed in the armor plate department of the Carnegie Steel Co., Homestead, has been granted a patent on an improved process for armor plate manufacture. The principal cost in making armor plate is in heating the billets for pressure into shapes, and the annealing and carburizing. By the Mitchell process the cost of manufacture is said to have been reduced 50 per cent., while the plates are stronger and can more readily be machined, after being annealed and carburized. The trust will exploit the patent and the independents are described as being uneasy at the turn of affairs.

Companies Incorporated.

Builders' Equipment Co., Ltd., Winnipeg, share capital $120,000., The directors are A. Macaw, A. L. Bredin, L. C. Hazlett, J. A. Tanner and W. J. Cummings, all of Winnipeg.

The Jones & Moore Electric Co., Ltd. Winnipeg, share capital $75,000. The directors are J. W. Jones, of Toronto, and G. J. Hicks, L. M. Delbridge, J. C. Kavanagh, and C. W. Bradshaw, of Winnipeg.

Albion Stove Works, Limited, Victoria, B.C., share capital $30,000, purpose to take over the stove business of the Albion Iron Works. The provisional directors are J. A. Mara, F. S. Barnard and John Bryden, all of Victoria.

The Myres Iron Fence Co., Ltd., Winnipeg, share capital $35,000, purpose taking over the business of the Myres Fence Co. and the Canadian Implement Co. The directors are R. L. Myres, P. C. Young, W. F. Salter, T. G. Mathers, and E. Spice, all of Winnipeg.

The Improved Match Co., Ltd., Montreal, share capital $75,000, purpose to carry on a business as general merchants and manufacturers. The directors are H. D. Metcalfe, of Westmount, H. H. Snowdon, C. P. Metcalfe, C. J. Anderson, C. A. Morin, F. C. Saunders, all of Montreal.

N. J. Holden Co., Ltd., of Montreal, share capital $200,000, purpose to manufacture and deal in apparatus which may be used for or as incidental to the transportation of persons or property. The directors are L. Johnson, W. Palmer, A. L. DeGuire, P. A. Masse, and C. Bethell all of Montreal.

The E. Guillet & Sons Ltd., Marieville, Que., share capital $150,000, purpose to acquire and develop any water power in order to supply electrical power. The directors are E. Guillet, H. D. Guillet and H. W. Jewett, of Marieville, Que., J. H. McKechnie of Granby, and T. Gnaedinger, of Montreal.

The North River Power Co., Ltd., of Montreal, share capital $90,000, purpose to manufacture and deal in apparatus for the manufacture of electricity, etc., and tools, wire, lamps, etc. The directors are R. Bickerdike A. Fogarty, J. A. Mann, W. R. Stavely, all of Montreal, and H. W. Robertson, of the village of St. Andrews, Que.

The Anti-Mal-de-Mer Belt Company, Ltd., of Montreal, share capital $90,000, purpose to manufacture and deal in appliances for the prevention of seasickness, etc., and machinery, utensils, etc., pertaining thereto. The directors are C. C. Knight, E. A. Davis, E. J. Williams, G. E. Hyndman, and B. C. Howard, all of Sherbrooke, Que.



No. 20. OSHAWA, ONT. SEPT. 9, 1905

BUILDED BETTER

Builders who have been foreseeing enough to specify **Perfect Metal Lath** in their building estimates have reaped a hundredfold on their outlay by thus enhancing the property's value and lowering the insurance costs. Hardwaremen who have been foreseeing enough to know that **Perfect Metal Lath** would be bought from them or through them if they kept a stock, or kept in touch with its manufacturers, have reaped a harvest of dollars, with expenditures, minus a little persuasion, nil.

THAN THEY KNEW

So the Builders who bought **Perfect Metal Lath** at 10c. per sq. yd. and the Hardwaremen who sold it to them builded better than they knew. The one hearkened to Necessity and got Minimum Prices ; the other hearkened to Opportunity and got Maximum Profits. This story of "Buyer and Seller" success is being repeated every week, because the 10,000 sq yds. daily have to be sold. Of this huge output how much are **you** carrying, how much are you seeing sold by yonder merchant-neighbor who saw the folly of hesitating ? Or are you doing any business with our **Tile, Siding, Cornices, Store Fronts, Wall Covering,** etc., etc.? In these wares and **Perfect Metal Lath** there is **Business**—for **you** if **you seek** it.

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. **OTTAWA**—423 Sussex St. **TORONTO**—50 Yonge St.
VANCOUVER, B.C.—615 Pender St. **SYDNEY, AUSTRALIA**—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

EVERY BUILDER

SHOULD USE OUR ROOFING MATERIALS

YOU WILL KNOW THEM BY THE TRADE MARK

"DOMINION BRAND"

LOCKERBY & McCOMB, 65 Shannon St., Montreal

ATKINS HIGH-GRADE, CROSS-CUT SAWS ARE SUPERIOR TO ALL OTHERS IN MATERIAL, TEMPER, WORKMANSHIP, FINISH AND CUTTING QUALITIES.

OUR VICTOR, TUTTLE TOOTH AND SEGMENT GROUND SAWS ARE THE FAVORITES IN THE CAMPS



E. C. ATKINS & CO., INCORPORATED

Factories and Home Office: INDIANAPOLIS, IND., U.S.A.

CANADIAN BRANCH: 56 King St. E., Toronto, Canada.

LEADING MANUFACTURERS OF HIGH-GRADE, CROSS-CUT, HAND, BAND CIRCULAR, HACK, BACK, WOOD AND SMALL SAWS OF ALL KINDS

Write for Catalogue and Prices.

GURNEY CYLINDER LOCKS

THESE Locks represent the best there is in Lock construction.

They are not cheap Locks, though much lower-priced than the locks imported from the United States. The Hardware dealer serves builders perfectly when he sells them **Gurney Cylinder Locks**—they get the best locks constructed at a very considerable saving.



No. 1400

All Hardware Dealers Should Have Catalogue No. 7 and Supplements.

THE GURNEY, TILDEN CO., Limited

HAMILTON

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

A LABOR SAVING MACHINE.

A CEMENT concrete mixer, manufactured by the Goold-Shapley & Muir Co., Limited, Brantford, is a recent development which the demand for concrete work in large quantities has made possible. The machine, as will be seen from the illustration, is mounted on a truck which contains likewise a prime mover to operate the machine, the entire apparatus being automatic. It has a capacity of mixing 75 yards of concrete per day. The gravel hopper is low down so as to be easy of access to the operator who is shovelling in the material. On top of the machine above the gravel hopper is placed another hopper which holds the cement, when the desired quantity of gravel is in the hopper for this purpose it is tripped by means of a lever and is raised up until the gravel dumps into the large main drum of the mixer and as this gravel hopper is being raised it automatically turns a cylinder which is in the bottom of the cement hopper and the cement is dumped in with the gravel into the long drum. This cylinder under the cement hopper is so arranged that it can be set to dump cement in any desired proportion from 12 to 1 to 2 to 1, and will automatically do this until the adjustment is changed making a new mixture.

The mixture is mixed dry in the revolving drum until it reaches about one-third of the length of the drum and at this point there are cups on the outside of the long drum which in revolving pass through a trough placed under the drum of the mixer and take up sufficient water which flows out into the centre of the drum to properly moisten the mixture. This water is also automatically put into the mixer by means of a stop cock being opened under the supply tank, which is also placed on top of the machine, and when the gravel hopper is elevated it opens the stop cock allowing the water to flow down from the tank into the trough below, and the quantity can be regulated at will. The water is pumped up into the tank by the engine which operates the mixer, which is a gasoline engine, also manufactured by Goold, Shapley & Muir Co., and the same pump circulates the water round the cylinder of the engine keeping it cool and the water is then delivered to the tank above. Naturally this pump forces more water into the tank than is required and an overflow back to the barrel or tank in which the water is stored is supplied, making the water supply continuous and regular.

TALL BUILDINGS.

The highest occupied structure in New York and in the world, is the Park Row building, opposite the postoffice, which has thirty-one stories, including the towers, whose crests are 390 feet from the ground. Without the towers, "under the roof," as the architects say, which is 336 feet from the ground, are twenty-eight stories with 950 office rooms. The building cost $4,000,000.

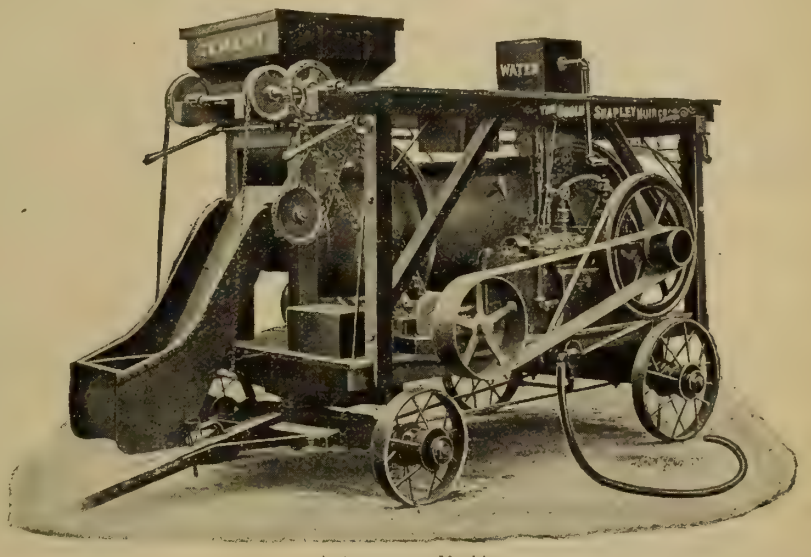
The next tallest building is that of the Commercial Cable Company. The roof is 317 feet from the ground, with twenty-one stories. The building of the National Bank of New York is 312 feet high, with twenty-two stories; the New York Times, 310 feet, with twenty-one stories; the American Surety Company building, 308 feet with twenty-one stories; the Hanover National Bank, 300 feet high, with twenty-three stories, and D. H. Burnham's Flatiron building is 300 feet high, with twenty-one stories.

BUILDING NOTES.

A $45,000 maternity hospital is being built at Edmonton.

A new English Lutheran church is to be erected at Winnipeg.

An engine house is to be erected at Pictou by the Intercolonial Railway.



A Labor-saving Machine.

A three-story brick hotel is to be erected at Fort Frances by local men.

Judge McCrimmon and W. M. Pringle are erecting new residences at Whitby.

Tenders are being called for the construction of a town hall at Arcola, Man.

New York capitalists are to build a large seven-story hotel at St. John, N. B.

Kelly, Douglas & Co., Vancouver, are to spend $75,000 on a new eight story warehouse.

Wm. Grace & Co., Winnipeg, have secured the contract to build the new town hall at St. Boniface, Man., the price being $33,801.

The Alberta Building Company has secured the contract to build the new 150,000-bushel elevator for the Calgary Milling Company.

John Crerar, of Chicago, has let the contract to F. Doherty for the erection of a business block on Simpson street, Fort William, 75x50, solid brick, two stories, and a modern building in every respect.

Ald. Edward Cook, Vancouver, is building a $30,000 warehouse on Water street in that city. Pither & Teiser, liquor wholesalers, Victoria, are also erecting a three-story warehouse in Vancouver.

The contract for the erection of a new steel business block at Forest has been awarded to C. McLean and N. McCordic. The new building will be two stories high, and will be built of cement blocks. It will be occupied by the Arcade Hardware and other stores. The cost will be about $8,000. The cement blocks will be furnished by the Forest Cement Building and Construction Co.

MONTREAL BUILDING PERMITS.

E. Gagnon, Aylevin street, Hochelaga ward, dwellings, $2500.

Euclide Desrochers, 433 Breboeuf street, dwellings, $1500.

Conrad Courtais, 616 Delorimier street, dwellings, $2000.

Mrs. Zacharine Desrochers, 9 Lalonde avenue, dwellings, $2000.

Joseph Lamoureux, 123 St. Hubert street, dwellings, $5500.

Canada Paint Co., Ltd., 570 William street, warehouse, $2700.

H. Wener, Logan street, Papineau ward, dwellings, $48,000.

Geo. Delisle, St. Andre street, St. Denis ward, dwellings, $1400.

Jos. N. Labelle, La Salle street, St. Denis ward, dwellings, $1500.

Mrs. F. Stephens, 1825 Notre Dame street, alterations to store, $7000.

Mrs. Zepherina Desrochers, Hochelaga street, Hochelaga ward, dwellings, $2,000.

J. E. Trepanier, 882 St. Lawrence street, alterations to dwelling and store, $2300.

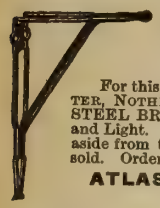
Nap. Deschamps, 788 St. Lawrence street, alterations to dwelling and stores $3600.

Dominion Cotton Co., Hudon street, Hochelaga ward, alterations to warehouse, $1400.

The Wm. Davies Co., Ltd., St. Denis

STREET PAVING and SIDEWALKS a SPECIALTY

SILICA BARYTIC STONE CO.
OF ONTARIO Limited
Head Office:
Ingersoll, Ontario.
Walter Mills, General Manager
Ask for quotations for Septic Tanks.
Water Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc.


Will Hold Up a Shelf!
That's what a shelf bracket is for.
For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.
ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH
Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—
CHARLES D. PHILLIPS,
Cables— "Machinery," Newport.
Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited
HANOVER, ONTARIO
Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.
Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
J. McLAUCHLAN, President.

Don't Forget the Name...
NEWMAN'S INVINCIBLE
FLOOR SPRINGS
Strong, Quick, Reliable, Effective.
Will close a door against any pressure of wind. Far ahead of ordinary door springs, pneumatic or otherwise. Ask your wholesaler.
W. NEWMAN & SONS, Birmingham.

WORK AND PRICES RIGHT
GALVANIZING
ONT. WIND ENGINE & PUMP CO. LIMITED.
TORONTO, ONT.

...FULL STOCK...
Salt Glazed Vitrified
SEWER PIPE
Double Strength Culvert Pipe a Specialty.
THE CANADIAN SEWER PIPE CO.
HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

street, St. Louis ward, alterations to dwelling and store, $3500.

A. A. Gravel, St. Lawrence street, St. Jean Baptiste ward, alterations to dwelling and stores, $2300.

TORONTO'S BUILDING GROWTH.

The great increase in building operations during the past year in Toronto is shown by the following figures: Approximate value of buildings for which permits were issued Jan. 1 to Aug. 31, 1904, $4,010,613; 1905, $7,068,779. For August, 1904, $540,180; 1905, $1,417,155. Number of buildings erected Jan. 1 to Aug. 31, 1904, 1062; 1905, 2163.

CEMENT WORKS FOR CALGARY.

R. P. Butchart, managing director of the Victoria Cement Company, has decided to begin manufacturing cement at Calgary and is preparing plans for the works.

ADVICE TO YOUNG CLERKS.

ALL kinds of clerks begin well; a new broom sweeps clean. But your employer will judge you by the way you wear, not by the way you start in. Lots of good starters are poor finishers.

Be prompt. One of the first things for a man to learn if he expects to be a business man is the necessity for promptness. Tardiness may do in swell society, but it won't do in business.

There's a right way to do everything. You probably will do most things the wrong way first. When you do find out the right way, remember it.

Keep busy. As long as there is a bit of dirt in sight, you have no excuse for being idle. You have no excuse for being idle anyway. There are a thousand things to do without waiting to be told.

Don't get the notion in your head that most of the old-fashioned, fundamental rules are exploded theories, and that you have a lot of new ideas that are going to revolutionize business. Revolutions are not so easily started, and many of them end in smoke anyway.

Be a man. Now that you have started in business life, just drop out the fool boy tricks that are a nuisance to everybody but boys. Take your job seriously, but don't be gloomy and solemn.

Do little things with the same degree of care that you use in the more important things. If you have ideas, don't be afraid to suggest them to the boss, but think them over a little and weed out the nonsense first.

Find out where things are. Keep looking over the stock until you know just where to get whatever is asked for. That is one of the first ways to make yourself valuable; be able to wait on trade without keeping them waiting.

Keeping things in their places is more than necessary. It will enable the buyer to know what to buy and the seller to know what to sell. Don't leave things out of place a minute longer than is necessary.

Be affable and courteous. Be polite to the ladies and to everyone else. Don't hurry your customers. Make them feel that you have time enough to get them anything that they want and to show them goods besides.

Hand people their change or packages.

CARRIAGE SPRINGS & AXLES
ANCHOR BRAND
GUELPH AXLE WORKS
THE GUELPH SPRING & AXLE CO. LIMITED
GUELPH, ONT.

$ $ $ $ $ $ $ $ $ $
CONTRACTS
mean dollars for the pockets of contractors. The weekly reports in the
CANADIAN CONTRACT RECORD
Tell where contracts may be had
$2 per year buys them. Address
THE CONTRACT RECORD
TORONTO, MONTREAL, WINNIPEG and VANCOUVER.

The Best South Wales Produces
IN STEEL COKE TINPLATES
"ELYN"
"LYDBROOK"
"ARTO"
"FRONTIER"
IN CHARCOAL TINPLATES
"CYMMER"
"ALLAWAYS"
"JUANA"
"SPARTAN"
FRANKLIN SAUNDERS & CO.
Limited
MONTREAL
Wholesale Trade Only Supplied

Don't lay the money down somewhere in their vicinity for them to pick up.

Make your packages neat. Make them conspicuous for their neatness.

Don't you make a single sale that you are not absolutely positive you are allowed to make, and then be positive that you are right before you make it. Get into the habit of being right the first thing.

Don't be cocksure. Just make up your mind that you don't know a thing—that you probably don't even suspect anything. Few men get over the cocksure period before thirty. You might try to be an exception.

You are liable to be called to wait upon very particular people at any moment. Always appear as neat as possible to customers.

Don't wear a chip on your shoulder. A good many people will be impertinent to you, but you can't afford to resent it. Be above getting angry when customers show their ill breeding.

The proprietor wants you to draw to the store all the trade you can but that does not mean that he wants your friends to get into the habit of loafing there. Loafing is the bane of many a store. Do all you can to keep it from hurting yours.

Identify yourself with the store to the extent of keeping up the same interest in the business that you would if it were your own.

Be honest with yourself and you will be honest with everybody else. Never compromise when it is a question of honesty. Keep the difference between "yours" and "mine" firmly fixed in your mind.

Don't slouch around. Don't sit on the counters and don't act as if your backbone was rubber. Be erect and alert.

You may think that it is none of the boss's business what you do outside of store hours. You are mistaken. It is very much his business, though he probably will not say a great deal about it. The first intimation you are likely to get of his being interested will be an invitation to look for a new job.

Leave alcoholic drinks alone. A resolution to that effect admits of no possible qualification or exception.

Take pains with the children. They very soon grow up and children are most discriminating customers that come into a store. They know every time when they are treated well and they report things at home.

Your salary is small, but you aren't worth much; in fact, the boss is taking some chances in keeping you at all, and it won't be wise for you to discount your future wages. Keep down expenses and then your creditors won't be asking your employer to help them collect their bills against you.

If your boss is the right sort he will raise your wages sooner than he said he would—if you are worth the raise. Better be worth it.

When you set out to do a thing, do it! Don't be a quitter. Be thorough.

Don't hang around the door of the store, either inside or outside. Don't be a sign telling people that there's nothing doing.

Keep close watch of the advertising that the store is doing. Read it carefully and know what to expect customers so call for.

Try your own hand at ad. writing. The employe who can write ads. is always in request.



RETURNED
NOV 23 1905
To Montreal
Cut Book 43
page 81

A Profitable Line

It's time to think about Horse Shoes. It will pay you to give the matter some good solid thought. There's money in it for you, if you handle the right goods—goods that will bring satisfaction to your trade and hence to you.

"M. R. M." HORSE SHOES

embody all points that go to make up a shoe of the highest class. There's more "quality" in them than any other shoe. The Blacksmith appreciates it. More sold than all other brands confirms our claims.

THE MONTREAL ROLLING MILLS CO.

Niagara Trace Chains



CHAINS

OF PERFECT CONSTRUCTION AND UNIFORM STRENGTH

The result of fifty years of Experience and constant Improvement. They are unequalled.

MANUFACTURED BY

ONEIDA COMMUNITY, Limited

NIAGARA FALLS, ONTARIO

THE LARGEST WELDLESS CHAIN MANUFACTURERS

23

Aluminum Oil Heaters

Sales have passed the million mark. After reading the following letter you'll know why:

BUTLER AND JOHNSON

JOBBERS AND RETAILERS OF

STOVES, RANGES, FURNACES, and HOUSE FURNISHING SPECIALTIES.

SPLENDID OIL STOVES, GASOLINE STOVES, REFRIGERATORS, ICE CREAM FREEZERS, LAWN MOWERS and ALUMINUM OIL HEATERS.

229-231 E. GENESEE ST.

Syracuse, N.Y., April 11, 1905.

METAL STAMPING CO., JACKSON, MICH.

Gentlemen,—The time is approaching when we desire to line up on Oil Heaters for another season. As you are successors to the Novelty Mfg. Co., permit us to say that our records show that we have sold over 50,000 Aluminum Heaters during the last ten years, and we think your records, or rather their records, will disclose the fact that we have never returned a single Heater for repairs or otherwise.

We bring this matter to your notice as we believe we are entitled to some consideration beyond that of the average purchaser. Please weigh this matter and let your Mr. Smith come to us as early as convenient, fully equipped and prepared to close contract along these lines.

Trusting our business relations with you may continue as pleasant as they have been with your predecessors in the past, we remain,

Yours truly, BUTLER & JOHNSON.

When you sell an Aluminum Oil Heater you've made a satisfied customer.

You won't have to send a clerk out to clean and rewick it. You'll never hear from it afterwards except in words of praise.

They never come back for "repairs or otherwise." Isn't it the Oil Heater for your trade?

Put in your orders promptly. Demand is coming in in double measure right along.

METAL STAMPING CO., DEPT. 12
JACKSON, MICH., U.S.A.

W. J. McMURTRY, GALT, ONT., Canadian Agent.

STOVES AND TINWARE

THE PARLOR HEATER.

THE pleasure to be derived from a fire in the living room will continue to be enjoyed by many notwithstanding the efforts to install central heating plants in the basement to warm all the rooms in the residence. Manufacturers af fine parlor stoves are gratified with the number of orders now on their books and will be able to ship to their customers at an early date. These orders show a substantial improvement in the number of fine parlor stoves over the sales of two and three years ago. Reports are to the effect that the tendency toward the larger and more expensive base burning heaters is very marked and that cheaper stoves, instead of suffering by this change of feeling, are still in good demand. Of late years a considerable expense on the part of manufacturers has resulted in the development of some very handsome designs in parlor stoves. These stoves are not only beautifully nickel plated, but the ornamental parts are designed to harmonize with the graceful lines and character of the stove. From being a thing of stern utility in the past, the modern stove is by no means out of place in the handsomely equipped apartment. In the cold days of Winter besides the warmth afforded a good cheer is spread from the burning fire through the large mica windows now a feature of the most popular constructions. The stove dealer will increase his trade by adding these heaters to his line of samples. The proper display of them will fill his visitors with the desire of possessing them.—Metal Worker.

AN IMPROVED ASH SIFTER.

THOSE who are in habit of building their kitchen fires afresh each morning will be interested in a recently invented ash-sifting device. The device is arranged to permit of sifting the ashes without filling the surrounding air with dust. The improved sifter comprises a box consisting of the main or body and an upper auxiliary section. These sections are fitted together with a tight joint and are securely fastened with hasps and turn buttons. The upper section is provided with a hinged cover which, when closed, forms a dust-tight joint therewith. A hasp and turn button lock the cover in closed position. A handle on this cover provides means for carrying the device. Sockets are formed in the upper edge of the auxiliary section, at opposite sides, to provide bearings for a shaft. This shaft carries a tray which is rigidly attached to it. The cover of this tray consists of a screen of semi-cylindrical form. The shaft is operated by a lever thereon which carries a crank handle at one end. Normally the shaft is prevented from turning by studs at each end of the lever, engaging lugs on the outside of the upper section. In use the pan of ashes which is to be sifted is placed in the tray and the screen cover is then fastened down, also the main cover of the device. Then the lever on the shaft is pulled outward so as to clear the lugs. The handle may now be rotated to invert the tray and pan of ashes, after which it should be rocked back and forth to sift the ashes through the screen. When the screen has been sufficiently rocked, the lower section may be disengaged to permit removal of the ashes. This body section is provided with two bails which may be swung over, when the body part may be readily lifted and carried in one hand. Legs are formed on the bottom of this section to space it from the floor and thus prevent scorching the floor or carpet when hot ashes are sifted. A patent on this ash sifter has recently been granted to Mr. Eugene A. Bagby, Bowling Green, Ky.

A DEAD INDUSTRY.

PEWTERERS no longer flourish, says the Washington (D.C.) Post. Vessels of pewter, in fact, are now mainly prized as antiques, and are little used because of the fear that food placed in them may take on a poisonous character. Yet there are still a few pewterers.

They are mainly native Germans. If they make platters and the like it must be in response to a demand for counterfeit antiques, and they are otherwise chiefly employed in casting tops for drinking vessels.

Most persons think of the warming pan as a forgotten utensil superseded by the rubber bag, but some old-fashioned folk still use the warming pan, and it is made of pewter. You may have a German pewterer make you a warming pan to hold a quart of hot water for $5, and it will outlast a dozen rubber bags. The pewter warming pan is the smoothest, neatest thing imaginable, with a double stopper, also of pewter, and thickness enough to insure its durability.

The main business of the modern pewterer is to make tops for beer mugs, pitchers, molasses jugs, and the like. His utensils are many curious molds of hard wood, smoothing tools of various forms, a bucket furnace, and a suitable cupel for holding the molten metal.

As to the metal itself, it comes in sheets of moderate thickness, which the pewterer chops up into scraps when he is ready to melt and mold his metal. Pewter melts at a relatively high temperature and cools rapidly, so that the pewterer's work is done with great expedition.

He will make you a plain top for your beer mug for 30 or 40 cents, and an ornamental top for 75 cents or $1. The molds are of many shapes and sizes, and when you have a mug to be capped you may pick and choose among them until you get a design to your taste. If you wish your name cut in the lid the pewterer will do it for you for a small additional charge.

Wise Germans, who keep their own mugs at their favorite saloons, go to the pewterer for lids, for every now and then some fellow-drinker who notes that his table mate has an uncovered mug comes the old student trick of capping it with the bottom of his own mug, which entitles the whole company to have their mugs filled at the expense of him whose mug is without a lid. If you will drink beer with your cronies it is well to make terms with the pewterer and contribute something to the maintenance of a dying trade.

STANDARDS OF TIN PLATE.

A SUGGESTION made by Mr. W. A. Fingles at the recent convention of the National Association of Master Steel Metal Workers at Milwaukee was that the manufacturers make four different kinds of tin plate instead of the large number of varieties now produced. Mr. Fingles said:

"The selecting of tin plate could be very much simplified if makers would adopt varieties as follows: 8, 15, 25 and 40 pounds of coating on sheet plates and 15, 25 and 40 pounds of coating on charcoal iron plates.

"At the present time plates run 8, 12, 15, 25, 30, 36 and 40 pounds of coating. This is too many varieties, and the difference in the amount of coating on them is too small. Four grades would be ample for every requirement and would simplify specifications, eliminate contentions and have a tendency to encourage architects to specify tin where they now specify other material. By using our influence as buyers with the manufacturers to withdraw from the market the 12, 20, 30 and 35 pound coated plates I am sure they would be benefited as well as ourselves, as the difference between the plates could be readily distinguished and the selection of tin plates would not be such a problem to architects, builders and to the tinner."

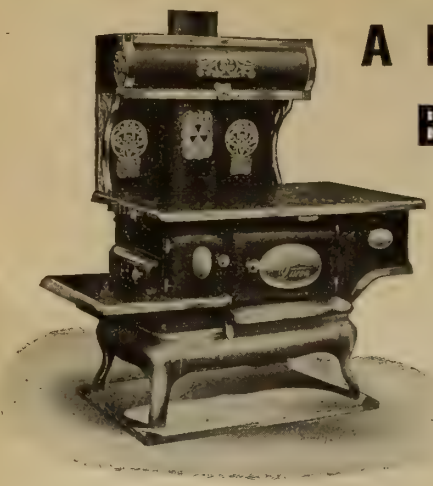
After some discussion a motion was carried that the tin plate makers be requested to limit the variety of roofing plates made to four different grades. A motion that the members purchase only guaranteed roofing plates was unanimously carried by a rising vote.

STOVE ITEMS.

Kelsey warm air generators will be used to heat and ventilate the new Boston Presbyterian Church at Mansewood, Ont. The James Smart Mfg. Co., Brockville, have the contract.

Keep catalogues handy so that you can order repairs intelligently. In many catalogues the parts of the stoves are shown together with the names, making ordering very easy. Give all the information possible when ordering repairs to a stove. The make and number of the stove, year or patent, etc., are all important.

How about your trade in stoves during the coming winter? Have you ordered a good stock? Aside from the prosperity of the farmers—which is governed by the crop—there are other things to take into consideration. Did the trade like that line you had last winter? Did it give universal satisfaction? If not, what was the chief trouble? Was it as high priced a stove as you could easily sell? Was it a fuel saver? Did it burn well the coal most commonly used in your section? Did you order too few or too many? Were larger firepots wanted, or smaller? These and a few hundred other questions the dealer must put to himself if he wants satisfied customers.



A PERFECT BAKER

—

The Empire Queen Range

is constructed to produce perfect baking. The heat is spread uniformly on all sides of the oven. After leaving the fire-box, it passes over the top of the oven, down the back and under the oven, up the back and over the top of the oven into the smokepipe, thus insuring the quickest and most satisfactory results. These are some of the good points about **THE EMPIRE QUEEN RANGE**—and there are many more.

Wouldn't you like the Booklet?

The Canadian Heating & Ventilating Co. Limited

OWEN SOUND, Ontario

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.



Sterne's Asbestos Stove and Furnace Cement

is in the stores of Hardwaremen who know the best and want it. You, of course, are thinking of getting a trial order. We will send any quantity, any time.

Prices furnished direct by

G. F. STERNE & SON, MANUFACTURERS, BRANTFORD, ONT.

We Make

accurate fitting **Fire Bricks** in a multitude of styles. Prices low. We also make

Furnace and Stove Cement and Stove Castings

We would like to correspond with you, give you our catalogue, forward you our prices. Write.

JONES BROS., - Bracondale P.O., Ont.



BASE BURNERS

are now in demand.

The base burner you want to buy is the base burner that will sell—the one with some individuality.

The GRAND IDEA is just a a little different from anything else on the market.

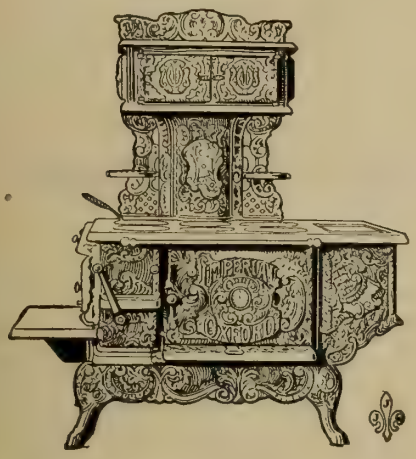
A little better and a little more up-to-date.

THE GUELPH STOVE CO., LIMITED

GUELPH

OUR SUCCESS IS MUTUAL. We realize it fully, and for sixty years have studied how to make the best range possible and give the dealer the best profit possible for selling it. Dealers who handle our goods can tell you how very satisfactory and profitable it has been for them.

Our guarantee bond is given with every range we sell



THE IMPERIAL OXFORD RANGE

contains more meritorious features than any other range ever made.

A SUPERB OVEN The Diffusive Oven Flue used only in the Imperial Oxford not only conveys the heated air in the most perfect manner, but acts as a ventilator as well. The most delicate pastry is baked exactly right and there is never any confusion of flavors. The draw-out oven rack is a great convenience in basting roasts.

DRAW-OUT DUPLEX GRATE This is not only the most perfect grate for burning fuel, but greatly facilitates repairs, as the bars are easily removed, without disturbing the fire-box linings.

A SPLENDID FIRE-BOX The fire-box in the Imperial Oxford is accurately proportioned to the oven size and always provides an adequate amount of heat. The water-front is exceedingly powerful and the reservoir is designed so as to yield a large supply of hot water at any time. The fire-box can be changed from coal to wood-burning with the greatest ease.

These are only a few points of superiority. Our handsomely illustrated catalogue giving complete details is sent on request. If you do not know the Oxford goods you should make their acquaintance at once. They yield handsome profits to you and perfect satisfaction to your customers.

The Gurney Foundry Company, Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal

The Gurney Standard Metal Co., Limited, Calgary, Alta.

THE CO-OPERATIVE IDEA



The Walker Pilot Steel Range affords more profit and more satisfaction than any other.

Live dealers everywhere commend the strong stand we have taken in maintaining proper profits for them.

Remember, perfection does not entirely consist of grey hairs—our Walker Pilot Steel Range, now one year on the market, has proved its worth many times over. It is staunch in its construction, modern and practical in its get-up, and goes hand-in-hand with a growing bank account.

Better get our agency and reap the benefits of dealing with a firm who co-operate with you for your benefit.

Let us hear from you.

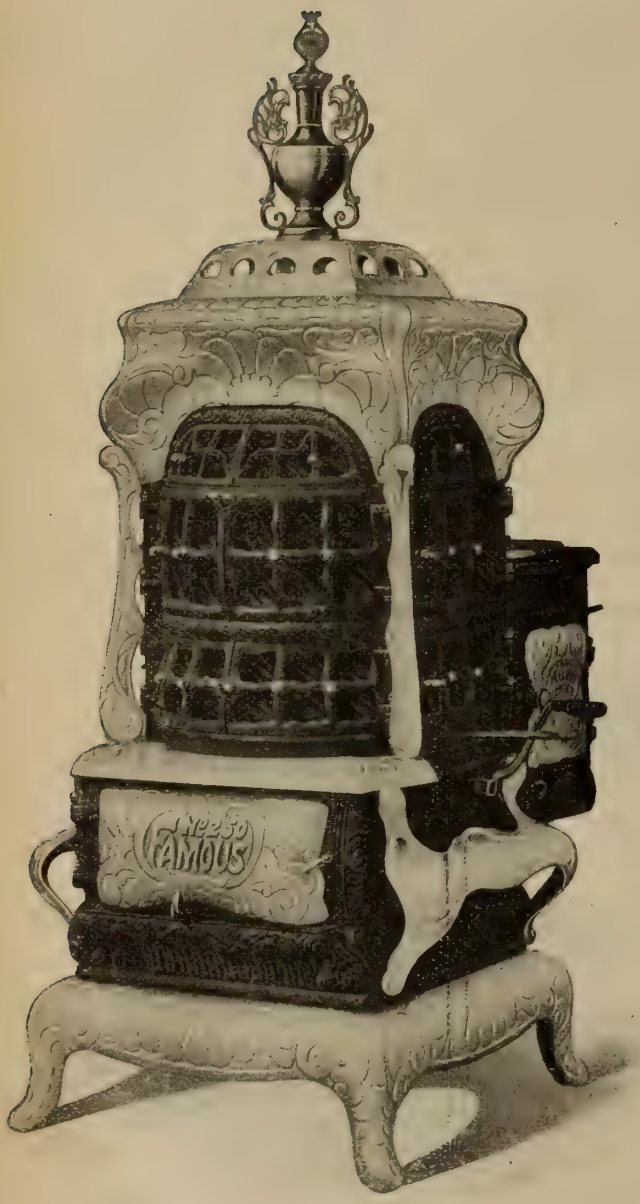
WALKER STEEL RANGE COMPANY

LIMITED.

Grimsby, Ont.

"Famous" Base Burners

SERIES 230



Made also for Parlor

Three-Flue Base Burner

For Hard Coal

This stove is exceedingly heavy and durable, while the quality of the castings, finish of the nickel parts, ornamentation, close fitting of the doors, mica frames and all joints are of the very best workmanship.

Has been given a new and beautiful nickel dress, making the stove thoroughly modern in appearance.

The grates are a heavy duplex pattern, and are strong enough to grind up the hardest clinkers without breaking.

The fire-pot can be easily taken out by sliding the lower part of the magazine up and drawing the pot out through the front doors. Is replaced in the same way. The pot revolves, which saves continuous wear on one spot.

The three-flue construction, which is found only on this stove (others having but two flues), gives an increased radiating surface and produces nearly one-half more heat from the same amount of fuel.

Printed matter, including all our Base Burners, sent free to any dealer.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:

JOHN BAYNE MACLEAN

The MacLean Publishing Co.

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NEW ADVERTISEMENTS:

Metal Stamping Co., Jackson, Mich.

CANADA IN WORLD POLITICS.

A RECENT issue of the Outlook has an article drawing attention to the growing importance of Canada as a factor in the commercial and political problems which go to make up what is known as world politics. The writer argues that Canada is rapidly moving to a place on this continent in which she will be one of two, if not the largest, factor in its politics. Coming from a United States publication the article is significant as the spread-eagleism of Yankee journalism in the past has not allowed intelligent writers to draw attention to the wonderful resources and possibilities of the Dominion to the north of them.

Until the tide of immigration commenced to flow into the Canadian Northwest from the Middle and Western States practically no attention was paid to the development of this country, and not one "American" in a thousand would credit the statement that Canada's area is greater than that of the United States. The remarkable advances made in Canada's development during the past twenty years have not allowed the average Yankee engrossed in the growth of his own country to realize that there are other pebbles on the American shore. Canada has at last forced recognition, and it is not surprising that those who show the greatest amazement at this country's progress are our nearest neighbors.

The next quarter of a century holds much in store for Canada. What has been done in Manitoba, the Northwest and British Columbia since the construction of our continental railway will probably be repeated northwards in the fertile lands drained by streams flowing into Hudson's Bay and the Arctic Ocean. For a thousand miles north of Edmonton it is good farming country, and the Hudson's Bay Co. is now erecting a mill 300 miles north of Edmonton to grind the wheat grown in this rich district yet untraversed by iron highways. There are few who care to speculate as to Canada's possibilities of development to the north, but it is probable that the speculations of even the most optimistic will be more than realized.

Much could also be said as to Canada's strategical position as providing the nearest route connecting Europe and Asia, or at least the two island kingdoms which dominate these two continents. With Britain and Japan in close alliance, Canada's position is emphasized in importance. The Outlook, however, draws attention to another factor which bids fair to provide another source from which Canada will draw the elements which are required to make a nation great. It says:

"If a balance be struck of the natural assets of the United States and Canada, it is seen that Canada has the advantage in almost every respect. She does not as yet possess the sub-tropical lands, without which no country with a high standard of living can be regarded as economically self-contained. But it is manifestly her destiny to draw the West Indies, with British Honduras and British Guinea, into her political sphere of influence, and when this consolidation of British North America, for which Canadian statesmen-capitalists are preparing the way, is accomplished, she will hold within her far-flung boundaries every element of economic greatness."

THE WORLD'S HARVEST.

THE London Miller gives the following pithy summary of the harvest conditions of the leading countries of the world, which is particularly instructive reading at the present moment:

The crop outlook remains on the whole favorable, and seems to justify the expectation that the world's harvest will be a full average.

The French harvest has been delayed by unsettled weather in the north and northeast, and it is assumed that quality has suffered to some extent. Looked at in the most favorable light it now seems hardly likely that France can be self-supporting for the next cereal year—especially as old reserves are known to have been exhausted. As bearing upon market values, however, this feature cannot count for much at the present, as it is not likely the French will appear as buyers of wheat for import for many months, probably, indeed, not before next Spring.

It is claimed that Russia has, on the whole, grown a full average crop. The surplus from the Danube countries, the output of southeastern Europe, will be maintained at about the standard of last year. Probably this will be so, at any rate in the early stages of the new crop, and more especially as Russia is supposed to have a considerable quantity of old wheat remaining over from her recent years of plenty. The action of this shipper during the ensuing year, needless to say, is of vast importance to the home milling trade, as from this source they have drawn a very large quantity of useful wheats during recent years.

In India the outlook is not encouraging. The monsoon has been irregular, and in many districts there has been a considerable deficiency of moisture. It looks, on the whole, as if the supply from this source will be restricted during the current crop year, and, moreover, as if the price would not be low relatively as it has been during almost all of the last year.

The American position seems to show a distinct improvement on the week. Harvest is now in full swing in the Spring wheat belt, and already new wheat has appeared in Minneapolis. Estimates cabled during the week put the crop in the three great wheat growing States of the Northwest at 200 million bushels, a result which, if borne out, must inevitably bring the American miller once again into our market as a competitor. Already, indeed, flour business has begun on the new crop, Top Spring wheat patents having been placed here this past week at 26s. c.i.f., 27s. landed for September despatch from mill. We may, however, add that a large breadth of wheat still remains to be secured in the northern portion of the belt, so that the present outlook may be somewhat modified before the crop has all been secured, but looked at all round it seems fairly certain that the American miller will again be in evidence.

The crop in Manitoba and the Northwest Territories continues to be well spoken of, and a full surplus of wheat for export is confidently anticipated.

PROFESSOR MAVOR'S REPORT.

A VOLUMINOUS report on the wheat growing capacity of the Canadian Northwest has been prepared for the British Board of Trade by James Mavor, professor of political economy in the University of Toronto. The report is published under the auspices of the British Board of Trade, and it is described as a "Report to the

Board of Trade on the Northwest of Canada, with special reference to wheat production for export." As is explained in the Blue Book, Professor Mavor was instructed to conduct an inquiry with the object of throwing "all possible light . . . on the existing conditions and future prospects of wheat growing in the Northwest of Canada for export to the United Kingdom." Clearly it was the desire of the Board of Trade to have some authoritative statement regarding the claims of Canada to be considered the future "Granary of the Empire," and unless immediate action is taken by the Canadian Government to correct the many mistakes and false conclusions contained in the report it will be considered authoritative by the British public, and work this country incalculable harm. For Professor Mavor personally we have the highest respect and admiration, and we can not believe that he would deliberately lend himself to an attempt to deceive and mislead the British public and to malign this country in order to provide campaign literature for the Little England party in the home land. The most charitable explanation is that the learned professor undertook a task for which he had no special qualifications and that he allowed his well-known anti-Chamberlain, anti-Imperial prejudices to warp his judgment.

Any graduate in political science from the University of Toronto in recent years is well aware that in the preparation of term essays by his students the learned professor always insisted that authorities should be quoted for all statements made. If then it is found that Professor Mavor fails to state his own authorities in this important report he is sinning against light. There are various reports and various authorities on the wheat growing capacity of the Northwest to which Professor Mavor might have referred, but he disregards such reports as those of Dr. Saunders, Dominion Director of Experimental Farms, and Hugh McKellar, late Deputy Minister of Agriculture in the Province of Manitoba, and bases all his conclusions upon the estimates of two anonymous gentlemen. Who these gentlemen are, what their qualifications to estimate the wheat growing capacity of the Canadian west, in what respect they are better qualified to judge of these things than Hugh McKellar and Dr. Saunders—on all of these points Professor Mavor's readers are left entirely unenlightened. Surely this is unfair; surely the value of the report is discounted at the start by such methods.

Hugh McKellar estimates the total wheat growing capacity of the Canadian Northwest in any one year at 1,000,000,000 bushels. His position as Deputy Minister of Agriculture in the Manitoba Government afforded him exceptional opportunities for independent investigation, and this is his estimate. Dr. Saunders, Dominion Director of Experimental Farms, estimates the total possible wheat crop at 800,000,000 bushels. Professor Mavor disregards these estimates by men who have exceptional opportunities for investigation, and he quotes two anonymous estimates. The first places the total possible wheat crop at 253,975,000 bushels, and the second at 357,445,000 bushels. Professor Mavor pins his faith to the first of these anonymous estimates.

According to the official report issued by the Manitoba Department of Agriculture in June, there were 2,643,588 acres of wheat above soil in Manitoba at that time. But Professor Mavor says that the total area available is only 2,800,000 acres. That is, there are only 156,412 acres of new land in the Province of Manitoba immediately available for wheat production. Such a statement is simply absurd. If Professor Mavor would disregard for a moment the opinions and estimates of anonymous gentlemen and consult the reports of the Department of Agriculture of the Province of Manitoba he would find that there are in that Province at least 25,000,000 acres out of a total of 41,169,098 acres immediately available for cultivation. About one-sixth of the available 25,000,000 acres is now under cultivation.

If Professor Mavor's report were not published as an official Blue Book it would do this country little harm, but under the circumstances it will be quoted as the final word upon the subject until such time as the actual wheat production of the Canadian west exceeds the anonymous estimates favored by Professor Mavor. Under the circumstances it is the plain duty of the Canadian Government to show the British public how utterly misleading the report is. The Winnipeg Board of Trade are already preparing a protest, but action by the Dominion Government is urgently required.

AMERICAN GOODS IN MANITOBA.

So marvelous is the development of Western Canada and so great is the interest displayed by easterners desirous of locating or extending their trade on the prairies that it has become a popular move for the most enterprising daily papers to send special correspondents to write descriptions of the rapid changes made and the various phases of life seen in the development of a new country. Readers of the MacLean Trade Newspapers are well-informed regarding the expansion of our country as permanent representatives are maintained in the large centres.

In a recent letter to the Toronto Globe a special correspondent making a tour of Southern Manitoba discovered that Canadian manufacturers were not securing all the trade in that district, especially in machinery, shelf hardware, stoves and ranges, his article reading as follows :

"Agricultural implements are by no means so exclusively Canadian as is furniture, even considering that the International Harvester Company now manufacture at Hamilton. Americans have so long been making machinery for prairie farms and have so many old patterns up here that in not a few cases the preference is for the American machine, and that even among Canadians. An immense amount of shelf hardware made in the United States is sold all over Canada. It is, therefore, not surprising that it should be found out here. But it is surprising to find that a large number of American-made steel ranges are carried in stock and sold by local hardwaremen. That is true all along this line. The American goods cost more, but these western people want the all steel and malleable ranges, which are worth retail up to $70 and $80. Just now the idea of a malleable instead of cast iron top on a stove is popular, and Canadian stove men would profit by meeting the popular idea. The American ranges are kept in stock by all the bigger dealers and a large number are sold.

"Hardwaremen along this line do considerable business with Duluth and Chicago houses. They say they can get shipments in and through the customs equally as quick as from Winnipeg or the east. Canadian manufacturers and traders must look to holding their trade up here, not through an increase in the tariff, but through careful attention to the character and wants of their customers, and by prompt and safe delivery of the goods. The west is against increasing the tariff. These people speak of the American as being satisfied with less profit than the Canadian, but wanting more business, which he is out to get in Manitoba. The Canadian, they say, is less aggressive and inclined to be satisfied with what he has succeeded in getting. That is a mistaken conception, but it exists in the minds of many people and can only be superseded by diligence and adaptation on the part of our eastern people. Everything that can be done to annihilate the barriers of time and space between the east and west ought to be done. The difficulty should not be accentuated by any neglect to attend to secondary things."

If it is a fact that manufacturers in Eastern Canada are unable to successfully compete with competitors in the States it is an additional argument in favor of improved transportation facilities between Ontario and Manitoba and

it is gratifying to know that the Canadian Pacific Railway are double tracking their line in order to give better service.

Eastern stove manufacturers disagree with the statement that they are behind their American competitors in the manufacture of the steel and malleable ranges and an inspection of their exhibits at the Toronto Exhibition certainly showed their ranges to be thoroughly modern and up-to-date. If a large share of the western trade is going to American stove manufacturers, however, it behooves the Canadian founders to discover the reason and take such steps as will secure this trade for the Canadian plants.

WHAT ARE FAIR PROFITS?

WHAT is a legitimate profit ? That depends on the article, the community, and other conditions. It also depends to a large extent upon the merchant himself. Some merchants will get a bigger profit than others on the same article and under the same conditions. At the same time their standing with the trade will be better than that of the merchant who is selling on a smaller margin.

That is the difference in personality. Simply one of the many illustrations of the truth that the difference in results is frequently found in the difference in men.

Now and then it is conclusively demonstrated that a retailer is charging too much profit on some particular line. But as a general thing that is the exception. On most lines the retailer does not charge enough profit. Why ? He is afraid of the fellow down the street and the fellow down the street is afraid of him.

So when it comes to marking goods, fear of the other fellow is the great influence which bears the price.

Run your own business. Be your own judge of the margin of profit to ask. When you price the goods, consider only the value and your community. Leave your competitor out of it.

To be sure, competition is a factor that must be considered. But most merchants consider it too much. In marking their goods they make it the great determining influence.

It has been said that many lines in many retail stores might be advanced ten or fifteen per cent. without any change in the trade.

At first that may sound foolish. But the more you think of it the more like real truth it seems. If you think of it enough you will come to believe it.

When you reach that stage, advance some of your lines. At the same time give the clerks convincing talks on the values. Then watch the results.

Some readers of this paper have tried this experiment. They are converted now and are getting better profits than they did a year ago.

You are probably selling many lines at a smaller margin of profit than you should. Get better prices.—The Hardware Trade.

BENEFITING CANADA.

MANUFACTURERS in this country are not worrying over the present boycott of United States goods entering China. The situation is the outcome of a discrimination against Chinese labor as well as a lack of discrimination when their travelers, merchants and scholars attempted to enter the republic. This result had never been anticipated, but is a natural retaliation that is causing the Americans considerable concern at the present time.

Already inquiries have been received from China regarding Canadian manufactured products, and before the trouble is adjusted many of our enterprising manufacturers and jobbers will have secured an opening for future trade with the Celestial Empire. Our strenuous neighbors will some day waken to the fact that a generous policy in dealing with other countries is, after all, the most profitable.

OUR TRADE WITH WEST INDIES.

IT is now some ten years since steam communication was opened up between Canada, the Windward West India Islands and Georgetown, Demerara. At the time of the inauguration of the steam service the trade was carried on by sailing vessels from Nova Scotian ports, and by steam via New York; as with all business the world over, steam has superseded sail to a very large extent, and this applies to the Canada-West Indian trade as well as all others. During the early stages of the enterprise the difficulties in connection with this trade were almost insuperable. Year by year, however, the obstacles are being removed and for a few years past the exchange of products has been steadily growing in volume.

The Government of Canada has from time to time granted assistance to this enterprise and has so revised the tariff as to favor the importation of British Island sugar and other products. The Government might perhaps go a little further and consider what it could do in connection with encouraging the direct importation of West Indian fruit, which at present goes largely to the United States. From the Canadian standpoint the advantages for such a market as the British West Indies and Demerara afford should not be lost sight of. Canada, however, is a young country; her manufactories are young, consequently with the rapidly increasing demands of the home market, it is more perhaps than Canadian manufacturers can be expected to do to supply the West Indian trade. Flour is of course produced in Canada in enormous quantities; the market in the south is not a small one, and is well worth the strenuous efforts of Canadian millers.

By close attention and continually following up the shippers and receivers, the West Indian markets are receiving more and more attention. There is also a growing increase in the exports of flour. Canadian peas, too, are finding their way to these markets through Canadian channels in very much larger quantities. Boots and shoes, corn brooms, butter, cheese, paint, cordage, box material, furniture and other manufactures of wood are being shipped in increased quantities, and it would appear as if the wedge having once entered the opening will increase; that is, the volume of traffic will grow year by year.

A great deal, however, depends upon the manufacturers and commission houses themselves; the steam service is an established fact, and it is up to the Canadians who are in these special lines of business to improve their opportunities and make the interchange of products one of considerable moment in the trade of the Dominion. So far as imports are concerned, the quantity of sugar has during the last five years increased from almost nothing to some 80,000 to 100,000 tons for the first half of 1905. The coffee used in Canada should find its way here from these islands, as well as cocoa and fruit. The consumption of these articles will increase with the rapid growth now going on in Canada so that this half of the business is not without its bright side.

To Pickford & Black belongs the credit for having established this business; they have followed it along with considerable energy up to the present time. At first their service was monthly, now it is semi-monthly, there being six boats employed in the West Indian traffic. All credit is due them for the persistent manner in which they have followed up the business in the face of many difficulties and discouragements.

Oil and oil cans are in season. With the coming of the harvest farmers require much machine oil. And then there are the cream separators that require oil the year around. Keep a good grade of oil for them.

Markets and Market Notes

(For detailed prices see Current Market Quotations, page 62.)

Quebec Hardware Markets.

Office of Hardware and Metal,
232 McGill Street,
Montreal, September 8, 1905.

FALL fairs are causing a lull in business this week, as many of the travelers are off their routes and entertaining their customers at the exhibitions. In spite of this fact, letter orders are coming in freely so that the trade is by no means stagnant. One of the features of this week's business is the movement of case goods in anticipation of the Christmas trade. Other lines that are being shipped in good quantities are axes and hay wire. The disposition to cut prices on axes is no longer apparent, a very firm tone being given to the market.

The continued strength of pig lead and ingot copper is bound to have some result on the prices of many hardware lines. Already an advance is threatened.

Snowshoes are now being displayed by one of the wholesale firms who took up this branch last year. They report that the demand for the coming season promises to eclipse that of 1904-05, and they have arranged to have a large stock on hand. Last year, they were unable to keep up with the demand.

The dullness which has been evident in the lantern trade throughout the Summer will be brightened up by the fact that some important manufacturers have withdrawn prices on lanterns, and their example will probably be followed by their competitors. Lantern orders, which were booked a long time back, are now being sent forward in good volume. the threatened advance having stimulated the retailers.

Axes—A decided awakening has taken place, the result being that prices are firmer than they have been for some time. None of the local firms anticipate any further cutting. We quote as follows: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—A brisk movement is reported. Prices remain firm. Axe handles No. 3 $1.25; No. 2, $1.50; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a doz.

Sewing Machines—As the Fall approaches, the demand is getting stronger. A good trade may be predicted this season. Prices are as follows: Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—The expectation of an advance has at last given a better outlook to this branch. Many orders booked at the time of the slump. are now being asked for by the dealers. While some manufacturers have withdrawn prices, we may still quote: Cold blast, $4.50; No. 0, Safety, $5.50.

Rivets and Burrs—There is the usual call for these lines which are still selling at the following prices: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—In common with all staples are enjoying a remarkably good demand. Our quotations are as follows: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—Are selling well, and are being frequently called for by the trade. We give prices as follows: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—The market is somewhat stronger than at our last report. Our prices are: $2.10 to $2.20 per keg f.o.b. Montreal

Cut Nails—Only a moderate demand is shown. There has been no change in prices and we still quote: $2.20 per keg f.o.b. Montreal.

Horseshoes—This is one of the best selling staples at the present time. We quote: P.B. New Pattern, base price, $3.50 per 100 lbs.; M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and large, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods—Arms and ammunition are still selling very strongly. Rifles are in particularly good demand just now. Our prices are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—Trade is looking up now and a fairly heavy movement westward is reported. Prospects for Fall trade are very bright, especially in view of the lage railway contracts about to be undertaken. Many shanties along the lines of construction and in the lumber camps will have to be erected, and the result is bound to be a boom in building paper. Local houses are hoping to get a share of the resulting business. Prices are unchanged.

Cordage—A good movement is noticed. No change has been made in the price.

Cement and Firebrick—Things are rather quiet this week and dealers are engaged in planning for the Fall business. We still quote as follows: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—No change in price is to be noted. A good volume of business is being done. We give prices: 5-16 inch, $4; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—Quite an active market is evident in this line. Prices are: Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Large orders are now being shipped to wide awake dealers, who are stocking up for a big season. Our prices are: 25c. to $2.50, according to quality.

Sleigh Bells—This is one of the best of the lines now going forward. We still quote as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Orders are coming in from all over the country, and are being shipped daily. We quote: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—This has been found a very profitable side-line by many leaders, and there is every sign of a large business again this Winter. We give prices from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Sept. 8, 1905.

CROWDS of visitors in Toronto to visit the Exhibition have somewhat demoralized business, but dozens of visitors have called at the hardware jobbing houses and left good sized orders. Travelers have been in the warehouses aiding in handling the rush, and their absence from the road has meant the receipt of many letter orders.

The chief features of the trade at present continue to be sorting orders for builders' hardware and staple lines. The trade in builders' goods this season has been exceptionally large, there having been a very active building season in the country districts as well as in the towns and cities.

From now on there will be an increasing trade done particularly in guns and ammunition, and in cutlery. Later on Winter goods will come in for repeat orders, the bulk of the regular orders being now booked. Cutlery and case goods are beginning to move already. Ammunition is in active demand, the possible increase in prices of shot stimulating trade somewhat.

Prices continue unchanged.

Sporting Goods—Shot guns and ammunition are meeting with a large sale and an increase is looked for on shot, owing to higher prices of metals.

Washing Machines—An increasing demand is reported.

Chain—Fall trade is beginning to pick up. We quote as folows: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders— The opening of Fall has brought an increased trade. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Good business is reported at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—Demand is active and stocks are being called on heavily.

Wire Nails—Trade is very large, but stocks are ample for all demands. Prices are the same.

Cut Nails—There is a very satisfactory trade being done. Quotations are: $2.40 per keg f.o.b. Toronto.

Horseshoes—Good business is being done and a large Fall trade is looked for. Our quotations are: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Axes—It is a little too early to expect much business, but trade is good.

Cutlery—Trade is increasing and case goods particularly are in demand.

Skates and Sleigh Bells—Large orders are booked for future shipment, an increased trade being indicated by the orders in hand.

Horse Nails—Trade is active at unchanged prices.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—Trade is fairly good. Some agricultural implements have withdrawn from the market, however.

Cordage—Sorting orders are coming in. Our quotations continue as follows: Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse, Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Demand is strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 20c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A good business has been done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool— An eccentric market still rules in these lines. Supply is still slow, with demand maintained in face of abnormally high prices. Similar conditions are in certain foreign points, where great scarcity is felt. Our revised quotations are ruling firm, with supply scarcely equal to demand. We quote:

Hides, inspected, No. 1 per lb.		0 12
" " " 2 "		0 11
Country hides, flat, per lb.	0 10	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelts		0 85
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, new clip, per lb.	0 16	0 17
Wool-washed fleece	0 26	0 27
Rejections		0 20
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 8, 1905.

IN spite of the conclusion of the war between Japan and Russia, pig lead, instead of weakening has actually strengthened in tone during the past week, and a couple of small advances were also reported. We still give the same figures as last week, however, and are confident that they will cover this week's conditions as well. What the effect of peace will be is difficult to foretell, but it is almost a surety that pig lead has now reached its top-notch price. It is higher now than it has been for many months.

A surprising feature of the week just past was the lower tendency of tin. No actual falling off in price occurred, but the tone of the market is distinctly for shorter prices in the future.

Ingot copper is still soaring, an advance of 3-4c. is noted in ingot with a coresponding advance of 1-4c. in sheet copper. Antimony seems to be at its top figure now, though it is still very scarce.

Canada Plates—No change has taken place in the condition of the trade. We give prices as follows: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—Lawson's threat to break copper has not been felt in the local market as yet, and indeed, there was a further advance during the week in both ingot and sheet copper. Current prices are: Ingot copper, 17 1-2c.; sheet copper, 24 3-4c.

Ingot Tin—A stop has been put to the advance of tin, and the market is decidedly weaker in tone. Local stocks are light. Futures are lower. Prices now are: 36 1-2c. to 37c. per lb.

Pig Lead—Some small advances were noted during the week, but on the whole, our figures of last week are still ruling, though these may be considered very firm. We quote from $3.80 to $3.90 per 100 lbs.

Boiler Tubes — Sales are being made in good volume. Our prices are as follows: British and American tubes, 1 1-2 inch, 8 1-2c.; 2 inch, 8 1-2c.; 2 1-2 inch, 10c.; 3 inch, 12c.; 3 1-2 inch, 15 1-2c.; 4 inch, 20c.; 5 inch, 45c. Price per foot net.

Pig Lead—The market is very quiet this week and local dealers are adding to their stocks more heavily than they desire. Prices stand as follows:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18 00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16 50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.50	"	"
" (special)	18.50	"	"
Ayresome No. 1	18.50	"	"
" No. 3	17.75	"	"
Summerlee	18.25 to 18.75	delivered	Montreal.
Clarence No. 1	17.75	"	"
" No. 3	17.25	"	"
No. 1 Cleveland	17.50	"	"

Tool Steel—Prices are still quoted as follows: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—No remarkably large orders are being sold at present. Our quotations are as follows: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75;

toecalk, $2.62 1-2; machinery iron finish, $2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting—Trade is fairly good, the following prices being quoted: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The demand is exceptionally good this week. Prices are unchanged and are quoted as follows: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—An increase in the price of raw materials has made the market even firmer in tone. We quote: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—No further advance has taken place and dealers are hoping that the top price has been reached. Many jobbers are still short in their supply. The price now asked is 16c.

Sheet Zinc—Although we give last week's prices, some firms have found it necessary to make another advance. We quote: Cask lots, $7.25; small lots, $7.50.

Tin Plates—Prices remain as before. We quote: Cokes, $3.75; charcoal, $4.

Ingot Zinc—This is another line in which higher figures are being asked by some dealers. We still quote, however: 6 1-2c. to 6 3-4c.

Scrap Metal—Iron is becoming more active in the United States and some Canadian dealers are taking advantage of this fact to export their scrap. As there is no duty to pay, only the freight has to be reckoned upon. Scrap copper is still high in tone. No changes have been made in any old materials. We quote as follows: Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed scrap, 75c. to 90c. per 100 lbs.; old rubbers, 5 1-2c. to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 8, 1905.

METALS continue strong with no advances reported on the local market, the conditions existing last week being repeated. Pig lead continues strong, but the impression prevails that quotations will not go higher than at present. Of all the metals, however, tin appears to be the only one which is weakening. Antimony continues very scarce.

Pig Iron—Many of the mills are booked ahead with orders and stocks are light. Quotations continue unchanged, as follows:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—There is a very active market. The mills are running to their full capacity. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—The market is not as strong as last week. We quote: 37c. to 38c. per pound.

Tin Plates—Demand is active with prices not so firm.

Galvanized Sheets—An excellent demand is reported. Prices are steady.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—The market continues strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—There is an active demand. Prices are steady: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Higher prices are looked for and present figures are very firm. Our quotations are as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—In spite of the excesive prices ruling, there is an active demand. Stocks are very light.

Old Material—Copper and brass are very firm and stocks are very light. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9 1-2c. per lb.; light brass, 7 1-2c. per lb.; tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Anthracite is meeting with an increased demand. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, September 7, 1905.

THE feature of the market during the past week has been the heavy buying of steel rails for 1906, notably on the part of the Western lines. It is estimated that the total sales foot up to fully 250,000 tons. Among the large orders are 70,000 tons for the Chicago & Northwestern, 55,000 tons for the St. Paul and 50,000 tons for the Chicago, Burlington & Quincy. In the South the Atlantic Coast line has taken 15,000 tons, while the Tidewater Railway has ordered between 8,000 and 10,000 tons and the Reading road 15,000 tons. It is understood that during the next two weeks the requirements of the Pennsylvania and the New York Central roads will be brought out.

Further heavy equipment orders have been placed, the Pennsylvania leading with over 16,000 steel cars. Among the orders to be placed is a lot of 1,000 steel cars for the Lake Shore & Eastern, controlled by the Steel Corporation.

The activity in nearly all lines of finished material is evidenced by the fact that the orders booked by the Steel Corporation for August make that the record month. The pressure which caused the advance in the price of structural material from 1.60c., base, Pittsburg, to 1.70c. last week is expected to lead to a like advance in the price of plates at an early date. Angle bars have been put up to 1.50c., Pittsburg, and some makers of iron bars are holding out for higher figures.

From Cleveland comes the news that contracts have been let for two additional ships, and it is reported that two ore vessels of exceptional size are to be given out at an early date.

In the pipe trade the principal item of interest has been the placing of an order for 60 miles of 18-inch pipe by the Ohio Fuel Supply Company. A smaller order placed is for 15 miles of 10-inch pipe.

In the pig iron trade it is worthy of note that there has been some contracting for foreign iron. A tidewater steel plant has purchased a lot of English Bessemer, the exact quantity not being known, while a large maker of cast iron pipe has bought a round lot of Middlesbrough pig. In both these cases the iron is to be used to cover export orders for finished product. A serious effort was made to compete with foreign iron for domestic orders for low phosphorus pig, but the business was taken by home furnaces. Sales aggregate about 15,000 tons of iron of this character at $20.50 to $20.75, about one-half going to a large New England wire plant and the balance to steel works in eastern Pennsylvania.

So far as Bessemer pig is concerned, it is quite evident that the Steel Corporation will probably need additional quantities of outside iron. There have just been ordered into blast the Niles, Columbus and Riverside furnaces, so that every stack belonging to the Steel Corporation is now on the active list with the exception of Zanesville. Of course from time to time furnaces must blow out for repairs. Thus one Duquesne has just stopped and one Carrie is expected to blow out.

For early delivery there is a fair activity in foundry irons, but there is no general movement as yet to contract for delivery during the first part of 1906. There is some manoeuvering going on, with the conflicting reports which usual-

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks,
Fire Bricks, Building Bricks,
Portland Cement,
Road Paving Bricks and Blocks.

F. HYDE & CO.
KING, QUEEN and WELLINGTON STS.
MONTREAL

Deseronto Iron Co.
LIMITED
DESERONTO, ONT.
Manufacturers of
CHARCOAL PIG IRON
BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"
BRAND.
Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents
Drummond, McCall & Co.
MONTREAL, QUE
or to
Canada Iron Furnace Co.
MIDLAND, ONT Limited

Get our prices for
GALVANIZED FLAT SHEETS
THE "VANDA" BRAND
For all purposes requiring the best quality.
It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited
Wholesale Merchants
Ormidale Block, Vancouver, B.C., and
Liverpool, England
Direct Importers of:
Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc. etc

ly characterize such a period. Furnacemen, particularly in the east, complain of high costs, while in the west the spectre of a car shortage is again appearing. It has already begun in the Chicago district and there are signs of its coming in the Pittsburg district.

LONDON METAL MARKETS.

From Metal Market Report, September 6, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 48s. 3d., and Scotch warrants at 5s. 6d., making prices as compared with last week unchanged for Middleboro and 1s. higher for Scotch warrants.

Tin—Spot tin opened firm at £148 7s. 6d., futures at £147 15s., and after sales of 130 tons of spot and 180 tons of futures, closed firm at £148 12s. 6d. for spot and £147 17s. 6d. for futures, making prices as compared with last week, £1 12s. 6d. lower on spot, and £1 15s. lower on futures.

Copper—Spot copper opened easy at £69 17s. 6d., futures £69 12s. 6d., and after sales of 150 tons of spot and 600 tons of futures closed weak at £69 5s. for spot and £69 for futures, making prices as compared with last week £2 5d. lower on spot and £2 lower on futures.

Lead—The market closed at £14 5s., making prices as compared with last week, 3s. 9d. lower.

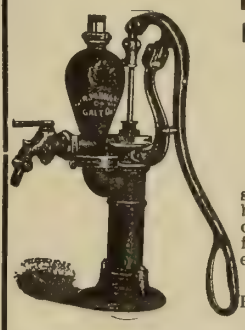
Spelter—The market closed at £26 7s 6d., making prices as compared with last week, 15s. higher.

Nova Scotia Trade News

CONSIDERING the season of the year a fair volume of trade is being done. Jobbers say that business is about as satisfactory as can be expected, as this is generally looked upon as the dull time of the year in the hardware trade. The price of wire nails is attracting more than ordinary attention in the Maritime markets at the present time. A short time ago the Montreal jobbers dropped the price fifteen cents and this has had a very serious effect on the markets in the Provinces. With this cut the Montreal dealers have captured the Cape Breton market, and also considerable of the trade of that county. The Montreal men took advantage of the low water freight rate to Cape Breton, and made a leader on nails so as to secure other business, and in this move they have been successful.

As soon as the Maritime men learned of the cut made in Montreal, they called a meeting, and it was decided to ask the two firms manufacturing nails in New Brunswick to reduce the price so as to meet that made by the Montreal men. These manufacturers, however, only made a cut of ten cents, which was insufficient, and in consequence our dealers have lost the trade. Some Maritime dealers who made sales before the cut are now in a peculiar position, as the Cape Breton people who made the purchases are asking for a rebate. One firm here was asked to quote on a two carload lot, and though the price was figured as fine as possible, the dealer failed to secure the order in competition with the Montreal men.

Tinplates
"Dominion" B.B. Charcoal
"Alloway's" Best Charcoal.
"Trym" and "Lydbrook" Best Coke.
Standard brands, best value.
A. C. LESLIE & CO.
MONTREAL.



Enterprising Hardwaremen handle our
ANTI-FREEZING PUMPS.
They know that the sale of a good Pump brings about the sale of many other things from satisfied customers.
Do you handle our PUMPS?
Write for catalogue and prices.
The R. McDougall Co., Limited
GALT, ONTARIO.

TESTED
B. K. MORTON & CO'S
B.C. BRAND
DRILL STEEL
has stood the severest tests. Speaks well for its quality. Get prices from:
AGENTS
E. G. PRIOR & CO., Victoria
BAINES & PECKOVER Toronto
CANADIAN REPRESENTATIVE:
D. W. CLARK, P O. Box 521, TORONTO

NOVA SCOTIA STEEL & COAL CO., Limited
NEW GLASGOW, N.S.
Manufacturers of
Ferrona Pig Iron
And SIEMENS-MARTIN
OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

SITUATIONS VACANT.

WANTED—Tinsmith at once; must be good at jobbing and eavetroughing; state wages and experience. Keys & Morrison, Lindsay, Ont. [36]

WANTED—Coopers to make apple barrels at Belleville; steady employment to good men till end of season; come at once; highest price paid; 40,000 barrels to make. R. J. Graham. [f]

BEAMSTERS wanted; first-class men only need apply. James Robson & Sons, Oshawa, Ont. [f]

BRUSH MAKERS wanted, boring and drawing hands, finishers, etc.; steady work. Apply Boeckh's Factories, 80 York st., Toronto. [f]

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. [tf]

TENDERS will be received by the undersigned executors of the late James M. Martin for the purchase of the good-will and stock in trade of the hardware business of the firm of Martin Bros., of the city of Rossland. An inventory may be seen and particulars obtained from the executors.

Wm. Martin,
W. M. Wood,
Executors. [39]

FOR SALE.

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. [38]

A WELL established stove and furnace business in the thriving town of Burlington. Box 65, Burlington. [36]

TENDERS WANTED.

The Assignee of Estate of J. A. Stovel, Edmonton, invites Tenders for the following parcels:

No. 1. Stock of Hardware, etc. - - $20,760.00
No. 2. Accounts and Bills Receivable about - - - - - - - - 5,000.00
No. 3. Equity in Buildings and Real Estate, Main Street, Edmonton.

Tenders to be received by J. H. Ashdown, Winnipeg, on or before Tuesday noon, 21st September.

The highest or any Tender not necessarily accepted.

Stock sheets may be seen at the Office of the Assignee, Edmonton; or at the Office of The J. H. Ashdown Co, Winnipeg, and Hardware and Metal, Toronto, Ont.

The price of copper is very strong and shows a tendency to increase in price. Some dealers here were buying up all the old copper that was available during the week, and for this scrap they paid 13 cents per pound cash.

Some orders are now coming in for axes. The price of axes is much higher than last year. Axes that were sold for $5.50 per dozen last year are now quoted at $7.00. This is due to an increase made by the mandfacturers.

The Robb Engineering Co. last week shipped two engines to Winnipeg, and the Amherst Foundry Co. shipped a carload of enamel ware to the same city.

The Dominion Iron and Steel Co. of Sydney are to import two thousand tons of coal from the Cumberland Coal & Railway Co., Springhill, N.S., to be utilized in the manufacture of coke. The coaf will be used as a test to ascertain whether it can produce a better quality of coke than the Glace Bay product.

Prices quoted here follow:

Lead pipe	$ 4 90
Sheet zinc, in casks	7½c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3¾ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 20
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 co
Black sheet iron	2 25
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94 to 96
Boiled oil	54
Raw oil	51

MINES AND METALS.

A deposit of coal has been discovered near Okanagan Lake, B.C.

* * *

It is proposed to erect a smelter at Princeton, in the Similkameen district, B.C.

* * *

Iron ore has been found at Temagami on ground owned by J. B. Caldwell, M.P.

* * *

Fire did $100,000 damage a few days ago to the wash plant of the Dominion Coal Co., at Port Morien, N.S.

* * *

The Dominion Government has appointed experts to investigate the character and extent of the zinc deposits in B.C.

* * *

The Granby Consolidated Co. have completed the purchase of the Gold Drop group of claims in the Phoenix camp, B.C., for $250,000.

* * *

The new concentrating plant at the Erittania Copper Mine, Howe Sound, B.C., is ready to start. Two hundred tons of copper ore are mined daily.

* * *

Native silver in thread formation has been found near Carcross, in the Yukon district, in rock that runs $1,100 to the ton. The owners of the find are preparing to expend $200,000 in developing.

* * *

The Superintendent of Mines, Dr. Haanel, has just completed the organization of a party that will shortly leave for British Columbia to investigate and report upon the extent of the zinc deposits of that Province. W. R. Ingalls, M.E., editor of Mining Review, will have charge.

* * *

Until Spring, or such time as the Legislature makes new regulations, no more patents for mining claims in Coleman, Bucke, Lorrain and Hudson Townships will be issued by the Ontario Government. In the meantime, however, prospecting may go on and when the new regulations come in force priority will be given to claims in the order filed.

* * *

It is claimed that one of the plans now under consideration by the Lake Superior Corporation is the opening of the nickel reduction works. It has been stated that a deal had been made whereby this plant had been leased for $60,000 a year, but the story was denied. It was admitted, however, that a deal was on and might be consummated at any time.

* * *

The Nova Scotia Coal and Steel Co. have now on their pay roll 2,200 men whose monthly wages amount to over $130,000. Up to the present this season the mines have had an output of over 250,000 tons of coal or at least 150,000 tons over the corresponding period last year. Most of the coal this season has been shipped to the St. Lawrence market.

* * *

New uses are being found for nickel in a variety of industries, and its possibilities are only just beginning to be appreciated. The British Government have been considering the question of employing it for coins, as is done in many continental countries. Arrangements have already been made for nickel coins to be circulated in one of the colonies, and they will be ready for issue in a short time.

* * *

Copper refined in Canada is now being sent forward to China to be used in connection with the coinage of that country, one shipment of 100,000 pounds having gone forward, while another of 50,000 is about to be made. There is at present only one copper refinery in Canada. The Montreal Copper Co. now have a ten-ton-a-day plant in operation, and while it is not yet much of a factor in copper production, the management state that they have been able to compete against the copper trust in the United States, and will grow.

* * *

The Lake Superior Corporation, operating the Sault rail mills and furnaces, have awakened to their need of iron ore, and are now about to carry on explorations at various points in Ontario, where there have been sufficient indications to warrant expenditure. This is a pretty wide field, running from east of Michipicoten to west of Thunder Bay, and for a time the work will be in the nature of reconnaissance, though at some points the company have faith that they can quickly get at good ore. Algoma, or Western Ontario, has been merely scratched by the prospector, and it would appear that with the extensive

and energetic work that has been done on the American side there would be important results, especially as there are indications galore. This work will doubtless be under charge of A. B. Wilmott, whose knowledge of the region is not surpassed.

* * *

Experiments in electric smelting, which are to be conducted at Sault Ste. Marie, will be commenced in about two months. Mr. Herault of La Praz, France, inventor of the Herault system of smelting by electricity, will come to Canada to give the Government the benefit of his advice. Investigations so far made into the electric system of smelting and the valuable report published on the subject under the auspices of the Canadian Government have attracted world-wide interest, and no less than 2,500 commendatory letters from all quarters of the habitable globe have been received by Dr. Haanel, Superintendent of Mines.

* * *

The Canadian Copper Co., who have within the past two years spent $2,000,000 on plant and betterments in connection with their nickel mines near Sudbury, have about completed arrangements for the sampling and purchase of the refractory and valuable ores of the Cobalt district. A crusher is being erected at Copper Cliff, the smelter town of the company, a skilled chemist from New York is to be engaged, and the cobalt ores will be purchased on the plan in vogue at Denver, Omaha and other mining centres in the west. An umpire will be chosen in case the chemists for buyers and sellers differ as to value, and on the certificate of this umpire payment will be made.

* * *

All mining explorations that have been under way in the vicinity of Loon Lake have ceased for the present and the efforts of the owners of the properties explored are now directed toward selling their holdings. Wiley Bros., of Port Arthur, who are leading owners in these developments, state that they have very rich finds but the general mining public is inclined to doubt this. Just now experts for the Jones & Laughlin Steel Co. are on the ground making preliminary examinations. There has been some diamond drilling with considerable pitting by the original explorers, and newspapers of the district have had much to say of results, but this sort of information is notoriously unreliable. The Government drill is now on some property of R. H. Flaherty, who has been connected more or less with iron explorations for some years, but this week the drill is idle. These finds lie on the south side of Loon Lake, and about three miles from Lake Superior, 25 miles east of Port Arthur, and if valuable are certainly well located for prompt and cheap shipment.

A GROWING BUSINESS.

Taylor Bros., hardware merchants of London, have recently made a large addition to their store at New Liskeard. The addition of about forty feet to the building will give them much larger space and allow them to handle their raoidly extending business in this thriving new Ontario town. The firm also have a branch at Cobalt, where they are capturing a large share of the trade in mining supplies. Mr. William Taylor is managing the New Liskeard store.

"Eastlake" Metallic Shingles will surely interest your neighbor who has just had the wood shingles on his roof ripped off by lightning.

No wise man will ever want to use wood shingles again when the lightning, fire, rust and storm-resisting qualities of "Eastlake" Metallic Shingles are once made evident to him.

All around you new buildings are going up and old ones being repaired. Why let other dealers supply the shingles etc., when the trade, at a good profit, is yours if you will go after it and show people who have given the matter little thought the advantages of "Metallic" building materials over wood?

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Sheet Metal Fronts
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Materials of every description.

401

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Sept. 8, 1905.)
Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

MONDAY being Labor Day there was some interruption in the week's business, but the turnover of general hardware and building supplies is still very large. The trade are buying liberally.

* * *

The Manitoba Iron Works have secured a contract from the Winnipeg Oil Co. for the erection of a large oil tank of 50,000 gallons capacity. The tank will be installed in November. The large water tower being installed in Portage la Prairie by the Manitoba Iron Works will be completed by the end of September.

* * *

Screen Wire Cloth—Very little selling now. The price is still $1.55 per 100 square feet.

Poultry Netting—Prices are as follows for the 2-inch mesh in No. 19 gauge:

24-inch roll, perroll			$1 20
30	"	"	1 50
36	"	"	1 80
48	"	"	2 40
60	"	"	3 00
72	"	"	3 60

Lanterns—Retail trade in lanterns has been demoralized to some extent by destructive department store competition. A big Winnipeg firm have been retailing lanterns at 47 cents each. Prices as quoted by the wholesale trade are as follows:

Cold blast lanterns	$4 75	per doz.
Coppered cold blast lanterns	6 75	"
Cold blast dash "	7 25	"
Lift Lanterns	4 25	"

Wire—Business is fairly active. Prices continue as follows:

Barbed wire, 100 lb		$2 85
Plain galvanized	6 to 8	3 39
"	9 2 50	2 90
Plain galvanized	10	3 50
"	12	3 10
"	13	3 20
"	14	3 90
"	15	4 45
"	16	4 60
Plain twist		2 85
Staples		3 35
Oiled annealed wire	10	2 96
"	11	3 02
"	12	3 10
"	13	3 20
Oiled annealed wire	14	3 30
"	15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. The price is steady since the recent reduction to $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are as follows:

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2½c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 3-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g.hickory, doz.	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is very active at following unchanged prices:

Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—All lines of ammunition for Fall shooting are in exceptionally brisk demand. Discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is active and prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 16 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	....
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2 lb. tins,

19c.; 1-lb. cardboard boxes, 16c.; 1-2 lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net

Canadian Paris Green—50-lb. drums, 17c.; bulk, 18c.; in 1-lb. packages, 20c.

Paints and Oils—Business continues very active. We quote:

White lead (pure)	$6 00	6 25
Bladder putty, in bbls	0 02½	
" " in kegs	0 02¾	
Turpentine, pure in barrels	0 96	
Less than barrel lots	1 01	
Linseed oil, raw	0 62	
Boiled	0 65	

Window Glass—We quote:

16-oz. O.G., single, in 50-ft. boxes—	
16 to 25 united inches	$2.40
26 to 40 "	2.65
16-oz. O.G., single, in 100-ft. cases—	
16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00
21-oz. C.S., double, in 100-ft. cases—	
26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

PERSONAL AND TRADE ITEMS.

Montreal.

Mr. R. G. Lee, of Fredericton, N.B., was in Montreal on business during the past week.

Mr. C. F. Comer, hardware merchant of Calgary, spent a few days in the city this week.

Mr. Geo. Boyd, of the Montreal Rolling Mills Co., is spending his vacation at L'Achigan.

Mr. J. W. Dowling, of Caverhill, Learmont & Co., is again on duty after an enjoyable vacation.

Mr. Jno. A. Burns, B.Sc., of Munderloh & Co., has returned from his vacation, which he spent at the seaside.

Mr. Benjamin Rogers, general merchant of Alberton, P.E.I., paid a visit to local hardware jobbers this week.

Mr. W. H. Evans, of the Canada Paint Co., returned this week from Prout's Neck, where he spent a very pleasant vacation.

Mr. J. N. Atthill, of W. & T. Avery, Limited, weighing machinists, Birmingham, Eng., sailed for home on the Victorian last week.

Mr. Paul R. Hanson, manager of the Montreal branch of the Canadian Rubber Co., has returned from a successful business trip to Ottawa.

Mr. D. Lorne McGibbon, general manager of the Canadian Rubber Co., Montreal, has returned from a vacation spent at Kamebunk Beach.

Mr. E. A. Chollette, formerly manager of sales with the Canadian Rubber Co., has accepted a similar position with the Gutta Percha & Rubber Co.

Mr. Matthew Moody, of the Matthew Moody Co., Limited, agricultural implement manufacturers, Terrebone, was in the city on business during the week.

Mr. Jas. R. Wilson, vice-president and managing director of the Thos. Robertson Co., Limited, metal merchants and dealers in plumbers' supplies, sailed for the Old Country on the Victorian, but

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

TRADE MARK

This design a guarantee of quality

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All grades, from the highest "Glossy Finish" to the rough "Antique" and bulky "Featherweight."

YOUR PRINTER CAN SUPPLY IT.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

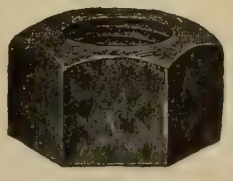
THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

FOR SPRINGS,

made and backed up by a concern with fifty years experience, send your specifications to

The WALLACE BARNES CO., BRISTOL, Conn.

NEW CATALOG JUST ISSUED.

returned to the city when the liner went aground. He took passage on the Bavarian, however, sailing Friday. Mr. Wilson's father is seriously ill in the Old Country.

Mr. W. B. McLean, B.Sc., of the firm McLean & Sophus, machinery merchants, 301 St. James street, has returned from an extended business trip to the Maritime Provinces.

Mr. C. C. Fee, lately advertising manager for Lawrence A. Wilson, wholesale wine and spirit merchant, has accepted a similar position with Lewis Bros., Limited, and entered upon his new duties the first of the month.

Mr. F. S. Eaton has been appointed manager of publicity and systems for Munderloh & Co.'s electrical department. Mr. Eaton is conversant with printing and publishing, and no doubt will prove an acquisition to this successful house.

Mr. B. Fowler, son of Mr. Josiah Fowler, the well-known axe and tool manufacturer of St. John, N.B., was in town last week. He was accompanied on his calls upon the trade by his capable representatives, the Messrs. Canavan, who have developed an excellent trade for their goods. Mr. Fowler has gone west to Sudbury, and will return shortly via Montreal.

Mr. F. L. Benedict, secretary of the Leeming-Miles Co., Limited, manufacturers' agents, Notre Dame and St. Lambert streets, has resigned his position to enter into business on his own account. Before leaving his old position he was presented with a handsome gold watch and an address by the management and employes of the firm. All the friends of Mr. Benedict will join with us in wishing him every success in his new undertaking.

The well equipped premises of the Canadian Hardware Co., on DeBresoles street, are fast getting into shape. The arrangements for serving the trade are about completed, and shortly a full announcement is promised in these columns. Messrs. A. Prudhomme & Sons, whose name appears on the brass plate of the main entrance, are known for the probity and progress of their business methods for the last quarter of a century. No doubt this record will be maintained in even greater measure.

President Jas. Hall, of the Halifax Board of Trade, was in Montreal last week on his way to Toronto. When seen at the Windsor Hotel Mr. Hall expressed the opinion that the Atlantic mail service should not be divided between two companies, which is said to be the Government's plan at present. The business men of the eastern sea port are almost unanimously in favor of granting the contract to the company with the fastest steamships. He also suggests that the I.C.R. be so improved in roadbed, bridges and motive power as to make possible an eighteen-hour mail and passenger service between Halifax and Montreal.

Toronto.

Mr. Dowswell, of the Dowswell Mfg. Co., Hamilton, spent a few days in Toronto this week.

Mr. Moore, of Moore Brothers, plumbers and steamfitters, Bradford, visited Toronto this week.

Mr. George Kerr, of the Kerr Engine Co., Walkerville, was a visitor in the city during the past week.

John Grills and son, of New Liskeard, hardware and general merchants, were visitors at the Toronto Exhibition during the week.

Mr. Fitzsimmons, of Fitzsimmons Brothers, plumbers and steamfitters, Hamilton, called on Toronto plumbing supply houses this week.

Mr. R. H. Lear, plumber, Winnipeg, is in Toronto this week as the guest of his brother-in-law, Mr. W. H. Meredith, secretary of the Master Plumbers' Association.

Mr. J. Marshall, one of Port Arthur's leading master plumbers, visited Toronto this week. He reports trade as very brisk in the growing towns at the haed of the lakes.

Mr. B. Werner, plumber, Innerkip, called on Toronto supply houses during the week, and left some good sized orders for early shipment. The demand for modern plumbing is increasing in the farming districts.

Mr. Hugh Labatt, of the Canada Brass and Supply Co., London, spent a few days in Toronto this week. Other Londoners connected with the plumbing trade who were noticed in the city were Messrs. James Hazlett and Ben. Noble.

Mr. C. Gurney, of the Gurney Foundry Co., is making a combined business and pleasure trip to the Pacific Coast cities in company with Mr. C. J. Furlong, Toronto. The Lewis and Clark Exposition at Portland will be visited before returning east.

Mr. J. O. Thorne, general manager of the Metallic Roofing Co., was in Winnipeg last week arranging for the establishment of a branch for their western trade. A factory will be erected to supply all the stock required in the west and 25 men will be employed. Mr. Thorne is an old timer in the west, having gone west in 1879, and again as a volunteer in the Rebellion of 1885. He will visit Calgary before returning east, his family accompanying him on the trip.

Amongst the paint dealers who visited Toronto during the past week, and called upon local supply houses, were the following: J. B. Filsinger, Southampton; G. A. Richardson, Guelph; A. Outram, Port Hope; F. J. Brock, Cope & Johnston, Fort William; Mr. Baxter, Nevereux, Clinton & Baxter, Windsor; H. N. Huehn, Heidelberg; Mr. Woodman, D. Brocklebank & Co., Arthur; W. McGladrey, Parkhill; R. McGowan, Uxbridge; Mr. Dewar, Milton; D. A. Fraser, Norwood; F. Otton, Barrie; D. L. Myers, Stratford; Wm. Neal, Walton; Fred. Haney and wife, Strathroy; L. Wright, Strathroy; Chas. Wright and family, Strathroy; J. B. White, Port Hope; C. E. Noble, Dundalk, and Clarence Race, Port Hope.

Amongst the hardwaremen from Ontario points seen in Toronto during the past week Hardware and Metal noticed the following: Fred. Smith, Gore Bay; D. Atcheson, Stouffville; J. Skelton and Mr. Lundy, Skelton & Lundy, Palmerston; M. Wichel, Wichel & Son, Elmira; Jas. White, the Nelson Hardware Co., Windsor; W. L. Trotter, Sheguiandah; Jas. Clark, Brechin; Frank Childs, Gravenhurst; R. J. Bruce, Port Perry; F. and C. Bales, Oshawa; Mr. Chown, Jr., Belleville; E. Pollard, Petrolia; M. A. Gendron, Penetanguishene; Geo. Davies, St. Thomas; S. A. Boulter, Niagara Falls; R. H. Appleyard, Humberstone; J. King, Chatham; Harry Johnston, Millbrook; F. W. Reynolds, Bethany; H. Moxon, Perth; E. Braund, Aurora; Mr. Summerfeldt, Mount Albert; Hugh and Ed. Cleland, Cleland Bros., Meaford; Mr. Mitchell, H. Clemens & Co., Guelph; Ed. Fenn, Bracebridge; T. J. Sims, Little Current; G. H. White, Orillia; D. McNab, McNab Bros., Orillia; J. W. McDonald, North Bay; Wm. Ough, Aurora; W. J. Bell, Beeton; B. Warnock, J. Warnock & Co., Galt; W. A. Rankin, Ottawa; F. A. Cote, Sudbury; F. G. Marshall, Orangeville; W. A. Proctor, Sarnia; D. Butchart, Owen Sound; A. Butchart, Lakefield; T. Batty, Norwich, and A. Wright, Hamilton.

Elsewhere.

W. M. Pringle, hardware merchant, Whitby, is building a new residence.

The Arcade Hardware Store, Forest, is to occupy quarters in a new $8,000 block now being erected.

L. Dougherty, of Messrs. Silvester & Dougherty, Stouffville, is spending his holidays visiting Mr. R. R. Gamey, M.P.P., at Gore Bay. Mr. Dougherty's family accompany him.

W. S. Piper, hardware merchant of Fort William, has been making considerable improvement in his store, an addition being made owing to the steady increase in his business.

REMOVING PAPER FROM WALLS.

STEAM as a means of removing old wall paper is a novelty which is just being placed on the market. Many devices for this purpose have been worked out, but few of them have stood the test of trial. In the present instance the steam is generated in a boiler by means of a gasoline burner, and applied to the wall through a hood in the hands of a workman. The connection between these parts consists of a rubber tube.

In the making of a contract for papering the paper hanger is always more or less in the dark, because he cannot calculate with any certainty on the amount or the tenacity of the old paper to be torn or scraped from the wall. He may base a calculation on a single or double covering, but when the workmen commence to scrape they may find half a dozen, which means that the work of removal will be very slow and laborious. The processes generally followed are tedious. In some cases the paper hanger merely tears away the portions of the old paper which are loose, thus leaving an uneven surface. In others water is sprinkled over the surface by means of a sponge, but it is necessary to wait until it has soaked in. Results are slow and somewhat incomplete, as the application of moisture is not uniform, and the paper is removed only in parts.

With the new apparatus alluded to, after a steam pressure is obtained within the boiler, it is merely necessary to hold the hood to the wall a short time, when the paper peels off easily under the action of the workman's plow.

The outfit is not too large to be easily portable. The gasoline tank holds a sufficient quantity of fuel for half a day's operation, while the water tank holds four gallons, sufficient for the same period of work. The time of steam application varies with the amount of paper on the wall. Ordinarily, it is said that a few seconds will penetrate a dozen coverings of paper, one over the other. The claim is also made that it is hygienic, the heat of the steam killing germs and vermin. This would depend, of course, upon the length of time the application of the steam is kept up. — Upholstery Trade Journal.

Humbug In Selling Horse Nails.

Abe Lincoln was about right, when he expressed his opinion of "Humbug" in this oft-quoted saying :—"You can fool all the people some time, and some people all the time : but you can't fool all the people all the time."

"Humbug" has been a feature in disposing of, and in statements made regarding some kinds of Horse Nails sold in Canada. For example :—a certain manufacturing firm hailing from the United States, have been pushing the sale of their second grade Horse Nails in this market for some time. This particular brand of nails is sold in the United States at one half the price of their regular goods, and is recognized by the trade as a competitive low-priced nail. The inference may safely be assumed that they are only one-half as good. And yet some of our Canadian buyers are led away by a little "Humbug" to pay more for this second grade brand than for the old reliable "C" brand, **made in Canada by Canadian labour for forty years from the best material known or used in the world for making Horse Nails —Swedish Charcoal Steel.**

How is it done ? We will let you into the secret. **By cutting the price in the small sizes, of which small quantities are sold, and increasing the price of the staple sizes, of which the largest proportion is sold.** For example :—Take size No. 4, and our experience shows that for every pound we sell of that size, we dispose of 100 pounds of No's 8 and 9 combined. **You therefore buy in the same proportion.**

Just see how this proportion works out :—

We sell "C" brand First quality. Per box					They sell "Black Prince" Second quality Per box	
@ $6.00	$24.00	4 Boxes, 100 lbs.,		No. 4.	@ $4.00	$16.00
@ 2.75	605.00	220 " 5,500	"	No. 8.	@ 3.00	660.00
@ 2.50	450.00	180 " 4,500	"	No. 9.	@ 2.90	522.00
	$1079.00	10.000	"			$1198.00

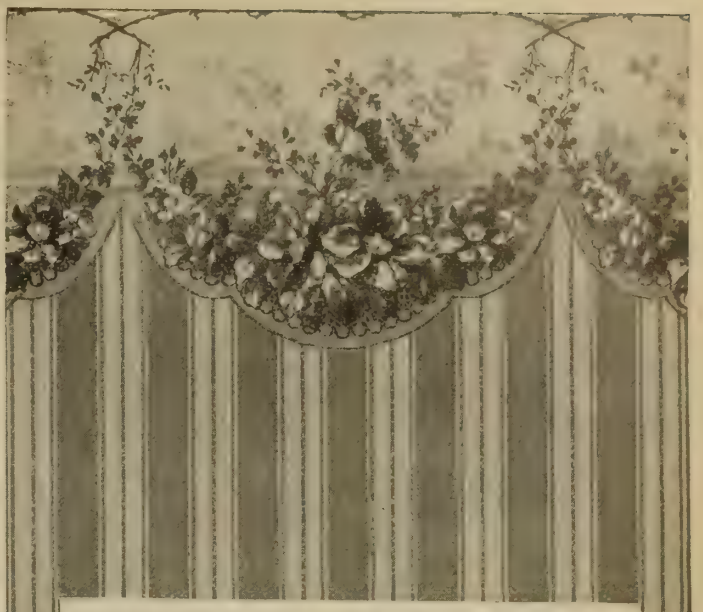
Difference in favour of buying "C" brand for every 10,000 lbs., or 400 boxes, $119.00, say 30c. per box.

Don't fool yourself by thinking "Yankee Doodle" is giving you small sizes at cut prices without getting it out of you.—That is only a little "humbug" in selling Horse Nails to the unsophisticated Canadian. **Moral:—Buy the old reliable "C" brand. Pay a fair price, and get the best, and "Made in Canada."**

CANADA HORSE NAIL COMPANY,

MONTREAL

Established 1865.

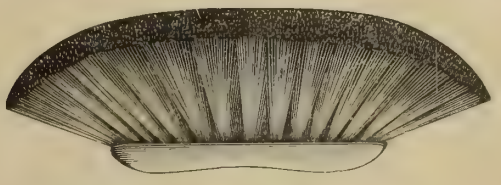


WALL PAPERS

Before You Place Any Order Let Us Demonstrate to You the Superiority of the "Staunton" 1906 Line. Our Salesmen's Trunks Hold the Evidence.

STAUNTONS LIMITED

TORONTO



..BRISK..

Your Brush Trade will be Brisk if you carry

SKEDDEN BRUSHES

Other Hardwaremen confirm this. They have tried "them all" and now bank on **Skedden Brushes**—high grade, low price. You could be just as successful a seller.

First, Get our Catalogue.

The SKEDDEN BRUSH CO., Limited
Hamilton, Ont.

Toronto Office—57 Queen Street East.

Phone Main 3431 F. W. KNIGHT, Agent.

PAINT, OIL AND BRUSH TRADES

PACKING WHITE LEAD.

PASTES of white lead and oil are singularly liable to change, which may begin almost as soon as the paste is made, and if it goes too far, may make the ready mixed pigment quite unusable. Everyone accustomed to oil colors knows that they become covered with a tough, leathery skin on exposure to the air. If the paint is then stirred the skin breaks up, but does not again combine with the rest of the mass. If then the stirred paint is applied by a brush, bits of the broken skin are left here and there, and no uniform coating of the surface is possible. No one seems to know exactly of what this skin consists. All we are sure of is that it is the result of the action of atmospheric oxygen on the oil in the paste, and that it cannot be regenerated.

To prevent as far as possible the formation of this skin the mixed paint must never be exposed to the air, and it must be mixed without any entanglement of air bubbles. In storage the paste must be securely casked in sound strong casks, which must be quite filled so as to avoid having any air space under the cover. It is obvious, too, that the casks must be airtight. A single crack will let in sufficient air to spoil the contents of the cask very rapidly. These desiderata can only be met by having good sound casks, and by having as many different sizes in stock as possible. White lead varies so greatly in density that a barrel which will be exactly filled with 60 lbs. of one brand of the pigment will perhaps barely hold 50 lbs. of another make of white lead. The cask should be painted inside to prevent the air getting at the white lead through the pores of the wood, and also to prevent the wood from sucking the oil out of the paint. At least two coats of paint, preferably white lead itself, must be given to the inside of the cask. The first coat must be quite dry before the second is applied, and the second must be dry before the cask is filled. Care must be taken that no iron nails with which hoops or the head of the cask are fixed on go right through, for wherever the paste comes into contact with iron it will turn yellow and become useless as a pigment. Iron drums must be painted or varnished inside if used for the storage or transport of mixed white lead, and no paint or varnish can be used which will injure the purity of the color of the white lead. If the drums are painted outside to protect them from the weather, care must be taken during the process that none of the paint gets inside the drum. The outer paint is nearly always colored, and such, of course, cannot be allowed inside the drum to spoil the color of the lead paint afterwards put in. A cask or drum filled with white lead should be carefully handled to prevent any leaks being caused. Once it has been opened for the withdrawal of part of its contents, the paint remaining should be covered with water to keep it from the air and so prevent the formation of any skin. Even with the greatest care in this respect it is extremely difficult to prevent skin formation if the drum or cask is being constantly opened to take out small quantities of the paint, and the consequent depreciation in the value of the article must be taken into account. Much may be done, of course, to avoid this source of loss by packing the mixed white lead in receptacles of proper size. Thus, a person who sells or uses a pound or two at a time should be able to purchase his mixed white lead in small casks, which will soon be emptied, while the larger dealer or user can purchase it in larger vessels. Once a mixed white lead pigment has made much skin the only thing to be done is to put it through the color mill, so as to break up the skin into as small pieces as possible, and to distribute them evenly, and then to mix the stuff with a much larger quantity of fresh paint.—Oil and Colourman's Journal.

CURDLING OF VARNISH.

THE term curdling is applied when the mass of varnish in bulk gelatinizes, or assumes a partially solid consistency, and when varnish added to paint breaks up into clots instead of becoming evenly amalgamated. The phenomenon is not by any means uncommon, and deserve some attention. In the first form of curdling noted above, that in which the whole mass of varnish sets to a solid or semi-solid mass, excess of driers in the varnish is usually the cause, and it is therefore, as a rule, varnishes of the kind known as "hard drying" that usually exhibit the fault. Thus, hard church oak varnish, or a hard cheap oak varnish, is sometimes found to become quite gelatinized even when packed in tins away from the air.

The addition of varnish containing resinate driers, or of terebine containing the same ingredient or adulterated linseed oil, very often causes curdling. Certain oils, such as colza, which from time to time find their way into paint oils, greatly induce curdling under such conditions. Curdling, then, may be considered a sort of finger post indicating that things are not as they should be, but whether the fault lies in the varnish or in the materials that have been mixed with it should be the subject of careful investigation.

NEW FLAX MILL.

The W. B. Marshall Co. are to erect a mill at Edmonton to extract oil from flax seed, and manufacture binder twine from the straw.

It is as easy to find the North Pole
as a reliable substitute for

ELASTILITE VARNISH

Many attempts have been made on both, but so far without success.

Manufactured only by

The Imperial Varnish & Color Co. Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN.,
care Mason & Hickey.

VANCOUVER, B.C.,
care Durand Merchandise Company.



TO THE VARNISH BUYER

the most serious considerations are quality, reliability and uniformity, and these qualifications are of special importance to the dealer who is trying to build up a permanent varnish trade.

Berry Brothers' label or brand may be safely relied upon as ensuring the above conditions.

Our varnishes are the safest goods to handle and the surest and most reliable goods to use.

BERRY BROTHERS, Limited

VARNISH MANUFACTURERS

WALKERVILLE, ONT.

Write for our 100 page illustrated catalogue. Every dealer should have a copy for reference.

McArthur, Corneille & Co.

MONTREAL

Glue and Gelatine

An extensive assortment, to suit all requirements.
WILL BE PLEASED TO SUBMIT SAMPLES AND PRICES

MANUFACTURERS AND IMPORTERS OF . . .

White Lead, Oils and Colors, Prepared Paints, Window Glass, Varnishes, Etc.

SELLING AGENTS IN CANADA

For the GENUINE
Imperial French Green
of JOHN LUCAS & CO., PHILADELPHIA.

And CELEBRATED
English Varnishes
of CHAS. TURNER & SON, LONDON.



ARCHITECTURAL VARNISHES

Reliable goods at reliable prices Varnish making is our specialty. Architectural Varnishes are the proof of it.

You had better get Prices.

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., Winnipeg, Man.

Please mention HARDWARE AND METAL when writing.

"Anchor
AND
English
Liquid
Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

We know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.

BRANDRAM BROS & CO. BRANDRAM'S B. B. WHITE LEAD REGISTERED TRADE MARK MANUFACTURERS LONDON ENGLAND

Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

PAINT AND OIL MARKETS

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, September 8, 1905.

LAST week's prices hold good in all cases, no advances having been made on any lines listed by us. Turpentine is very firm in the south and stocks are light on the local market. While higher prices are possible, we still quote the same figures as in last week's report.

Linseed oil is weakening in response to the eastern markets where lower prices are quoted. The scarcity of goods on the local market, however, has prevented the decrease here. Canadian crushers are preparing to put their mills in operation, and Canadian oil will probably be available about the end of the month. If prices continue low it is probable that the Canadian product will be held for sale later on at higher prices.

Gum shellac is quoted at an advance of about 10 to 20 per cent. and higher prices are looked for in shellac varnish.

White lead is also likely to advance. The time for bringing in stocks, ordered at the low figures prevailing before the recent tariff changes, has practically come to an end. After the advance following the increased duty, there was a slight reaction, but it is almost certain that the market will strengthen again during the coming month. An incident which will aid and bring about higher prices is the loss of the steamer Virginian of the Leyland line, the wreck occurring in the St. Lawrence River below Quebec. A heavy cargo of white lead and glass were carried and the loss of these and the inability of the white lead importers to replace the shipment at the low prices prevailing during the Summer will make for higher quotations.

The loss of several large shipments of glass on the Virginian taken in connection with the scarcity of goods on the Canadian market is also likely to bring about higher prices. The season for an increase demand for glass has now arrived, and no relief is expected from Europe, prices are likely to become very firm, and jump upwards during the Fall.

White Lead—Ex Toronto, pure white $5.50; No. 1, $5.02 1-2; No. 2, $4.65; No. 3, $4.40; No. 4, $4.15 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs., $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white, $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 92c.; 2 to 4 barrels, 91c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels, 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels, $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Prospects for a good Fall trade are excellent. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass— Glass is very firm at present prices (see current market quotations), and an advance is expected.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, September 8, 1905.

GENERAL business is somewhat easy, as is usually the case during the Fall fairs. Letter orders are more frequent than travelers', as it is understood that travelers have not been calling with their customary regularity, owing to the fairs now in progress.

Prices in all staples continue very firm—we might almost say with an upward tendency. All lead products appear to be on a strong footing, and the market generally is in a very healthy

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A Transparent Varnish suited for any high-grade interior or exterior fine work. Light Win-Tro-Lac is unequalled for prolonging the life aud preserving the colors of Oil Cloths and Linoleums. Win-Tro-Lac renews Hardwood Floors, Woodwork, Furniture, etc., leaving a brilliant and durable finish. It will both stain and polish at one application. Made in a number of colors. Write for prices.

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Possibly some of your customers already use it.

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Multum in Parvo
Beaucoup dans Peu

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Ces deux marques, **Elephant** et **Decorators' Pure** de la **C. P. Co, Limited,** sont, sans contredit, les marques les plus populaires sur le marcher.

Chaque paquet porte la garantie de l'association des fabricants de Blanc de plomb, ce qui est une preuve de sa haute qualite.

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"ELEPHANT" GENUINE DECORATORS' PURE WHITE LEAD.

NOTE

THIS ADVERTISEMENT IS REPEATED AGAIN IN FRENCH AT THE SPECIAL REQUEST OF A NUMBER OF OUR FRENCH-CANADIAN FRIENDS WHO WISH TO DEMONSTRATE TO THEIR CUSTOMERS THE "BODY" WHICH IS IN THE CANADA PAINT COMPANY'S WHITE LEAD.

ETURNED
T 3 1905
Montreal
Book 41
page 17

condition. Prospects for the autumn trade are particularly bright.

Turpentine has gained additional strength during the week and shows an advance all around of 1c. per gallon. Linseed oil is again weaker, and our quotations give a dropping off of 1c. Shellac varnish is still at our last week's quotation, though an advance is imminent owing to the better prices commanded by the raw materials.

Turpentine—Strength in the west is now reflected in the eastern market, as is shown in the appended price list: Single barrels, 90c. per gallon. Two barrels or over, 89c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—Another drop has occurred, the price now quoted being one cent lower than we gave last week. Current quotations are: Raw, one to four barrels, 48c; 5 to 9 barrels, 47c.; boiled, 1 to 4 barrels, 51c.; 5 to 9 barrels, 50c. f.o.b. Montreal. Net 30 days

Ground White Lead—Firmness is the feature of the market Inquiries are being received from all parts of the country for all lead products. We quote: Best brands Government standards, $5.35 to $5.50; No. 1, $5.10 to $5.25; No. 2, $4.75 to $5.00; No. 3, $4.50 to $4.75, all f.o.b. Montreal.

Dry White Lead—Shares in the general activity of the lead market. We still quote: Barrels, $5.25; one hundred lb. packages, $5.50; six or ten-lb. tins, $6.50.

Dry White Zinc—No change has been reported since our last issue. Our quotations are as follows: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil)—We can only say that the volume of business is quite satisfactory to all the manufacturers. We give the following prices: Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty—We still quote the same prices as last week. Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral — Our prices are as follows: Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c. smaller quantities, 8 1-2c.

Red Lead—Last week's conditions are still ruling the market. We give the following prices: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—The advance made by some firms last week has not yet been followed by all manufacturers. Our prices are as follows: Pure white in barrels, $2.30 to $2.50; pure orange $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—The demand is very fair for the season. We give the following prices: From $1.20 to $1.40 per gallon.

Castor Oil—The advance recently made in this article has held firm, and the market at present is described as being very strong. Figures generally quoted are: 8 1-2c. to 9 1-2c. according to lots.

Refined Petroleum—Business is picking up daily as the season is advancing very rapidly. No change in prices has yet occurred, but the market is gaining strength and an advance is considered not unlikely.

WINDOW GLASS—MONTREAL.

Local importers are in a worse position than ever owing to the grounding in the lower St. Lawrence of the Leyland liner Virginian, which had a considerable quantity of glass in its cargo. This consignment, if it had reached Montreal, would have relieved the situation somewhat, but, as it is feared that the steamer is a total wreck, we cannot report any improvement in Montreal stocks. No further news has been received from Belgium concerning the threatened strike. Prices are unchanged as follows: First break, 50 ft., $2; second break, $2.10; first break, 100 feet, $3.75; second break, 100 feet, $3.95; third break, 100 feet, $4.50; fourth break, 100 feet, $4.75; fifth break, 100 feet, $5; sixth break, 100 feet, $5.50; seventh break, 100 feet, $6.00; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50; seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

FOREIGN LINSEED MARKETS.

IN sizing up the foreign linseed and oil markets the Paint, Oil and Drug Review of recent date says: The depression in the foreign linseed oil market seems to be due to the fact that large buyers there are well supplied, and that they will not take on oil now except at bargain prices. Seed and oil in London market are not on a parity of values. Seed is selling at about $1.16 per bushel, while oil is weak at about 30 cents per gallon. This puts their seed market a few cents above our October market, while their oil quotations are fully 7 to 8c. below our oil futures. Our tariff of 25c. per bushel on seed would put the imported seed at $1.40 per bushel with freight and port charges additional. The duty on oil is 20c. per gallon, which, added to the foreign price, would put oil into our markets at upwards of 50c.—a clear impossibility. Hence there is no outlet in this direction for oil or seed from England.

English and Continental oil buyers are now accustomed to take on very large quantities of oil at times, when prices are low. They "stock up" on a favorable market—a custom which does not prevail in this country to the extent that it does there. The American oil buyer takes his oil on contract, to be

delivered as he needs it. He will not store any great quantity if he can avoid it, because the risk of leakage and loss counteracts any advantage he might otherwise gain by heavy purchases. But in Europe there seems to be no limit to the amount of linseed oil the trade can absorb, at a low price. And, per contra, when prices are not specially attractive, oil buyers avoid the market. Just at present this attitude on their part is indicated by the lack of life in the oil trade as reported from the Hull and London exchanges.

It is probable that the coming year will see some interesting developments in seed and oil abroad, for the seed supply is none too abundant, and the oil demand is not likely to be correspondingly curtailed. The present depression in the oil trade is not an unusual occurence, as the course of those markets is not infrequently from one extreme to another. Low prices and lack of interest are followed by hardening markets and heavy buying as a natural reaction.

PAINT REMOVERS.

A GOOD paint remover in paste form can be made by mixing a solution of one pound caustic soda, and one pound pearl ash in one gallon of hot water, with starch and china clay, in equal proportions to the consistency of stiff paste, says an exchange. The starch causes the remover to set to a jelly on cooling. Work treated with these alkiline paint removers must always be carefully washed down before painting. Sometimes it is necessary to wash down with vinegar and water to "kill" the alkali which, if left, is sure to eat through and injure the paint. Paint and varnish removers of a spirituous nature are usually composed essentially of amyl alcohol or of fusel oil which contains a proportion of this alcohol. Amyl alcohol possesses the property of readily dissolving oils and gum rosins, and hence, instead of removing these materials by a process of saponification, as is the case with the alkaline removers, the spirit removers actually dissolve, or at least render soft and pulpy, the hardened oil and gum. Other ingredients of the spirituous removers are coal-tar benzine, acetone nitro-benzine and light hydrocarbon oils. Many of these preparations, however, are protected by patent rights.

THE WEST INDIAN TRADE.

WHILE we, as Canadians, are proud of our country and are firm believers in its future, yet we must acknowledge that there are some things which we lack, the possession of which would be most desirable. The United States, to the south of us, are self-contained. From the wheat fields of Minnesota and Dakota, to the cotton fields and rice fields of Alabama; from the orchards of Oregon to the orange groves of Florida; from the forests of Maine to the fruit lands of California, the country is productive of every possible article that a civilized human being can require. And where the United States fail to supply any known want, their over-seas possessions fill in the gap. Can the same be said of Canada ?

Desirable as it would be to be able to record that Canada is capable of supplying all her own wants, this is impossible under existing circumstances. True, we have an immense variety of products in boundless supply, but it must be remembered that the southern boundary of the Dominion lies far north of the tropics, and all the products of the tropical belt are denied us. To fill in this gap in the case of Canada, what could be more natural than to have recourse to our nearest sister colonies—the West Indies?

Geographically, Canada is not so far distant from the British Islands of the West Indies as one might be inclined to suppose. As compared with her distance commercially from Great Britain, the position of the West Indies is highly favorable to the development of a successful trade. Where it takes six weeks to get an order filled in England, it only takes three or, one-half, that time, to get an order filled in Jamaica. This is comparatively quick work.

The sentiment in the Indies, as voiced by travelers who visit the Islands, and by Islanders who come to Canada, is extremely favorable towards a closer political and commercial connection between the two colonies. At present trade is carried on principally with the United States, whilst the trade with Canada is nominally small. But the possibilities for a great expansion are there, and with proper cultivation there should be a considerable growth in the volume of products exchanged.

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HEATING AND PLUMBING

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By M. J. Quinn, Mechanical Superintendent for the Ontario Government.

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Article XIV.

THE "OVERHEAD" SYSTEM OF STEAM HEATING.

As was said in the beginning of this series of articles, the character of building in which a heating system is to be installed must be the only guide for the heating engineer in making a choice of a system which will give uniformly good results under all circumstances and conditions, and for that reason he must in some cases be very sure of his data, before coming to a final conclusion.

Take for example the building illustrated in figure F, in which is shown an overhead steam piping system, the essential feature of which is that the steam main, instead of running through the basement, rises at once to the highest point in the building, viz., the attic, where it connects to a system of "drops," which supply the radiators with steam and also conduct the condensation from the same to the return main in the basement, which, as will be seen, connects directly with the boiler.

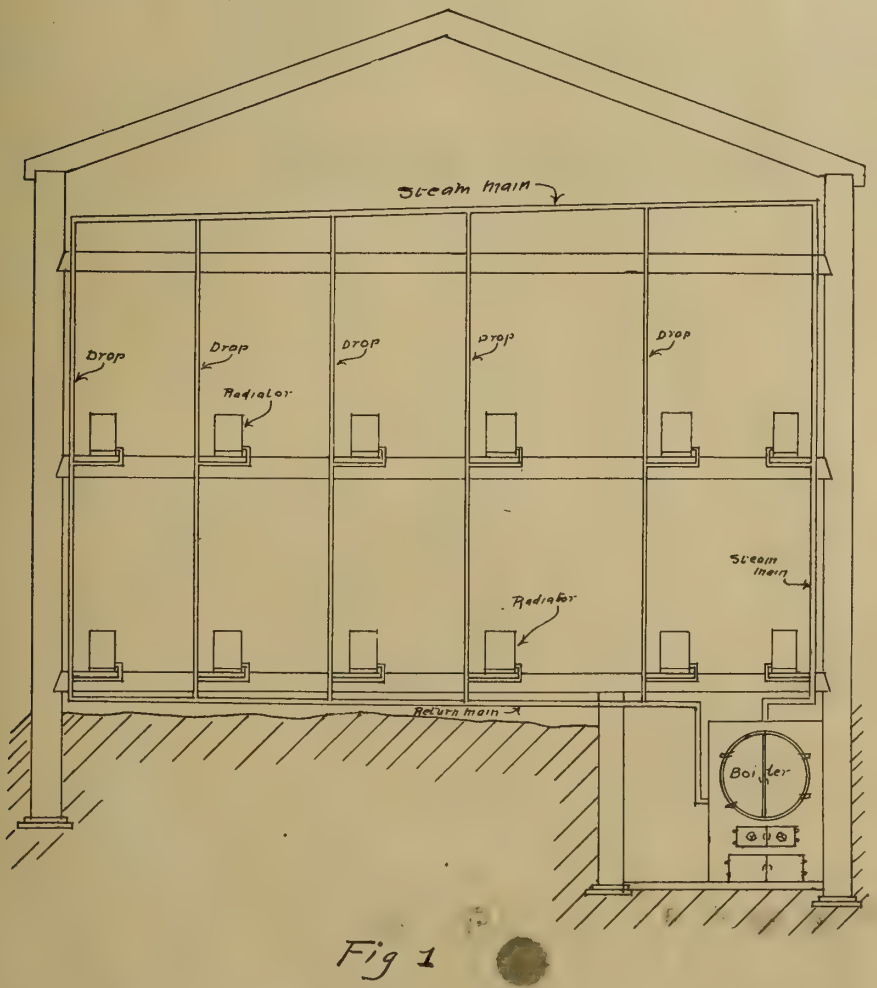


Fig 1

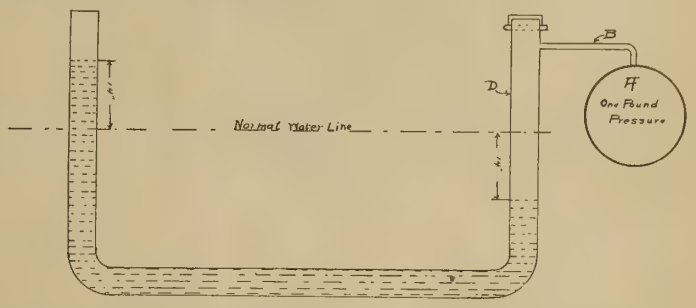


Fig 2

Now, the question will naturally be asked, why cannot the steam main, as well as the return main, be carried in the basement, or at least under the ground floor, as well in this building as in that in which the "two pipe gravity return system" was shown, and it is the purpose of this article to give an answer to that question and to illustrate the exact physical conditions which would prevent the "two pipe gravity return system" from working successfully, and as a proper understanding of these conditions seems to us to be of the utmost importance, the reader will pardon us if we take what may appear at first a long road to reach a nearby point.

Referring then to figure E, we have an illustration of a length of pipe (of any size or length) turned up at each end, the end marked "D" being capped tight, and being connected by pipe "B" to cylinder "A."

Now under normal conditions the water in both ends of pipe "D" would assume the same level at the line marked "normal water line."

Assume, however, that a small air pump is connected to cylinder "A," and a pressure of one pound to the square inch is exerted, not only in the cylinder, but through the pipe "B" to the surface of the water in pipe "D"; the result must be as indicated in the drawing, that the water must sink in one leg and rise in the other, until the difference between the two levels produces a pressure due to head, equal to that exerted by the air under pressure, and it will be obvious that a difference in level must continue to exist as long as there is more pressure on the surface of the water in one leg than on that in the other.

That point having been made clear, then let us consider the drawing, figure 3, where we have the same result, due to unequal pressure, though brought about by slightly different conditions.

In this illustration the pipe "D" is connected to the cylinder "A" at the bottom of same, and from the top of "A" to the top of "D" is connected a small pipe "B," in which there are three leaks, "C," "C," "C," through which the compressed air is escaping.

Now assuming that a pressure of, say, five pounds to the square inch was exerted in the cylinder "A," and consequently up through the pipe "B," and that by reason of the loss of one pound press-

ure, due to the leaks, the pressure of air in pipe "B," where it connects with "D," would be only four pounds to the square inch, it will be plain that the difference in level between the water in "A" and that in "D" will be the same as that in figure 2 or about 28 inches, and the water in "D" will rise and fall just as the difference in the pressure between one end and the other is increased or decreased.

To come to the point, then, let "A" in figure 2 represent the steam boiler, let "B" take the place of the steam main, and "D" that of the return, and

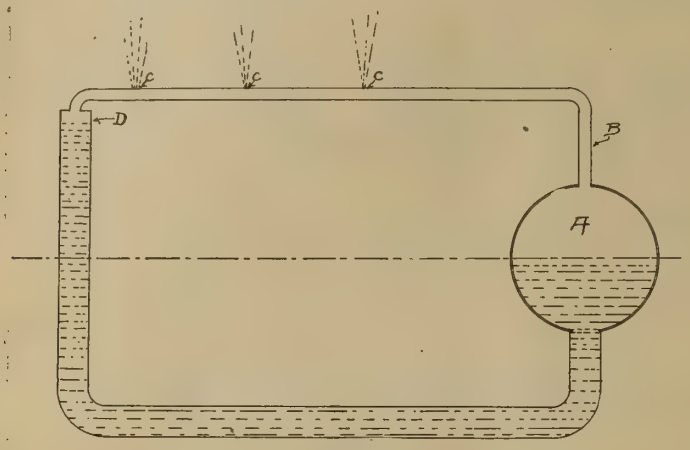


Fig 3.

let the leaks "C" "C" "C" represent the steam necessary to supply three radiator connections. A little thought will convince the reader that the pressure will be somewhat reduced after passing the first "C," still further reduced after passing the second "C," and will be at its weakest point after having passed the third "C," when it joins with "D."

Now as the pressure in the boiler "A" is constant, and is exerted in all directions equally, it will be plain that when it is pressing up through the steam main with a pressure of five pounds to the square inch, that it is also pressing down through the return main with the same pressure, and, if the pressure at "D" is reduced below that in the boiler, because of the steam taken to supply the radiators, then it follows that the water level in "D" must always be higher than that in the boiler, and hence, where there is not room under the ground floor, as in figure 1, to place the return main some distance below the steam main, we must use the overhead system, or have unsatisfactory results such as those indicated in figure 4, where an attempt is made to successfully run both pipes in a contracted passage.

In this case, the return main, of necessity, being close to the steam main at the end furthest away from the boiler, has overflowed into the latter up to the level indicated by the arrows, and marked "level to which main is flooded" and as the water has risen into at least two of the risers, they will be entirely cut off from a supply of steam, except that which, under a high pressure, may be forced through the water in the main, causing the "pounding" in the pipes, which is the bane of the life of the owner of a system with such defects in it.

It will, we hope, be plain, then, that the principal value of the overhead system lies in its adaptability to buildings where there is not room under the ground floor to run both the main and return, with a proper distance between them, or where the ceiling of the basement is not a sufficient height above the water line in the boiler.

A MODERN FILTRATION PLANT.

By James G. Fernald, L.H.D.

MODERN methods of filtration, like all that is best in scientific attainment, reach their result by closely copying nature. They build on a vast scale subterranean sand-beds, where the gathered water percolates through into the city mains, as it does by natural process into the deep well or the mountain spring.

Of the way in which this is done, the filtration plant now in course of construction at Washington, D.C., the second largest in the world, is a good illustration.

The water is drawn from the Potomac River above Great Falls, at a point 14 miles from Washington, whence it is brought to the city through a circular conduit of brick, which is 9 feet in diameter, and has a fall of 9½ inches to the mile. President Washington estimated that the city which he planned would require 8 million gallons of water daily. The present aqueduct has a daily capacity of 75 million gallons, and engineers are urging the immediate increase of this supply by paralleling the existing conduit with another of the same dimensions.

After entering the conduit at Great Falls, the water flows 9½ miles to the Dalecarlia reservoir, which has a capacity of 150 million gallons, and was originally constructed by the damming up of the Little Falls branch of the Potomac, and which is entirely without lining of stone of any sort. Thence the water passes through a similar conduit for a distance of 1.1 miles into the old distributing reservoir, which has a total capacity of about 151 million gallons, and has paved slopes—it also being divided into two basins containing 98 million gallons and 53 million gallons respectively. Thence the water passes into the Washington city tunnel, commonly known as the Lydecker tunnel, which is 3-9 miles in length, to the Washington city reservoir, which has a total capacity of 300 million gallons. This, in addition to the Reno reservoir, and the Brightwood reservoir, gives a total storage of 635 million gallons, or about 9 days' supply, assuming 75 million gallons daily consumption.

The water as it now comes from this reservoir into the homes of Washington is often so muddy that one hesitates even to wash in it. Yet this is the water that Washington is compelled to drink. Many persons, of course, buy spring or other bottled waters. But these cannot be used for cooking on any great scale. So the people are fain to use the muddy hydrant water and hope for the best. Worse than the mud, however, are the unseen germs which the scientist's microscope discovers. In fact, the muddy water is the purest. It is after rains or freshets, when a flood of fresh water has been poured into the river, that it comes down charged with earthy matter and looks so forbidding. But in quiet times, when animal and vegetable matter decays on the banks and is washed into the stream by occasional showers, or blown upon its surface by the wind, the clear water may be and often is much more fully charged with dangerous microscopic life.

The filtration plant that Washington is building to meet the city's need covers

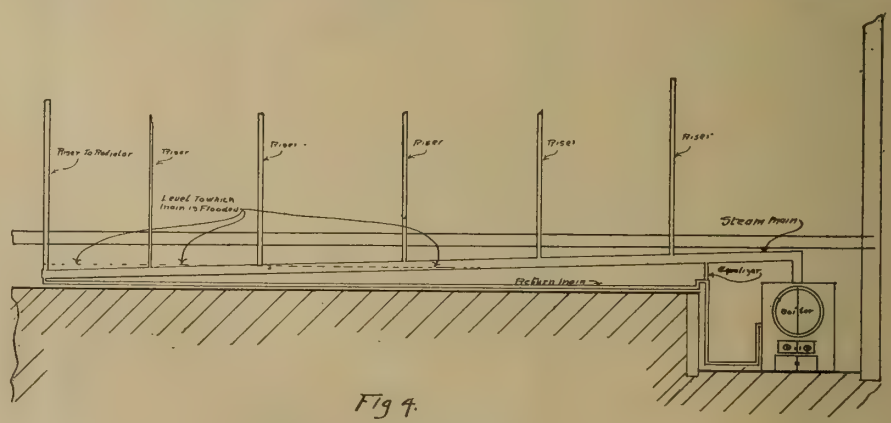


Fig 4.

29 acres, each acre a separate unit or section of the system.

As you stand at the southern gate of the Soldiers' Home and look southward toward the city, you see great fields covered with rows of small circular ridges looking like corn fields, with the hills rather large and rather far apart, and without the growing corn. Those circular ridges are the rims of the manholes that let light and air as needed into the filter below. These manholes are 3 feet in diameter and 28 feet apart, and are guarded with double covers, so that they may be opened or closed as occasion de-

Ramsay's Creosote Stains

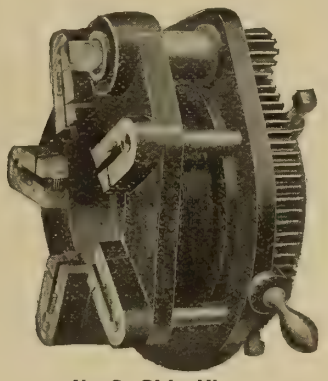
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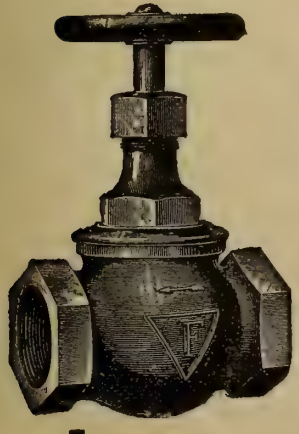
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Have you made up that order for Valves, Pipe and Fittings, also Packings, which you require for the Fall trade yet? Have you specified the best Valves, i.e., Fairbanks. The kind with the renewable Disc that can't flake or break, and which is changed so easily.



WHY HAVEN'T YOU?

We're now filling orders at our new warehouse from a larger stock than ever.

The Canadian Fairbanks Company, Limited
Montreal Toronto Vancouver Winnipeg

mands. The filters are built in double lines, intersected by depressed roads, on which great double gates open, through which the filter may be entered for cleansing purposes at suitable times. Long aisles stretch away between rows of pillars.

As you look down at the floor of the partly completed work, you see that the groined arches overhead are repeated there inverted.

At the apex of many of these inverted arches may be seen openings leading downward, which are to carry the collected water after passing the filter into 2-foot mains that run under the floor. Lines of split tile with uncemented joints are laid with the convex side upward across the unpierced arches to reach these openings, along which the water will find its way as it does through a tile underdrain in a wet meadow.

Over the floor thus prepared is spread one foot of fine washed broken stone, and above this fine, clean sand is laid 4 feet deep. When this has become thoroughly settled, water will be let in from the pumping house with even flow till it reaches the depth of 4 feet above the sand, at which depth it will be maintained with unvarying accuracy by an automatic apparatus in the pumping house.

The filling of the filter is a very nice undertaking. It must be filled backward. When the broken stone and sand are well packed, water is let in through the mains underneath, and allowed to soak up gradually through the mass till the whole is thoroughly wet. By this slow absorption the sand is evenly moistened and firmly packed together.

Then the water may be let in over the top. But even then it is not allowed to flow directly upon the sand lest it disturb the surface and start a washout, which the water will wear more and more, going down through it in a stream unfiltered, instead of working its way through drop by drop. So the new water is let in behind a detaining wall, the top of which rises just 3 inches above the surface of the sand, so that the incoming water flows slowly and evenly over upon the sand.

Here then we have the subterranean waters in cool dark chambers under the earth, slowly trickling down through fine, clean sand, the nearest artificial reproduction yet attained of nature's great filter that supplies the wells and springs.

The whole vast structure is built of concrete, which is really artificial stone, prepared by mixing 1 barrel of cement with 11 cubic feet of sand and 19 cubic feet of broken stone or gravel. It has been found that an arch of concrete so prepared will bear practically any weight that can be piled vertically above it. These arches are of 14-foot span, the concrete being 6 inches thick at the crown of the arch.

A visitor to the filtration plant sees vast piles of wooden forms of various shapes lying ready to be carried where they may be put in place to have the concrete masonry formed upon them. The work is necessarily slow, because the concrete is so thinly spread over so vast an area. The forms must be carried by hand from point to point, a dozen or fourteen men carrying one form, and carrying it no faster, of course, than a man can walk, to the place where it is to be set up. After the concrete has hardened, the forms must be removed and carried to a new place by the same slow process. So the inverted arches are formed for the foundation. Then the pillars or piers, monoliths of concrete 10 feet high and 22 inches square, are built where they are to stand. Looking across the partly-completed filters, one sees long rows of these roofless columns like the ruins of some newly-excavated Pompeii. When these are ready, the arched wooden forms are placed upon them, and the concrete spread above, which is to set into solid stone for the arches of the wide roof.

Over the roof is laid a level covering of earth 2 feet deep, stopping just 4 inches short of the upper rim of the manholes, so that no surface water can enter by way of the manholes. But how is the surface water falling in every rain to be kept from converting this earth covering into a swamp, and gradually working rifts, as water will, through the masonry of the roof? This is prevented by an ingeniously simple device. In the centre of each pillar is set a 2-inch terra-cotta pipe, bent with an elbow so as to come to the surface of the north face of the pillar one foot above the level of the sand in the filter. Over the top of the pier, where the radiating arches spring, there is naturally a sump or depression. The terra-cotta pipe set in the stone of the pier opens upward in the centre of this depression. Over the top of each of these pipes is placed a brass-wire screen, and over this 1 cubic foot of fine gravel and 11 cubic feet of sand. Thus water can never gather in pools upon the roof and become stagnant, but must work its way down through these prepared channels, and in going down must pass through sand and gravel, by which any impurities it may have gathered, as of decaying vegetation, will be mostly removed before it joins the mass of water in the filter below, again to pass through 5 feet of sand and gravel before reaching the underlying mains.

The filters are to be cleaned once a month, one filter a day, so that it will take practically a month to clean the whole plant. In cleaning, about one inch of the top surface of the sand will be carefully scraped away and removed. So carefully must this be done, that the workmen who do it will be required to wear flat-soled wooden sandals about 18 inches long by 6 inches wide, on which they go skating or sliding over the surface, where any dent of a boot heel might start a washout, through which the water would ultimately rush unfiltered. The water pressure will be very great, because each filter will contain water covering a surface of approximately 45,000 square feet and 4 feet in depth, giving 180,000 cubic feet of water, which at an estimate of 63 pounds per cubic foot, would weigh 11,340,000 pounds.

When the water has passed down through the sand and broken stone into the underlying mains, it flows through these to the "regulator houses," of which there are six, neat brick buildings, each controlling five filters. The water from the five filters is conducted into a central chamber in the "regulator house," and from this through 48-inch mains to the "filtered water reservoir."

This is a vast underground structure, 612 feet long by 162 feet wide, the roof of which is formed of arches 18 feet in span resting upon columns of monolithic concrete masonry, 2½ feet square and each 27 feet high. As one walks through the empty structure now the likeness to a vast cathedral is still more impressive than under the arches of the filters. This reservoir will hold one-third of a day's supply for the city (25 million gallons). This supply must of course be drawn off three times every day, which is to be done by five great engines in the Trumbull street pumping station, to which the water is conveyed by four 48-inch mains from the filtered water reservoir.

The filters have been described as subterranean. They are, indeed, largely built upon excavated ground, but even so they are higher than the water in the Washington city reservoir, from which their supply is drawn. This makes necessary a special pumping station in connection with the filter plant, having for its sole work to raise the water from the reservoir and distribute it to the filters. The completion of the work is promised by the end of the present month. The total cost is estimated at $3,000,000.

The earth covering the roofs of the filters will be sown to grass, and the intersecting streets paved and parked, so that, with the vast lake of the Washington city reservoir on the west, the lands of the Soldiers' Home stretching far to the north, and the Capitol, the city, and the Washington Monument full in view as one looks southward from this elevated ground, the Washington filtration plant will be an added ornament as well as a source of incalculable benefit to the beautiful and rapidly-growing capital city.

HOW TO CLEAN BRASS.

The United States Government is said to have sanctioned the following method of cleaning brass: Make a mixture of one part common nitric acid and one-half part sulphuric acid in a stone jar, having also a pail of fresh water and a box of sawdust. Dip the articles into the acid, and then soak them in the water and finally rub them in the sawdust and they will take on a brilliant color. If the brass is greasy, it must be first dipped into a strong solution of potash and soda in water, and then rinsed, so that the grease may be removed, leaving the acid free to act.

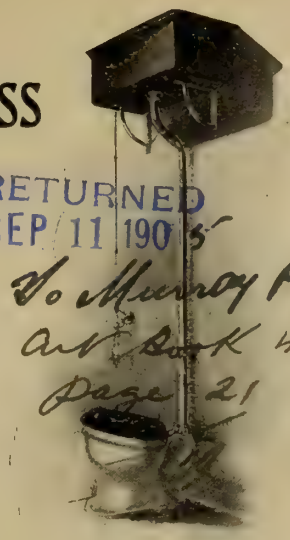
BORDEN CO.'S MOVE.

Mr. M. E. Murray, representing the Borden Co., Warren, Ohio, called on Hardware and Metal in Toronto this week. The company have concluded arrangements for the manufacture of their pipe threading machinery and solid adjustable die stocks in Toronto to supply their growing trade throughout Canada. Mr. Murray will make his headquarters in Toronto, and will oversee the manufacture of the common machinery by Armstrong Bros., Sheppard street.

TRUCK FOR RADIATORS.

W. H. Armstrong, Vanwert, Ohio., has a new invention which pertains to improvements in hand-trucks particularly adapted for carrying heating radiators, the object being to provide a truck that may be readily adjusted to different sizes of radiators and having means for firmly gripping a radiator so as to prevent any movement thereof relating to the truck.

'TIS PROGRESSIVENESS THAT COUNTS



RETURNED
SEP 11 1905
To Murray Mfg Co
Art Book 40
Page 21

to-day, whether in warfare between nations or in the keen competition of commercial life. Compare Japan the progressive with Russia the ultra conservative—the latter an old nation many years behind the age, the former constantly striving to improve. Are the Japanese victories to be wondered at?

As with nations, so with individuals. The plumber who keeps abreast of the times, who keeps his weather eye open for better things and conducts his business after modern methods—he is the one who will achieve success. To the plumbing trade this century has brought one of the grandest improvements known in many years—

The NATURO Closet

Why persist in handling the old fashioned Water Closet when for the same profit you can handle something far better—something that will make your name a by-word and bring trade right to your store?

If you doubt this, send for our book describing the NATURO Closet — you'll soon be convinced.

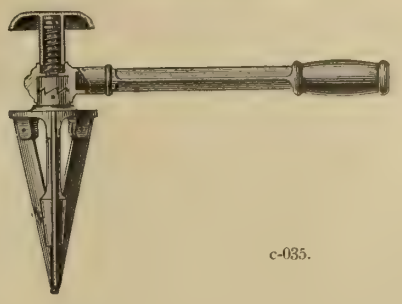
THE NATURO COMPANY

C. H. MUCKENHIRN, PRESIDENT

Salem, N.J.

MUELLER PIPE REAMERS

Ratchet Handle Pattern



c-035.

Some reamers cut off the burrs well in some places, but skimp them in others, because the operator cannot hold them true in the pipe.

Mueller Pipe End Reamers have a breast handle for holding them true while operating. They leave a clean reamed surface in the entire circle of the pipe.

Mueller Pipe Reamers ream all sizes of pipe up to 3-inch, and are made in plain hand'e and ratchet handle patterns. The reamer illustrated is the ratchet handle pattern.

Each reamer is given a working test, bears the Mueller trade mark, and is *unconditionally guaranteed.*

We also make ground keys, compression and fuller work for plumbers' use. Catalogues upon request.

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We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



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SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application to

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 8, 1905.

AFTER a long period of stationary prices, lead pipe has at last felt the effect of the pig market, and lower discounts are now quoted. This advance has been expected for the last six weeks, so that it will occasion no surprise.

Brass manufacturers issued partial new lists during the week, showing advances in the price of sheets, rods and tubing, but figures for other lines are not available, at time of writing. There is no doubt, however, but what they will show a substantial increase.

Supply houses are still kept busy filling good orders from all parts of the Province, as well as many points in Ontario.

The weakening of tin during the past week, has prevented any further increase in half-and-half solder, which remain very firm at the figures quoted last week.

Another feature of the week's trading has been the withdrawal by manufacturers of prices on soil pipe and fittings. New prices have not yet been settled, but the lists are expected in a few days. Some houses report a shortage in their supply of iron pipe, with the result that prices on this article are strengthened and given an upward tendency.

Range Boilers—There is no feature in the week's business which may be described as a healthy one. We give prices as follows: Iron clad, 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—The continued advances in pig lead have had the inevitable effect on pipe. The old discounts have been withdrawn, and we now quote: Discount 25 and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton 10c. per hundred lbs. extra.

Iron Pipe Fittings—Prices are somewhat firmer, though we do not amend previous quotations. We give prices as follows: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—Some jobbers complain of a shortage with the result that the market has strengthened. An advance may have to be chronicled before long. In the meantime, we still quote: Standard pipe in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—Manufacturers have withdrawn prices, but pending receipt of the new lists, jobbers are still giving the following prices: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—No further advance is reported, last week's prices still holding good. Our quotations are as follows: Bar solder, half-and-half guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street east,
Toronto, Septem' er 8, 1905.

LEAD pipe has responded to the higher prices quoted in the metal markets for pig lead and discounts have been lowered 5 per cent., being now 25 and 5. Despite the advance, buying continues very heavy.

No other changes are reported, although an advance on brass goods is looked for daily on account of the high price of copper. Iron pipe continues strong with no change in quotations. Soil pipe is very scarce and supply houses are behind in their shipments owing to their inability to secure goods from the manufacturers.

Business during August was the largest in the history of the trade, being considerably larger than last year's record figures. September also has started out remarkably well and from the present outlook the month will be a top-notcher.

Lead Pipe—The looked-for advance has arrived and lower discounts are noted. We quote as follows: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Shipments are behind owing to foundries being unable to fill orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Stocks are fairly large and prices continue firm. Our quotations are as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Buying continues active and no change in prices is looked for. We quote: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—No shortage in stocks exists. Prices continue very firm, however, as some have looked for higher prices. Prices are firm. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Demand is strong and despite weaker conditions in metal markets, prices are firm at the old figures. Our quotations are as follows: Bar solder, half-and-half, guaranteed, 19 1-4c.; wiping solder at 17 1-2c. and refined 17 3-4c.

Enameled Ware—Manufacturers keep well up to the demand. We quote: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50, special, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality $19, special, $17; 3 inch rim, first quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.

NEW FLUSH VALVE.

J. P. Goodfellow and S. R. Ramsay, New Westminster, B.C., have invented a flush valve the objects of which are to improve the construction of devices of this character in such a manner as to do away with the annoyances of the ball-cocks, floats and the like now in use, to simplify the construction of such devices, and especially to provide a valve which will be balanced under all pressures.

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There can be Trade without much BUSINESS about it.

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The Manufacturers List Co., - - - Toronto.

DID YOU EVER

use a wooden sifter? Do you know what a beastly thing it is? Chokes you with dust, exhausts your arms; your patience, and then—the bottom falls out. None of this with the

METALLIC ASH SIFTER

No dust, no "tired feeling," no "falling out." We make this sifter expressly to cover these points, and it does so admirably. That is why the ***Metallic Ash-Sifter*** is ***saleable***—at your store or any other store. Do you keep a stock? Have you had the Booklet?

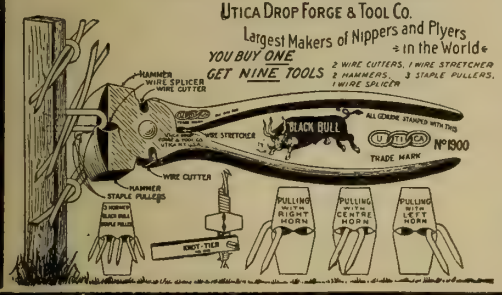
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YOU BUY ONE GET NINE TOOLS



Utica Black Bull Staple Puller

The only STAPLE PULLER with THREE Pulling Points.

Pulls bottom wires equally as well as top wires. The centre prong pulls staples straight.

Each Tool is Tested before leaving the Factory. Fully Guaranteed.

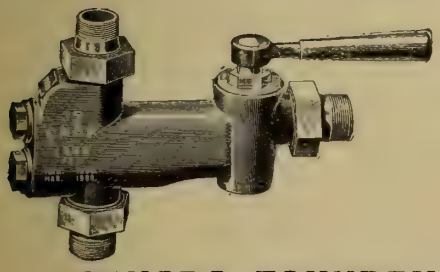
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See our catalogues; read our description of the Standard Oak and the Souvenir Range. Sent free on application.

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PRIEST'S CLIPPERS



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Highest Quality Grooming and Sheep-Shearing Machines.

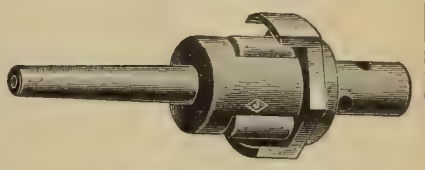
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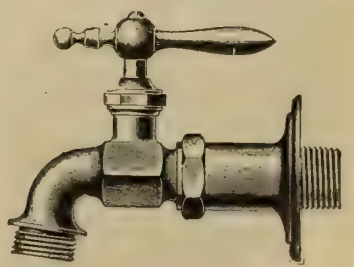
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ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

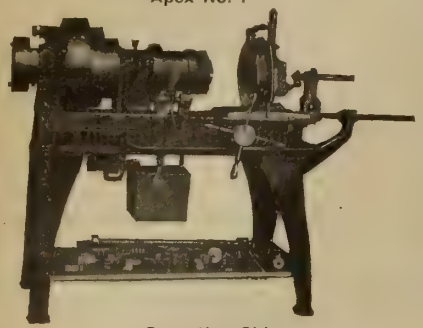
ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, **CLEVELAND, OHIO, U.S.A.**

THE MERRELL
NIPPLE and PIPE
MILL MACHINES

Apex No. 1

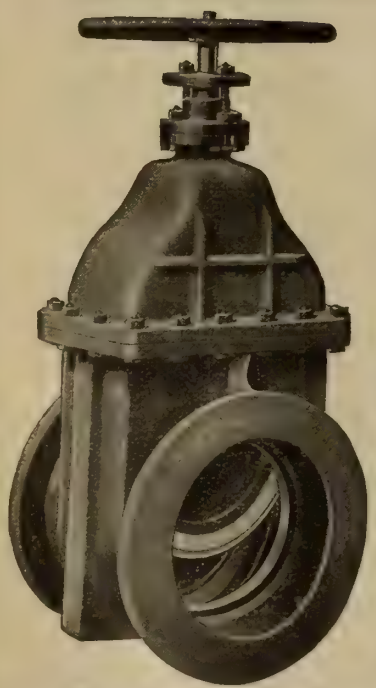


Operating Side

This machine is designed for heavy and constant service in pipe mills and shops where a large quantity of pipe of one size is handled. It is unequalled for strength, speed and convenience in operating, and is especially adapted for making nipples. Capacity of machine, from ¼ to 2 inches, inclusive.

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Kerr's Weber Iron Body Gate Valves
Are recognized as the leading Gate Valves
"MADE IN CANADA."
Every valve is tested and packed before shipment.
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Manufacturers Limited
WALKERVILLE - ONTARIO

ELECTRICAL NOTES.

IN order to prevent wireless messages interfering with one another, endeavors have been made to send electrical waves only in one direction, as luminous signals are given off from a concave mirror. Prof. Braun has been engaged in experiments of this kind, and in a lecture given on July 11 last before the Strassburg University Association of Electricians and Naturalists he announced that these experiments had come to successful conclusion. Prof. Braun's methods are based on the fact that three antennae arranged in the angles of a regular triangle are excited by waves of the same periodicity, but of different phases. The inventor states that one of the three antennae begins vibrating by 1-250,000 second earlier or later than the two others, this difference in time being kept up, according to experiments, with an accuracy of about one second in three years. This will result in different radiation according to the difference of the space, and by simply inverting a crank the direction of maximum effects can be shifted by 60 or 120 degrees.

A new system of electrically lighting trains is being adopted on certain British railroads. This is the Leitner-Lucas system. It differs from the general Stone type, wherein the electrical energy is generated by an axle-driven dynamo and stored in accumulators, inasmuch that instead of compensating the variable speed of the axle by a slipping belt, there is an automatic decrease of the lines of force cut by the armature windings, by reducing the dynamo field in approximate proportion to the speed of revolution. To attain this end, subsidiary armature windings are mounted on the same shaft as the primary armature and revolve under small separate fields, thereby becoming a small subsidiary dynamo. This arrangement is carried out in such a manner that the flow of current through the main field is counteracted or choked back by an opposing electromotive force from the small subsidiary armature, which opposing voltage rises proportionately to the speed at which the whole machine is driven. Various methods of winding have been adopted in this system for regulating against sudden rise of current or voltage in the circuit feeding the accumulators and lamps due to variations. The output of the dynamo is kept reasonably constant independent of the train speed.

Among miners, where the underground workings are lighted by electric incandescent lamps, there is often a tendency to be careless in the handling of the lamps. As the light is not naked, it is considered that the lamps may be laid down anywhere without fear or danger. Some experiments that have been carried out in England, however, prove the fallacy of this contention, and show that an incandescent electric lamp is equally as dangerous if not properly handled as a naked light. The investigations of Mr. H. Hall, one of the British Government inspectors of coal mines, showed that when a sixteen-candle-power lamp was covered with coal dust, the generation of heat was so rapid that within four minutes a temperature of 450 degrees F. was attained, and the bulb burst. His investigations also showed that when the heat had risen to a certain point evidences of spontaneous combustion developed, and although the lamp was then removed from the coal, heat generation still continued, and finally the coal burst into flame. In another case the investigator imbedded a 100-volt 16-candle-power lamp in a heap of coal dust. Within three minutes smoke was emitted from the dust, and in another case where the lamp was simply laid down upon the heap, flame burst out in the course of twenty-five minutes. Colliery managers should therefore impress upon the miners the great danger, when stopping work for a few minutes, attending the laying down of the lamp upon the ground. It should always be suspended, with the bulb free from contact on all sides. Every care should also be displayed in handling the globes as as to avoid breakage, as the instantaneous exposure of the incandescent filament when the bulb bursts is sufficient to create a violent explosion should any firedamp be present. A short time back a terrible explosion occurred in a French coal mine, by means of which sixteen men lost their lives, owing to the ignition of the firedamp by the bursting of an incandescent bulb.

NEW SHOP OPENED.

George H. Cooper, one of the most popular members of the Toronto Master Plumbers' Association, is wearing "the smile that won't come off," he having opened up a branch show room and shop at 113 Church street, just below Queen. This expansion in itself is sufficient to put the expansionist in good spirits but when it is realized that the new shop is run in connection with a dressmaking establishment George's friends will know the reason for his unusually broad smiles. Mr. Cooper will continue to do business at 151 Berkeley street but he can be found at the dressmaking address each day at noon as well as in the evenings.

AIR AND GAS MIXING APPARATUS.

H. L. Karger, 26 Frankfurter Allee, Berlin, Germany, has invented an apparatus for mixing air and gas for illuminating purposes. In accordance with this invention uninterrupted operation is provided for by means of circulation conduits in appliances for mixing gas and air; and also for the supply of the mixture at a high pressure, so that in this case both air and gas or two different kinds of gas are sucked in and forced out. Suction of two kinds of gases may be effected either into a common chamber or separate chambers. Employment of special circulation pipe for gas and another for air is not possible, because exact co-operation of the valves leading back to the pressure main is unattainable.

RUST REMOVERS.

Cover the metal with sweet oil, well rubbed in, and allow to stand for forty-eight hours. Smear with oil applied freely with a feather or a piece of cotton wool alter rubbing the steel. Then rub with unslaked lime reduced to as fine a powder as possible. Immerse the article to be cleansed for a few minutes, until all the dirt and rust are taken off, in a strong solution of potassium cyanide, say about one-half ounce to a wineglass of water. Take it out and clean it with a toothbrush with some paste composed of potassium cyanide, castile soap, whiting and water mixed into a paste of about the consistency of thick cream.

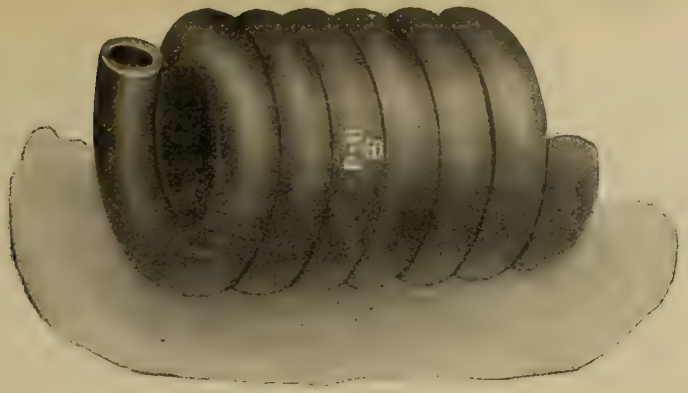
PIPE THAT IS PIPE

THIS IS OUR BRAND

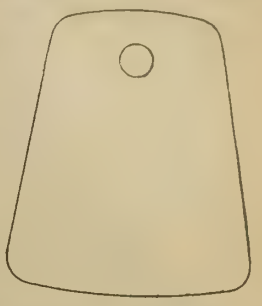
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

TRADE PENBERTHY MARK.

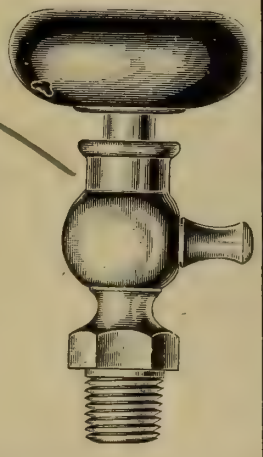


Works Low
22 lbs.

Works High
155 lbs.

RETURNED
SEP 11 1905

AUTOMATIC INJECTOR



RADIATOR AIR VENTS

Do you sell them? We are the largest manufacturers of Vents in Canada and supply the leading Plumbers, Radiator and Rod Manufacturers. If you want Vents that look right and are right buy Penberthy and be sure you get the genuine.

Tried and Tested—Always Satisfactory

United Stop and Waste Cocks used by Leading Plumbers Everywhere

Unite with United Brass Goods — Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.

WM. STAIRS, SON & MORROW, LIMITED

HALIFAX, N. S.

The Eastern Canada Plumbing Supply House

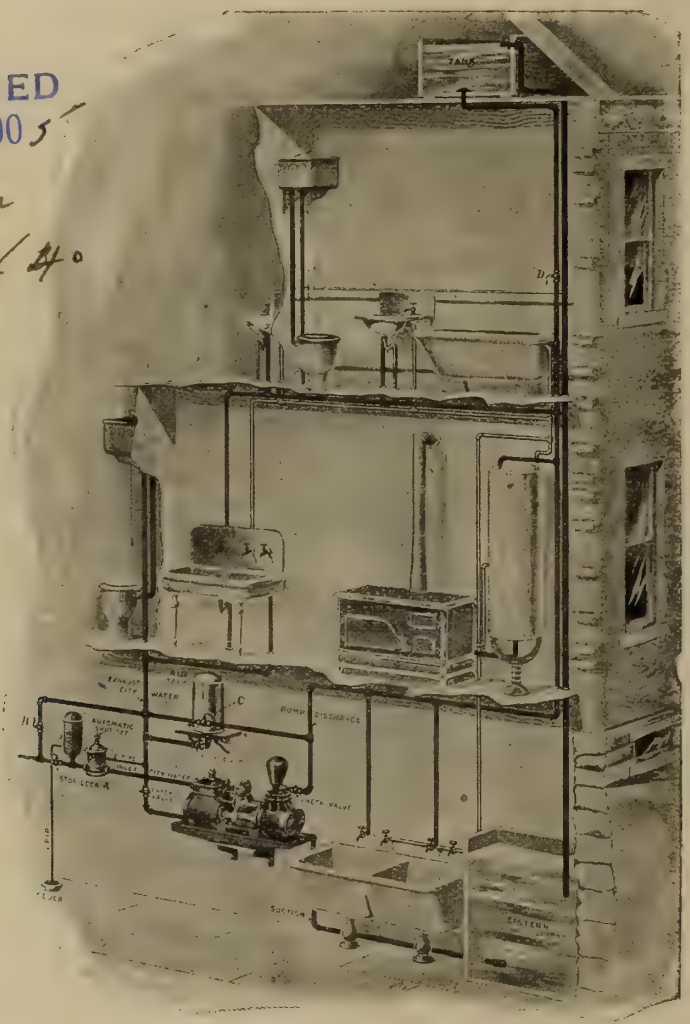
Plumbing Goods sold to Plumbers only.
Plumbing Materials and Steam-Fitters' Supplies of all kinds.

Office and Warehouse, 174 to 190 Lower Water Street

A WATER LIFTING PLANT.

With a more general use of all classes of plumbing fixtures, a demand has been created for running water on every floor of dwellings whether in the city or in the country. In many places the elevation of the building is too high to avail one's self of the city pressure, while in the country there is rarely any supply under a sufficient pressure head. In either case, moreover, the water furnished may be of such a character that it is not desirable for domestic consumption. To meet the demand the Goulds Mfg. Co., Seneca Falls, N.Y., has developed an automatic water pumping outfit, which is illustrated in the accompanying engraving. The essential feature is the duplex water lifter, which is a duplex pump, receiving the low pressure water in its working cylinders and forcing from its pumping cylinders either a portion of the low pressure supply or a supply from an independent source. The working cylinders must of course be large in respect to the force or pumping cylinders.

RETURNED
SEP 11 1905
J. Owner
Cut Book 40
page 3



Duplex Lifters for Household Water Supply.

The pump has two horizontal power cylinders and two pumping cylinders, being duplex, as stated, and the pump cylinders have an air chamber to act as a cushion with the discharged water. The entire lifter is provided with drain or draw-off cocks so that water may be drawn off when the house is unoccupied. In the illustration connections are shown for the supply of cistern water at the right hand side of the pump, which after the energy has been expended in moving the pistons wastes away into the sewer. These pistons drive the pumping pistons which pump the domestic supply. One advantage of this arrangement is that the pump may be placed in the kitchen or cellar as the needs of the case may demand, and if a supply is taken from an underground cistern it may be used as a suction pump as well.

In operation the pump is started by opening the city cock on the supply valve and pumping all the pipes full of water, by which time the air in the air tank shown is compressed by an amount that corresponds to the height of the tallest column of water. The pump continues in operation, compressing the air in the air chamber until the pressure reaches a predetermined point, when the pump automatically stops working. It remains inactive until some faucet is opened, allowing the water to flow out, the compressed air meanwhile acting to keep the water under pressure. An attic tank is necessary with this system, but is not required when connections are

---

Toy wagons, children's garden tools, saws, engines, etc., are found to be valuable side lines in some hardware stores.

SUPPLY HOUSE IMPROVEMENTS.

A TOUR through the plumbing supply establishments in Toronto will give Exhibition visitors the impression that business is in a good condition, several of the supply houses having made great improvements in their offices and show rooms recently.

The Ontario Lead & Wire Company's move from their Lombard street quarters to the handsome offices on Richmond street east is one of the most important changes and Mr. Fred Somerville is to be congratulated on the improvement made. The entrance to the offices is on Richmond street while the show room is reached from Church street.

The James Robertson Company have improved their offices greatly by extending the counters and frame work, and they have under way equally important improvements in their show rooms.

Taylor-Forbes Company, who opened temporary offices at 21 Richmond street west some weeks ago were unable to complete their new warehouse on King street west (near the subway) for the Exhibition, but they expect to be installed in their new quarters in a couple of weeks and will branch out into a complete jobbing house for heating supplies, carrying a stock of boilers, iron pipe, etc., in addition to their popular "Sovereign" radiators.

R. J. Cluff & Company have improved their office and warehouses on Lombard street and are looking forward to getting into the new Warden King building on Sheppard street before many months.

The Canada Brass & Supply Company's offices on King street, just west of York, are fitted up in splendid shape and R. W. Crashley, the manager, reports a very large business for so young a firm.

The James Morrison Company have not been making elaborate changes but a new flooring in Charles Morrison's offices is an improvement and allows them to be included in the list we have given.

HIGH CLASS CUTLERY.

ACCORDING to English makers, there is a better demand on the part of the public for pearl-handled cutlery. There is something so dainty about the appearance of these when well finished that one does not wonder that they appeal to the eye. Their display upon a table-cloth is, in the mind of the fastidious, a certain indication of taste, and by all accounts the public are purchasing more freely than they were wont to do. It is perhaps open to doubt whether the system of placing these goods upon plush in a well-got-up case is altogether in favor of their systematic use. There is something so suggestive of the cabinet about them that the middle classes would possibly be disinclined to use them except upon special occasions. People like to think that they possess such things, and enjoy displaying them before their guests but the conditions under which they are brought into use are all in favor of preservation, which is by no means to the interest of the manufacturer. It could hardly be expected that the demand for these articles could become general, but evidently more are being sold since more are being manufactured.

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

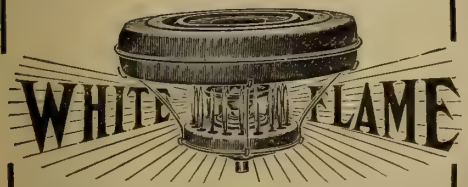
Fall and Winter Sellers

Time for Trade to

ORDER NOW

to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug. 12, page 59; Aug. 19, page 58, or send for Catalogue.

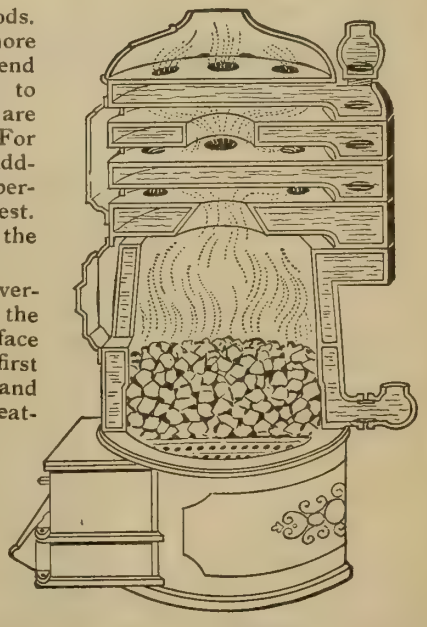
WALTER CROSE, MONTREAL } Sales Agent for the Dominion

OXFORD HEATING SYSTEM

(BOILERS and RADIATORS)

YIELDS BIG PROFITS TO DEALERS

Why It Pays You to install our goods. They cost you no more than inferior goods. You can recommend them to a customer without having to dodge him afterward. Their merits are obvious even to the uninitiated. For sixty years we have improved them, adding year by year everything that experience suggests to make them the best. We have succeeded. To-day the OXFORD stands without a peer.



Greatest Heating Capacity is attained by the overhanging walls of the fire-pot, which expose a very large surface to the direct action of the heat. The first section over the fire is double size, and with the bell-shaped flue openings, greatly adds to the efficiency of the boiler.

Gaskets and Washers Discarded The iron to iron connections made by our Oxford Steel Push Nipples, which are employed in all Oxford Boilers, supplant the gaskets and washers which used to add most conspicuously to boiler defects.

Our Devices All Improved We have improved every part of the apparatus, and we claim they are better made, better assembled, better in appearance—and we can prove it. We are willing to put the Oxford in comparison with any goods of similar character in the world. Dealers who handle the Oxford most make this unqualified challenge, with the knowledge that we can stand back of it with the reputation and THE GOODS.

OXFORD HOT WATER and STEAM RADIATORS

are a superb complement to the Oxford Boilers. They give uniform conduction of heat throughout the house and the artistic embellishments we can provide, when desired, will give them the highest ornamental value. The Oxford Steel Push Nipple, with which all radiator loops are connected, obviates the use of gaskets or washers, and adds immensely to their serviceable qualities as you will technically understand.

Send for our handsomely illustrated Catalogue. It tells the whole story.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam-fitter. Ask your supply houses or our goods for best results. Or, if they have not not them, write direct to

R. E. THORNE
768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED
WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.
Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND
Cable address, "Pearce," Liverpool. A. B. C. Code

SAVED—LOST.

One cent saved often means Dollars lost. Don't fail to send a Post Card to our advertisers asking for full information about their goods. Don't buy with your eyes shut. Mention Hardware and Metal.

Bolton, Fane & Co.
Leadenhall Street, London, E.C., Eng.
TINPLATES
In all qualities and sizes

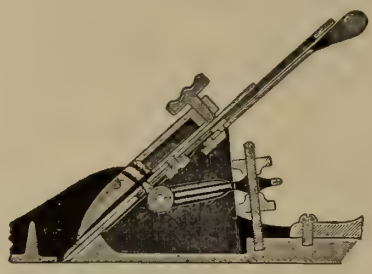
Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.

R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

NEW CARPENTER'S PLANE.

THE Union Mfg. Co. of New Britain, Conn., U.S.A., call attention to their line of planes and other carpenters' tools, particularly their new line of "X" planes. As will be seen by the illustration shown, these planes are new and have many features not shown in other lines. The cutters are extra heavy and well tempered. The frog, or



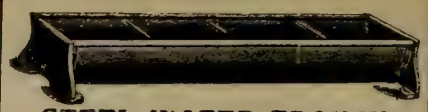
Sectional View of Plane.

cutter seat, is a part of the body of the plane and cannot become loosened in any manner. The cutter is raised or lowered by means of a lever giving the simplest and at the same time the finest adjustment on any plane. This plane will be particularly welcomed by all union carpenters who are always on the lookout for new tools of real merit. Other tools made by this company are block planes, a full line of wood planes, wood planes with steel face, circular planes, spoke shavers and scrapers.

NEW HOSE HOLDER.

A. G. Burton, Denver, Col., has invented an improvement in hose holders, especially designed for holding hose in use for sprinkling lawns and the like. Construction is simple and easily applied. By bending the points of the tripod so they extend parallel to each other, and may be forced straight into the ground it is found in practice that but slight pressure is required to force the points into the ground and that the holder will not turn over, no matter how heary the force of the water.

HARDWARE MEN: Our



STEEL WATER TROUGH

is a seller—something the average farmer has been waiting for.

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.** *TWEED, Ontario* Limited



THE BANNER COLD BLAST LANTERN

ALWAYS LEADS GREAT LIGHT WIND PROOF.

Note Improvements for Season 1905.

We make twelve different styles of Lanterns in Tin Antique Copper and Solid Brass.

For Sale by all Prominent Jobbers Throughout the Dominion.

ONTARIO LANTERN & LAMP CO.
LIMITED

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

J.C.M.

Galvanized Dead Flat Sheets

made from British Siemens Martin Steel only; most reliable for working up. Apply for samples and prices to:

RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

A PERMANENT and Handsome Roof.



Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

A. C. JENKING & CO, Sole Agents,
Room 215 Corlstine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

GILBERTSON'S

COMET
Selected Soft Smooth

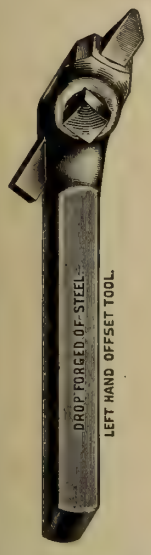
Comet Brand GILBERTSON'S

galvanized sheets. All live jobbers handle this brand. It sells without talking. Perfectly galvanized, carefully selected. Price lower than other high grades.

Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.

IF YOU OWN STOCK

in a tool steel mill there may be some excuse for you continuing to forge lathe and planer tools. You may get some of the loss back in dividends.

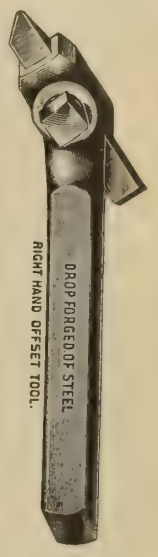


ONE POUND OF TOOL STEEL USED IN AN ARMSTRONG TOOL HOLDER

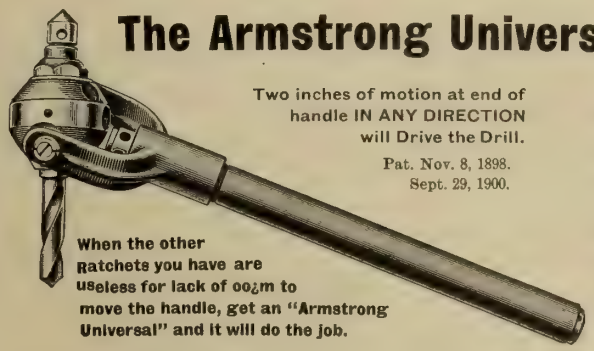


Patented February 28, 1893.

EQUALS TEN POUNDS USED IN FORGED TOOLS



The Armstrong Universal Ratchet Drill



Two inches of motion at end of handle IN ANY DIRECTION will Drive the Drill.

Pat. Nov. 8, 1898.
Sept. 29, 1900.

When the other Ratchets you have are useless for lack of room to move the handle, get an "Armstrong Universal" and it will do the job.

STRONGER and FASTER than any other rachet made.

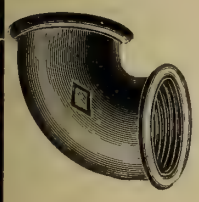
Even a vertical movement of handle drives the drill.

Adopted by the U. S. Navy.
Used by 60 railroads

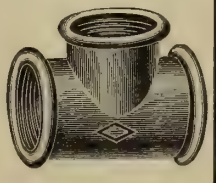
WRITE FOR OUR CATALOG of Tool Holders for Turning, Boring, Planing, Cutting-off and Threading Metals.

Armstrong Bros. Tool Co., "The Tool Holder People" 104-124 North Francisco Ave., Chicago, U.S.A.

Imitations are Unsatisfactory--Infringements are Unlawful



TRADE MARK REGISTERED



DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

SPECIALTIES

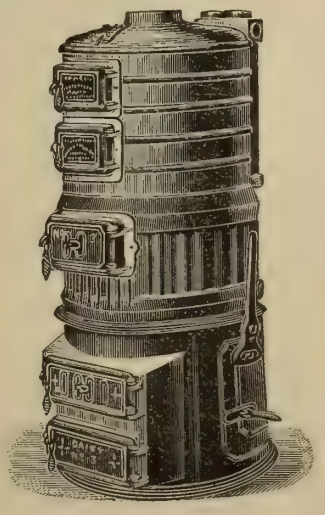
Hot Air Furnaces. Sash Weights and Washers.

Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

DEAR STOREKEEPER

A SIGN THAT MEANS WELL

Did you ever stop to think that QUALITY, DURABILITY and FINE APPEARANCE are all combined in the

BUILDING PAPER, SHEATHING, TARRED FELTS, READY ROOFING and WRAPPING PAPERS

THAT ARE STAMPED WITH OUR STANDARD BRAND STAMP?

INQUIRIES WILL FIND US IN A GOOD MOOD TO FURNISH PRICES.

ALEX. McARTHUR & CO., Limited, MONTREAL

82 McGILL STREET

CURRENT MARKET QUOTATIONS.

Sept. 8, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—	
56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	
Hoop steel, 1½ to 3 in. base		
Sleigh shoe steel "	1 97½	
Tire steel	2 07½	
T. Firth & Sons, tool steel—		
Speedicut		0 60
Annealed speedicut		0 65
Self-hardening		0 36
Best tool steel		0 12
Warranted		0 09
Best sheet steel		0 12
B. K. Morton & Co.—		
"Alpha" high speed		0 65
" annealed		0 70
"M" Self-hardening		0 50
"J" quality		0 18
"I" "		0 14
"B C" "		0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"		0 65
" " annealed		0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special		0 17
" Silver steel		0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:

Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:

Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

	Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge	3 40	
22 to 24 gauge	3 50	3 50
26 "	3 75	3 75
28 "	4 00	4 15

	Comet Bell.	Queen's Head
16 to 20 gauge	3 40	
22 to 24 gauge	3 45	3 65
26 "	3 70	3 90
28 "	3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10¾ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.	7 00	10 00
" ¼ "		5 60
" 5-16 "		4 45
" ⅜ "		3 85
" 7-16 "		3 70
" ½ "		3 55
" 9-16 "		3 45
" ⅝ "		3 35
" ¾ "		3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.
Jack chain, iron, single and double, discount 35 p.c.	
Jack chain, brass, single and double, discount 40 p.c.	

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ½ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz., 14x48 and 14x60	21 00
Plain, 14 oz.	22 00
inned copper sheet	24 00
lanished	32 00

raziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.	
Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb	4 00
Bar, " "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c dis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

	Standard	Ideal	Enameled.	Special
Plate E I, Fittings extra	1st quality			
4 and 4½ ft. 3 in. rolled rim	$18 00			16 00
5 feet "	19 00			17 00
5½ " "	20 50			18 50
6 " "	23 25			21 25
Plate E II				
4½ feet 2½ in. "	16 75			14 75
5 " 2½ " "	17 50			15 50
5½ " 2½ " "	19 00			17 00
Plate 123 E, lavatories	1st quality			8 90
" 123 E, "	2nd "			7 50
" 127 E, "	1st "			5 70
" 127 E, "	2nd "			4 80
" 128 E, "	1st "			5 60
" 128 E, "	2nd "			4 70
" 129 E, "	1st "			5 40
" 129 E, "	2nd "			4 50
Sinks 18 x 30 in flat rim, A quality				2 45
" " " " " B "				2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—	Per 100 feet.
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60 flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in. 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p.c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 per cent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 "	" 1 75
No .7 Fuller's	" 2 10
No. 4½, "	" 2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	22 00
" 35 "	24 00
" 40 "	28 00

Discount off copper boilers 15 per cent.

GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

CLAUSS BRAND HOUSEHOLD SHEARS

FULLY WARRANTED

The best Shear on the market for general house use, being an exceptionally fine cutting and wearing Shear.

Manufactured by our secret process.



ASK FOR DISCOUNTS

The Clauss Shear CO., - Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17¼

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	"	5 05
No. 3		4 12½
No. 4		4 05
Munro's Select Flake White		5 65
Elephant and Decorators' Pure		5 50
Tiger brand, pure		5 75
Decorators' Special for exterior use		5 00
Monarch		5 75
Decorator's Pure		5 50
Essex Genuine		5 00
Sterling Pure		5 75
Island City Pure		5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure		0 07½
No. 1		0 06½
No. 2		0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	1 20
Second qualities, per gallon	1 00
Barn (in bbls.)	0 90
The Sherwin-Williams paints	1 35
Canada Paint Co.'s pure	1 25
Toronto Lead & Color Co's pure	1 25
Sanderson Pearcy's pure	1 20
Standard Co.'s "New Era."	1 30
Francis-Frost Co.'s "Ark" B'd	1 25
" British Navy deck	1 50
Henderson & Potts's "Anchor"	1 35
Ramsay's paints, Pure, per gal.	1 20
" Thistle, "	1 00
" Outside, bbls	0 55
Island City House Paint	1 25
" Floor "	1 25
Sterling House Paint	1 20
" Floor "	1 10
National	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak		1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, case, from to 1 gal., $2.50.		assorted
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine		
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner		
Ground	0 12	0 16
Cologne, genuine		

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10

Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11¼

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes		10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅔ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50 8 00
" Peterboro', discount 50 and 10 per cent. off new list.	

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07¾	0 12

BOLTS AND NUTS

Carriage Bolts, common ($1 list	Per cent.
" " ⅝ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅝ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball per M.	4 25
Small heel "	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German per doz.	6 00	9 00
American "	12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L. " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Root Coating, in barrels per gal.	0 17
Roof small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "		6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Warnock's, discount 70 per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 pe cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Othouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Balky Customer

is harder to manage than a *Balky Horse.* Your customers *won't Balk* if you offer them Paterson's Building Papers and Wire-Edged Ready Roofing, because these goods never fail to please the user.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	"	0 95 1 65
English	"	2 00 4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch per 100 ft. 10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26	....	3 80	....	5 06
26 to 40	....	4 00	....	5 44
41 to 50	....	4 50	....	6 56
51 to 60	....	4 75	....	7 50
61 to 70	....	5 00	....	8 62
80	....	5 30	....	9 38
85	....	....	....	10 75
86 to 90	....	....	....	12 30
91 to 95	....	....	....	15 00
96 to100	....	....	..	18 00
96 to 100	....	..	....	18 00

GAUGES.

Marking, Mortise, Etc.

Stanley s discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33 ....each 1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		2½ 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch	....	4 50
" 5-inch	....	6 00
Zenith	....	9 00
Lane's covered—		
No. 11, 5-foot run	....	8 40
No. 11½, 10-foot run	....	10 80
No. 12, 10-foot run	....	12 60
No. 14, 15-foot run	....	21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)	....	3 75
" 1¼ x 3-16 in(100 ft)	....	4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" 2,	"	4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' 'Anchor Brand'

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" 5-in.,	"	0 06½
" 6-in.,	"	0 06
" " 8-in.,	"	0 05½
" " 10-in.,	"	0 05½

Light T and strap, discount 65 and 5 per cent.
Screw hook and hinge—

6 to 10 in	per 100 lb.	4 50
12 in. up	"	3 25

Spring, No. 20, per gro. pairs 10 80
Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60

Screw, bright, discount 62½ per cent.

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval
M.R.M. Co. brand, 55 per cent. { head
"Monarch," 50 and 7½ per cent.
'Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.
Cabinet trunk and padlock

American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz	1 50	2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	.... 2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt 10½-in., 14-in. cut	$ 8 50 to	$11 00
Star, 9 -in.	" 6 00 to	6 50
Daisy, 8 -in.	" 5 25 to	5 75
Philadelphia, 7½-in.	" 6 00 to	7 50
Woodyatt, 10½ in., ball bearing	13 25 to	18 00
Grass Boxes	1 75 to	2 00
King Edw'd 12-in., 14-in. cut	9 00 to	10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent
Russell & Erwin, steel rim ...per doz 2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3⅓ per cent.
German, 15 per cen
Gem .....each 1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38
Diamond	1 00

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary s Model galvanized oil can, with pump, 5 gallon, per dozen	10 00

Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen	6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

pint in tins	per gross	7 80
½ " "	"	9 60

PLANES.

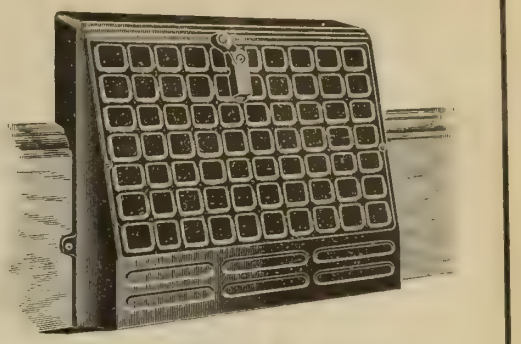
Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Standard Sizes, All Finishes
Perfect Operating Device
Unusually Large Air Space
For Sale by Leading Jobbers

HART & COOLEY CO.

NEW BRITAIN, Conn., U.S.A.



H. & C. No. 100.

PUNCHES.

Saddler's ..... per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid..... per set	....	0 72
" hollow..... per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros.' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....	0 11
Pure Manilla	0 14½
"British" Manilla.....	0 11
Cotton, 3-16 inch and larger 0 21	0 23
" 5-32 inch 0 25	0 27
" ¼ inch 0 25	0 28
Russia Deep Sea	0 16
Jute.....	0 09
Lath Yarn, single	0 10
" double	0 10½
Sisal bed cord, 48 feet..... per doz.	0 65
" " 60 feet..... "	0 80
" " 72 feet..... "	0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton s) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.

Crosscut, Disston's....per foot	035	0 55

S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century.....$6	25
" " No. 1 Maple Leaf..... 5	25
" " Happy Medium..... 4	25
" " Watch Spring..... 4	25
" common frame..... 4	00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb.....	0 28	0 30

SAW SETS. per doz.

Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz.	0 65	1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz.	6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz.	6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz.	8 75

3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net.....	6 00	9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24.....	0 85
" 18 x 30.....	1 00
" 18 x 36.....	1 40

SNAPS.

Harness, German, discount 25 per cent.

Lock, Andrews'	4 50	11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	....	0 37
2-lb. or over ..... "	....	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	....	3 00
Plain	....	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita .....per lb.	0 28	9 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	....	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	....	7 00
7 inch..... " "	....	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85,	12½ and 12½
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nailz, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Disston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	....	0 27
Wrapping, cotton, 3-ply	....	0 24
" 4-ply	....	0 27
Mattress .....per lb	0 33	0 45
Staging..... "	0 27	0 35

VISES.

Wright's.....	....	0 13½
Brook's.....	....	0 12½
Pipe Vise, Hinge, No. 1.....	....	3 50
" " " No. 2.....	....	5 50
Saw Vise.....	4 50	9 00

Columbia Hardware Co.

Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "		6c. extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.6[illegible]—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 fo small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net..	1 50

Terms, 2 per cent. off 30 days.

WASHING MACHINES.

Round, re-acting per doz.	56 00
Square " "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

WRINGERS.

Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

WROUGHT IRON WASHERS.

Canadian make, discount 40 per cent.

Want Ads.

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MacLEAN PUBLISHING CO., Limited
Montreal and Toronto.

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Capital and Surplus, $1,500,000. **Offices Throughout the Civilized World.**

Executive Offices: Nos. 346 and 348 Broadway, New York City, U.S.A.

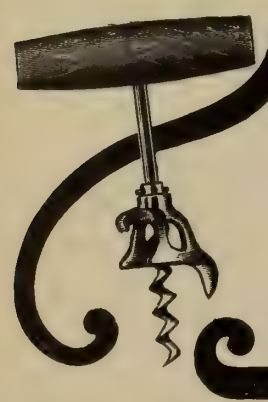
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OTTAWA, ONT. QUEBEC, QUE. ST. JOHN, N.B. TORONTO, ONT.
VANCOUVER, B.C. WINNIPEG, MAN.

THOS. C. IRVING, Gen. Man. Western Canada. Toronto.



WALKER CORK SCREWS

over seventy varieties to select from. Every one tested and guaranteed. Our large window display stand will help sell them.

Manufactured only by **ERIE SPECIALTY COMPANY,** ERIE, Pa. U.S.A.



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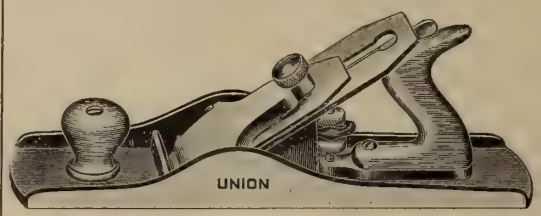
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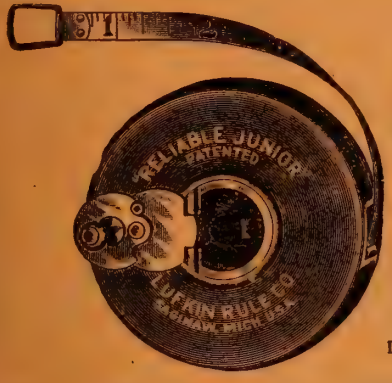
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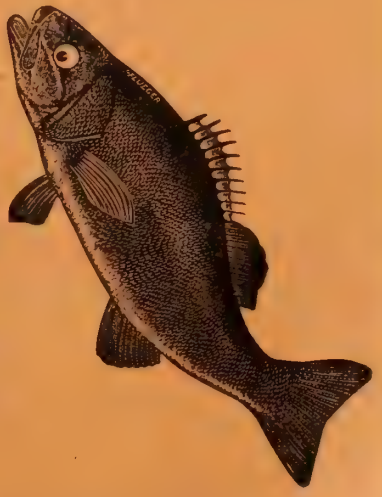
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A Weekly Newspaper devoted to the Hardware, Metal, Heating and Plumbing Trades in Canada.

VOL. XVII. MONTREAL AND TORONTO, SEPTEMBER 16, 1905 NO. 37

E. M. BICKINSON'S

CARVERS
CASED GOODS
TABLE CUTLERY

TRADE MARKS
THE MURRAY
THE INVICTA
EL DORADO
CAMBRIDGE & Co. ENGLAND SHEFFIELD

BUTCHERS'
HUNTING &
POCKET KNIVES

CUTLERY.

FOR SALE BY LEADING WHOLESALE HOUSES.

FOR CORRUGATING

"Redcliffe" Sheets are soft, flat, uniform weight and well galvanized.

JOHN LYSAGHT, Limited, Makers, BRISTOL, ENG.

A. C. LESLIE & CO., MONTREAL
Managers Canadian Branch

Canada's Most Expert Radiator Manufacturers





THE LATEST INVENTION

For years nothing new in Radiation has been recorded until the advent of the ***SOVEREIGN.*** We were in great demand amongst the Engineers of this country to do something—they knew we could—and we did—and their expectations have been more than realized, for we are receiving large orders every day. Every order shipped same day as received if necessary.

Taylor-Forbes Company,
LIMITED

TORONTO
21 Richmond St.

Head Office and Works :
GUELPH

MONTREAL
9 De Bresoles St.

Classified List of Advertisements on Page 87.

Ammunition

We are pleased to advise the trade that we have just received two more carloads of loaded shells and can now execute all orders promptly for all sizes.

Write for Prices

RICE LEWIS & SON

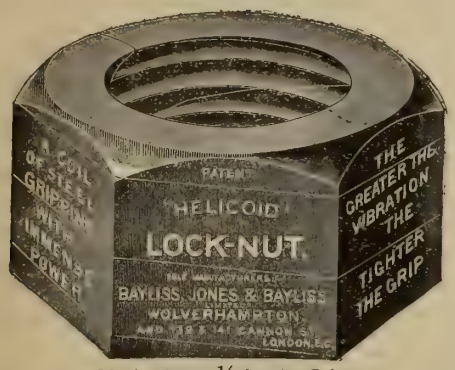
LIMITED

TORONTO.

PATENT
LOCK-NUT.



BAYLISS, JONES AND BAYLISS, LD.
ARE
SOLE OWNERS
AND
MANUFACTURERS



Made from ¼ in. to 2 ins.

SAMPLE NUT AND COMPLETE LIST MAILED FREE.

Also Manufacturers of BOLTS, NUTS, PATENT TIE BARS, RAILWAY AND TRAMWAY FASTENINGS, IRON AND WIRE FENCING, HURDLES, RAILING, GATES, Etc.

VICTORIA WORKS:— WOLVERHAMPTON, (ENGLAND).

LONDON OFFICES AND SHOWROOMS: 139 and 141 CANNON ST., E.C.

Browning Automatic Shot Gun

Also

Full line of Single and Double-Barrel Breech Loading Guns,

Winchester, Savage and Marlin Sporting Rifles

in all models.

Shot and Ball Cartridges

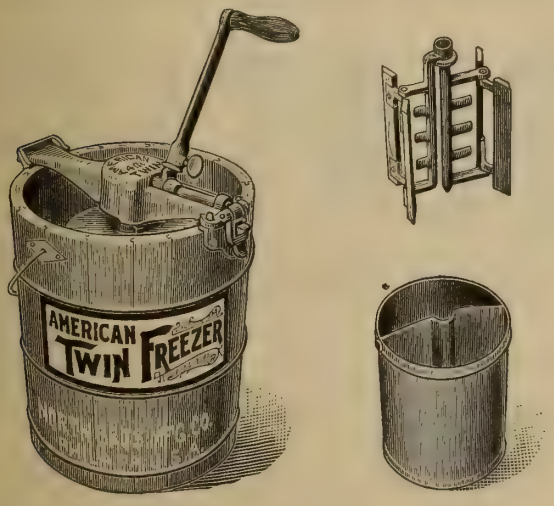
in

Smokeless and Black Powder.

THOS. BIRKETT & SON CO., LIMITED

IMPORTERS AND JOBBERS OF HARDWARE

OTTAWA, ONT.



"LIGHTNING" "GEM" "BLIZZARD"



"AMERICAN" (2 in 1) TWIN FREEZERS

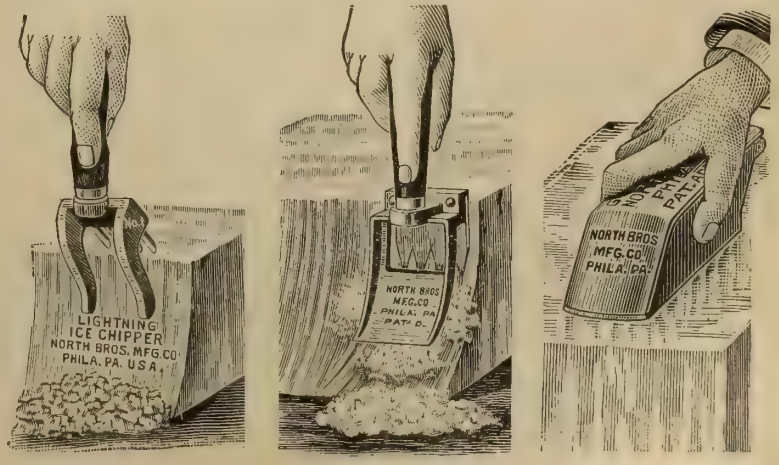
Freezes two flavors of Ice Cream or an Ice or Sherbet and Ice Cream at one and same time, in one Freezer Something entirely new. Never done before.

ASK YOUR JOBBER FOR THEM.
SEND FOR NEW FREEZER BOOK.

NORTH BROS. MFG. CO.
PHILADELPHIA, PA.

THE BEST ICE CREAM FREEZERS in practical use, because convenient compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work.

THE ONLY FREEZERS MADE having Cedar Pails with Electric Welded Wire Hoops, Cans of Heavy Tin with Drawn Steel Bottoms, Automatic Tin Scrapers.



"LIGHTNING" ICE CHIPPERS "CROWN" "GEM" ICE SHAVE



No. 10—**"New Process."** Design attractive. Construction first-c ass.

No. 21—**"Standard."** Cheaper in quality, but well proportioned and handsome in appearance, and a strictly up-to-date heater.

New Process Oil Heaters.

Are absolutely safe.

Produce intense heat without smoke.

Simple as a lamp in construction.

Light and Durable

Founts are removable for Cleaning and Filling.

Provided with Bail Handle with which they can be easily carried to any part of the house.

Write for Prices.

The Thos. Davidson Mfg. Co., Limited

MONTREAL.

CANADA PLATES

Ordinary

18 x 21 x 60 sheets
18 x 24 x 52 sheets
18 x 24 x 60 sheets
18 x 24 x 75 sheets
20 x 28 x 40 sheets

All Bright

18 x 21 x 60 sheets
18 x 24 x 52 sheets

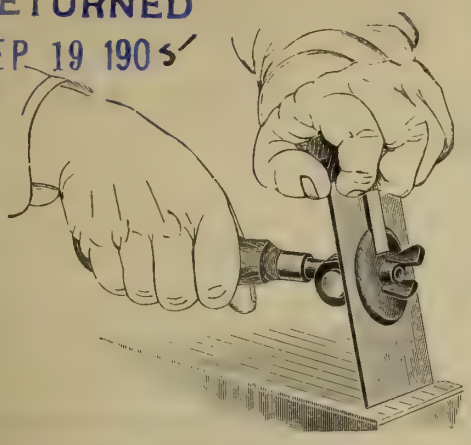
From Stock or For Import

M. & L. Samuel, Benjamin & Co.

503 Temple Building - TORONTO.

English House—16 Philpot Lane, LONDON, ENGLAND

RETURNED
SEP 19 1905



No. 90 Adjustable Scraper

Blade made of best cutter steel, and handle of finished hardwood. Useful in general work, but especially designed for scraping hardwood floors and finished woodwork.

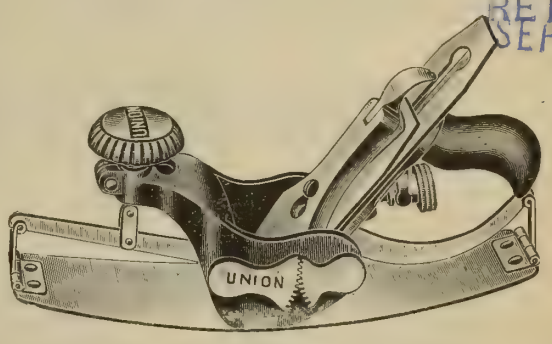
Plane Talk

The Artisan, Mechanic, the man who uses tools is an important consideration with you (or should be).

These men are critical judges of tools, the tools they use are their daily bread.

We illustrate herewith a few lines of planes that will satisfy your most particular customer; you should always keep before you the fact that "A satisfied customer is your best advertisement."

RETURN
SEP 19



No. 311 Circular Plane, Cutter 1¾ in.

The construction, finish and the material used in the manufacture of these planes have raised them to the highest standard of excellence.

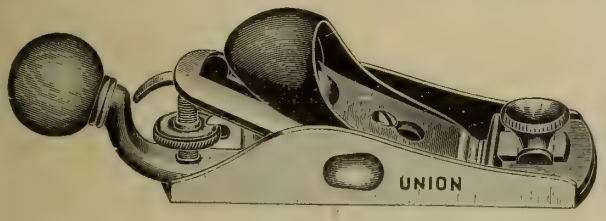
They may be imitated, but never duplicated.

Remember, the name "Union" on a plane insures you against all risk, as they are fully guaranteed.

RETURNED
SEP 19 1905

We carry a complete stock of every thing manufactured in this line, and in sending us your orders you have the largest and best assortment in Canada to draw from.

MAIL ORDERS SHIPPED SAME DAY AS RECEIVED



No. 9¾ U
Length 6 in., Cutter 1¾ in., Rosewood Handles.

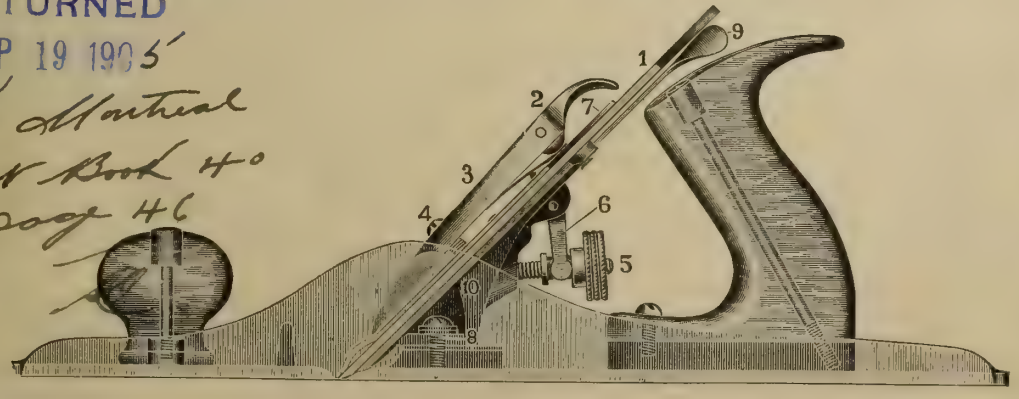
No. 15½ U
Length 7 in., Cutter 1¾ in., Rosewood Handles.

Write for prices

LEWIS BROS.

LIMITED

RETURNED
SEP 19 1905
T. Montreal
Cut Book 40
page 46



Union Adjustable Plane Iron, Smooth Bottom } **All Sizes**

Importers and Distributors

Always address the Head Office at

Montreal

Toronto
Ottawa
Vancouver
Calgary

The Browning Automatic Shot Gun

12 GAUGE ONLY



Single Trigger Automatic Repeater 5 Shot

The Sportsman's Favorite

IMMEDIATE SHIPMENT

WRITE FOR PRICES AND CATALOGUE

E. F. WALTER & CO., 166 and 168 McGILL STREET MONTREAL

American Steel & Wire Co.

New York 21 State Street. **Montreal** Bank of Ottawa Building. **Chicago** The Rookery.

BARBED WIRE GALVANIZED PLAIN WIRE
PLAIN TWIST CABLE FENCING

Telegraph and Telephone Wire; Mattress, Broom, Weaving Wires of every description; Rail Bonds, Bale Ties, Special Wires for all purposes, Springs, Horse Shoes, Wire Rope, Cold-drawn Steel Shafting.

A Royal Warrant



couldn't secure you more fully.

WARRANTY

This saw is made of CRUCIBLE CAST STEEL, of the FINEST QUALITY, is tempered in Oil, carefully tested, and is

FULLY WARRANTED

If found defective upon reasonable trial the purchaser may return it to the Ironmonger from whom he bought it and who is hereby authorized to replace it free of charge or to refund the price paid.

If returned, this label, properly filled in on the reverse side, must be attached to the saw.

SPEAR & JACKSON
Etna Works, SHEFFIELD

To every hand saw we send out is attached a label corresponding to this.

You assume no risk in selling our saws—your customer takes none in buying them.

We stand behind you and guarantee satisfaction.

Couldn't have anything fairer than that could you?

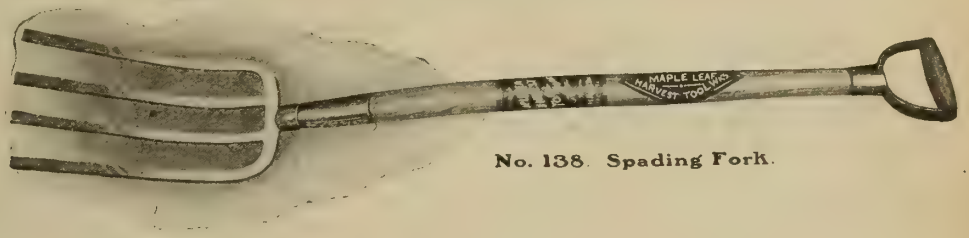
SPEAR & JACKSON ETNA WORKS SHEFFIELD

Have You Seen Them?

For Beauty, Finish and Quality, the "Maple Leaf" Harvest Tools are unexcelled.



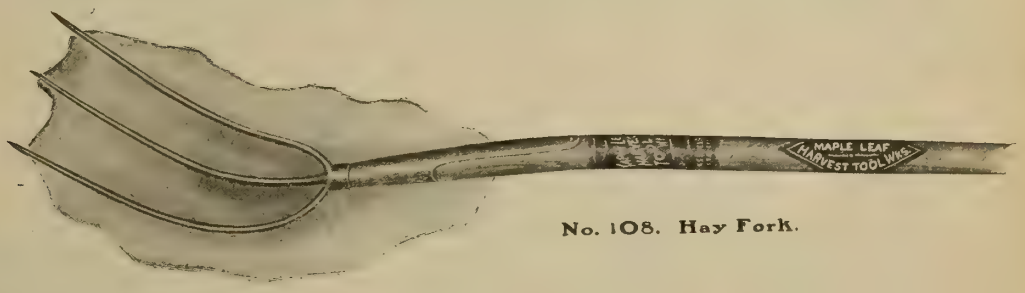
No. 122. Manure Fork.



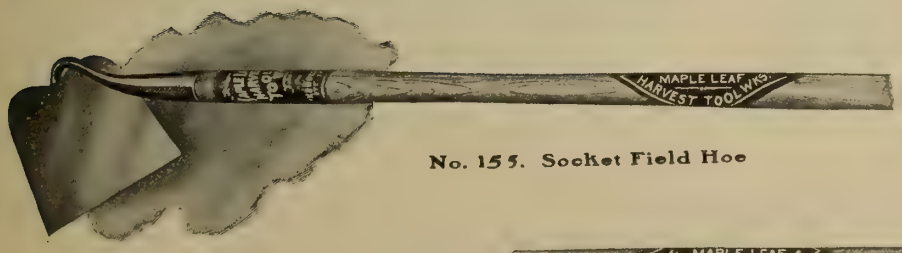
No. 138. Spading Fork.



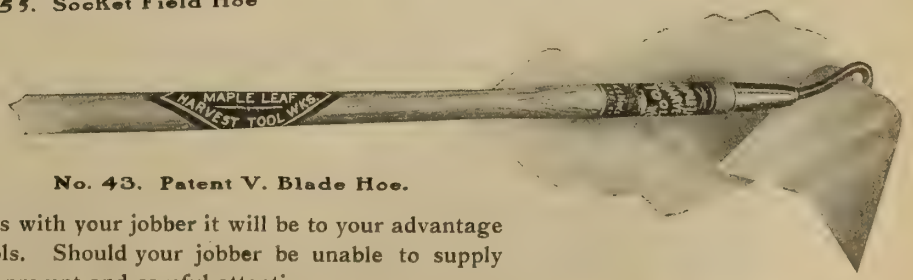
No. 243. Beet Fork.



No. 108. Hay Fork.



No. 155. Socket Field Hoe



No. 43. Patent V. Blade Hoe.

TO THE HARDWARE TRADE:-

When placing your order for harvest tools with your jobber it will be to your advantage to **specify** for the **"Maple Leaf"** Harvest Tools. Should your jobber be unable to supply them, send your order to us and it will receive prompt and careful attention.

The Maple Leaf Harvest Tool Co., Limited, Tillsonburg, Ont.

GOLD MEDAL AWARDED 1904

WILKINSON CUTLERY

MADE BY THE KING'S SWORD CUTLERS.

Made of the finest sword steel by

THE WILKINSON SWORD CO., LIMITED, - SHEFFIELD, LONDON, ENGLAND

R. G. HOW, Sole Representative, - 204 St. James Street, MONTREAL

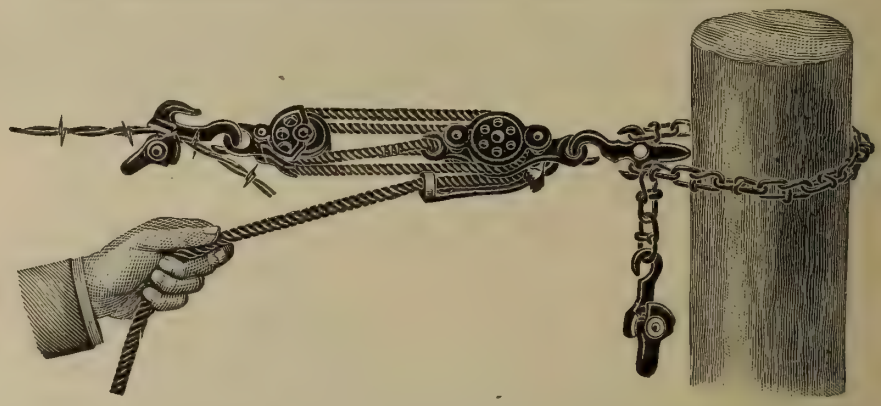
THIS IS THE

OLD STAND-BY

None better on the market unless it is the Triumph.

If your Jobber cannot supply, write us for prices.

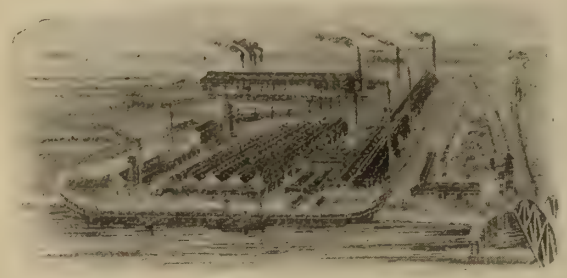
NO. 233.—WILCOX TACKLE-BLOCK WIRE STRETCHER



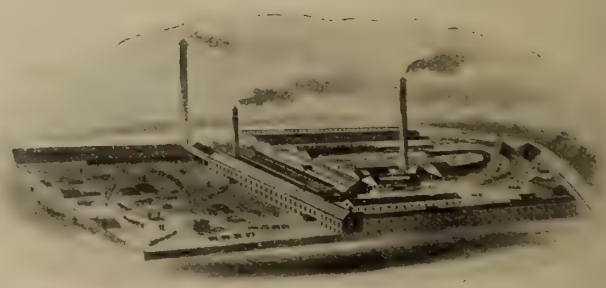
WILCOX MFG. CO. OF ONTARIO, Limited, London, Ont.

John Summers & Sons, Limited

Hawarden Bridge Works, Shotton, Flintshire, England



Globe Iron Works, Stalybridge, England



These two Works cover more than 50 acres. Our output of Galvanized Sheets exceeds 2,000 tons weekly, and we employ over 2,500 men.



LARGEST MAKERS OF

GALVANIZED SHEETS

IN ENGLAND

The output from these works for three weeks would be sufficient to cover a building capable of seating over five million people, or the entire population of Canada.

Agent: F. Hankin, Montreal

THE "UNIVERSAL" CAKE MAKER

like the Bread Maker and Food Chopper of the "Universal" series, is the friend of housekeepers, saving time and labor and ensuring better results.

IT BEATS RAPIDLY, the mixing fliers revolving five times at each turn of the handle.

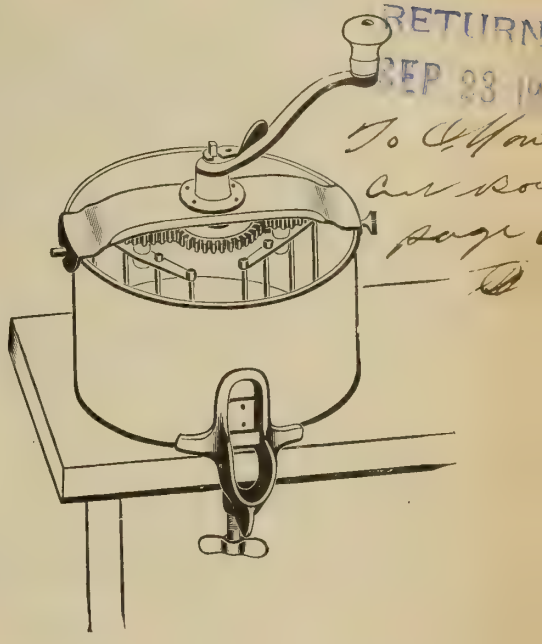
Every housekeeper knows that good cake depends upon beating the air into the batter. This machine does that to perfection.

The machine may be used also for whipping cream, beating eggs, and making salad dressing, provided the quantities are not too small.

A supply of cake recipe books with each lot of machines.

Each machine is packed in a neat box.

RETAILS at a good profit at $2.00.



Frothingham & Workman, Limited

Wholesale Hardware and Iron Merchants, - - Montreal, Canada

John Round & Son, Limited

Manufacturing
GOLDSMITHS and SILVERSMITHS
Contractors to
H. M. ADMIRALTY & WAR OFFICE

REGISTERED TRADE MARKS
J.R. & S. ALL THE ROUND
ESTABLISHED 1847

Tudor Works:
SHEFFIELD, England
and
112 HATTON GARDEN, LONDON



3 1520.—ENTREE DISH.

Manufacturers of all Kinds of GOLD, SILVER
ELECTRO PLATE ON NICKEL
and BRITANNIA METAL GOODS
Silver and Plated Cutlery
Steel Cutlery, Oak and Inlaid Goods
With Silver and Plated Mounts

Our Manufactures have a world-wide reputation of over 50 years' standing. We are the largest makers of spoons in the world.

WE WANT TO MAIL OUR CATALOGUES TO ALL CANADIAN DEALERS
WILL YOU SEND US YOUR NAME?

HOTEL and SHIP'S OUTFITS, special goods for hard wear
Special designs for all purposes supplied free

WHATEVER YOUR REQUIREMENTS ARE DROP US A LINE



31197.—E.P.N.S. CAKE BASKET

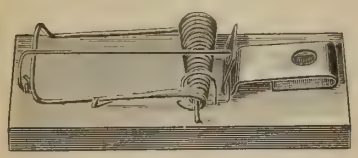
GALVANIZED FENCE HOOK FOR FASTENING WOODEN PICKET ON WIRE FENCES



WIRE NAILS, COILED SPRING, BARB and PLAIN FENCE WIRE, OILED and ANNEALED, CLOTHES LINE WIRE, STAPLES, etc.

THE WESTERN WIRE & NAIL CO., Limited, LONDON, ONT.

More "JOKER" Rat and Mouse Traps are sold in Canada than all other makes combined.



Canadian Agents: E. H. GRENFELL & CO. London, Ont.

Manufacturers:

J. M. MAST MANUFACTURING CO.

LITITZ, PA.

GLAZIERS' DIAMONDS

Sharratt & Newth

43 and 44 Percival Street, - London, England

Contractors to H. M. Government and the Principal English Sheet and Plate Glass Works.

ALSO Lead Vices, Carbon Tools, Etc., Etc.,

Established 18



Agents for Canada: A. Ramsay & Son Company, Montreal

GLAZIERS' DIAMONDS



Ahead of all others in **quality** and **workmanship**. If **sparks** of **fine quality**, set by **experts**, are what you require, buy Diamonds of **A. Shaw & Son's** make.

Canadian Agent

GODFREY S. PELTON

388 ST. PAUL ST., MONTREAL

CELEBRATED HEINISCH SHEARS

Tailors' Shears,
Trimmers' Shears,
Tinners' Snips, etc.



ACKNOWLEDGED THE BEST.

R. HEINISCH'S SONS CO.

NEW YORK OFFICE, 188 Chambers St
NEWARK, N.J., U.S.A.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK

SEYMOUR SHEARS

HAVE BEEN THE

Standard for over Half a Century.

"QUALITY UNQUESTIONED."

Each pair of our shears bears the above trade mark.

HENRY T. SEYMOUR SHEAR CO. NEW YORK. TRADE MARK



Complete Line *TRIMMERS', BANKERS', BARBERS' and TAILORS' SHEARS, Etc., Etc.*

Latest Catalogue will be sent in exchange for your business card.

Henry T. Seymour Shear Company

WIEBUSCH & HILGER, Limited, NEW YORK, Sole Agents

ARMSTRONG BROS. TOOL CO.

"The Tool Holder People"

Manufacturers of Armstrong Patent Lathe and Planer Tools and other machine shop specialties.

106 N. Francisco Ave., CHICAGO, ILL.

Buy the Best.

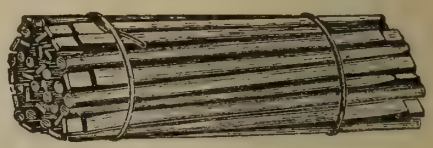


HERCULES

Sash Cord.

Star Brand Cotton Rope
Star Brand Cotton Clothes Lines
Star Brand Cotton Twine

For Sale by all Wholesale Dealers.



The Sarnia Hub, Spoke and Bent Goods Mfg. Co.

Sarnia, Ontario

We are prepared to fill any orders for

HEAVY WAGON, SLEIGH, BUGGY, AND CUTTER STOCK.

We make a specialty of heavy stock and can fill orders promptly. Made from the best of oak and hickory as we carry a large stock of lumber and can make any sizes that may be required. We make it a point to fill orders promptly.

If you are in need of anything in our line we will be pleased to hear from you and we will give it our prom pt attention.

J. S. LOUGHEAD & SON, Sarnia, Ont.

MAPLE LEAF

STITCHED COTTON DUCK

BELTING

DOMINION BELTING CO. LTD.

HAMILTON CANADA



Improved Steel Wire Trace Chains

Every Chain guaranteed.

Gives universal satisfaction.

The
B. Greening Wire Co.
Limited
Hamilton, Ont., Montreal, Que.



DILLON DIFFERENCES.

—IN THE—

Dillon Hinge-Stay Fence

there are no locks to rust, break or come loose. You know what a drawback "Lock" fences are, and why modern methods eschew them. In its freedom from such unessentials you see a prime factor for the "Dillon's" acceptance over all other wire fencing. The "Dillon" stands for a bigger pile of satisfaction and longer wear —ever so much longer than any other fence made. Let your motto be: "DILLON or None."

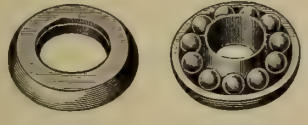
THE OWEN SOUND WIRE FENCE CO., Limited
Owen Sound, Ont.

MESSRS. CAVERHILL, LEARMONT & CO.,
(Eastern and Western Agents,) Montreal and Winnipeg

MANY OF THE BEST ARCHITECTS ARE SPECIFYING

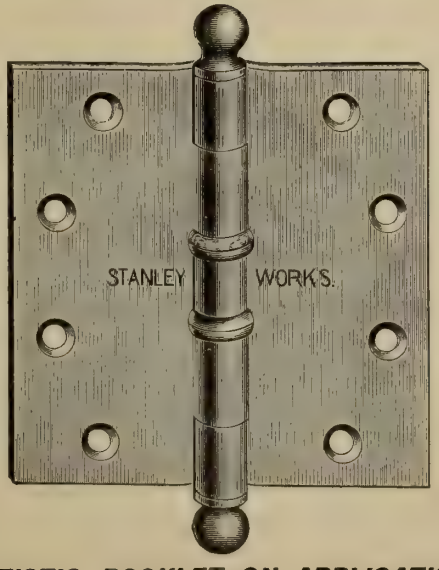
Stanley's Ball-Bearing Hinges

FOR ALL THEIR IMPORTANT WORK. DEALERS SHOULD HAVE THEM IN STOCK.



CUT OF WASHER
FULL SIZE

IT IS SO CONSTRUCTED THAT IT WILL NOT COME APART IN USE

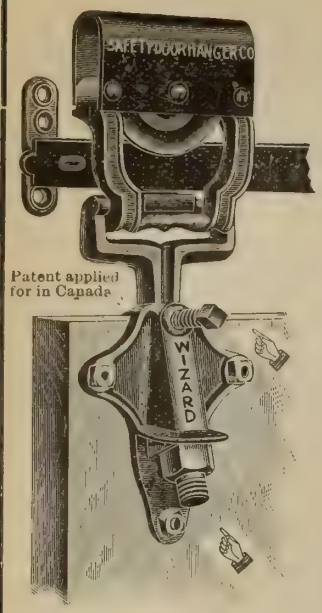


MADE IN WROUGHT BREEZE AND STEEL

ARTISTIC BOOKLET ON APPLICATION.

THE STANLEY WORKS, New Britain, Conn.

FOR SALE BY LEADING JOBBERS.



Patent applied for in Canada

THE

WIZARD ADJUSTABLE

Flexible Door Hanger

A SUPERIOR HANGER!!

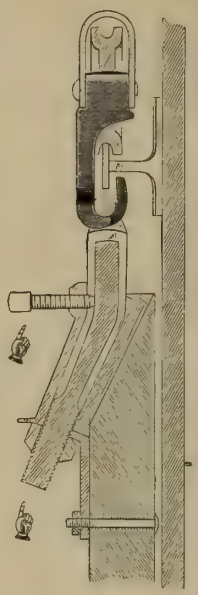
Lateral Adjusting Screw.

Easily Adjusted
Exceptionally Strong and Smooth Running
Made of Malleable Iron
Has Steel Roller Bearings

Vertical Adjusting Nut.

Ask Your Jobber or Write Us.

Safety Door Hanger Co.,
HAMILTON, ONT.



IRONSIDE FOR IRON

OUR SPECIALTIES ARE BRITISH AND FOREIGN **IRON, STEEL, METALS, BARS, PLATES, SHEETS, BOLTS and NUTS, TIN PLATES, Etc.**

Sole Licensees for **PAGE'S PATENT WIRE STRETCHER,** and we are willing to sell the right of manufacture in Canada on a Royalty basis.

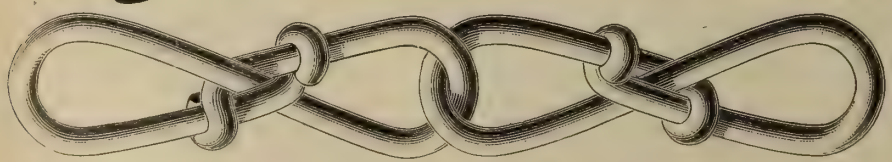
IRONSIDE'S PATENT WIRE CUTTERS, guaranteed to cut any wire

We publish a "Canadian Metal Price List" monthly. Quotations in Dollars and Cents. (C.I.F.) We will send this, and our "Weekly Market Report" on receipt of address.

IRONSIDE, SON & CO., 16 Water Lane Gt. Tower St., E. C **LONDON, ENG.**

Sole Agent for Canada: MR. SYDNEY T. HACKETT, 233 St James St., Montreal.

Niagara Trace Chains



CHAINS

OF PERFECT CONSTRUCTION AND UNIFORM STRENGTH

The result of fifty years of Experience and constant Improvement. They are unequalled.

MANUFACTURED BY

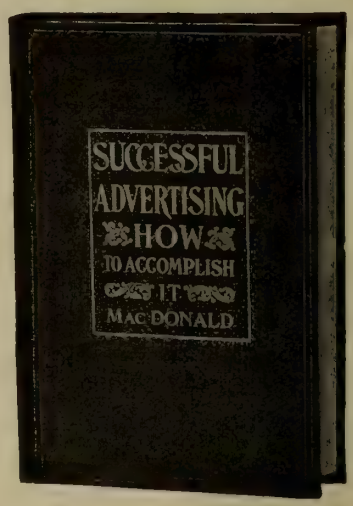
ONEIDA COMMUNITY, Limited
NIAGARA FALLS, ONTARIO

THE LARGEST WELDLESS CHAIN MANUFACTURERS

SUCCESSFUL ADVERTISING

How to Accomplish It

By J. ANGUS MacDONALD



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The MacLean Publishing Co. Limited

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Transmission Rope

We are the largest Manufacturers of TRANSMISSION ROPE in Canada. Our mills are equipped with special machinery for manufacturing extra long lengths. We import the most select brands of Manila Fibre, and are therefore in a position to supply a FIRST-CLASS ROPE.

Rope Transmission has proved to be the most satisfactory and economical drive.

If you contemplate buying, we would be pleased to have our expert call upon you.

Consumers Cordage Co., Limited

MILLS: MONTREAL and HALIFAX.

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HOTEL DIRECTORY.

THE GRAND UNION

The most popular hotel in
OTTAWA, ONTARIO. JAMES K. PAISLEY, Prop.

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This House is pleasantly and conveniently located on the East Side of Queen Street. The rooms are bright and cheerful. Every attention paid to guests. Billiards and pool. Hot and cold water baths. A. MCNICOL, Prop.

TOWER HOTEL, GEORGETOWN, DEMERARA, BRITISH GUIANA.

This first-class hotel is most conveniently situated in the coolest and healthiest part of the city, within one minute from Post and Telegraph Offices, Tram Junction and principal clubs. Five minutes from railway station and steamer stallings, and near to all principal public buildings. Cool and lofty bedrooms. Spacious Dining and Ladies' Rooms. Billiard Room. Electric light throughout.

VICTORIA LODGE

Mrs. J. F. SMITH, Proprietor. HAMILTON, BERMUDA
Opposite Victoria Park and Cedar Ave. Private board $12 to $14 per week.

BOARD AND ROOM

"THE ARGYLE,"

Mrs. FRASER Cedar Avenue, HAMILTON, BERMUDA
Terms moderate. Also furnished cottages.

THE AMERICAN HOUSE

A. PASCHAL (Prop.) HAMILTON, BERMUDA
Centrally located. Open all the year round.

WOODSIDE BOARDING HOUSE

(CORNER OF MAIN AND LAMAHA STREETS, GEORGETOWN, DEMERARA.)

Cool and airy Bedrooms, Excellent Cuisine, Attendance Qualified. Terms Moderate. Electric Car Loop at gate of premises. Patronage Solicited. Manageress, E. COTTAM.

WINTER RESORT—QUEEN'S PARK HOTEL.

PORT OF SPAIN, TRINIDAD, B.W.I.

JOHN MCEWEN, Manager. For Rates, etc., apply Trinidad Shipping & Trading Co. 29 Broadway, New York.

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By J. ANGUS MACDONALD

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Is a companion, friend and servant combined.
Invaluable for convenience in the household.

LONG DISTANCE TELEPHONE SERVICE

Has no equal for the facility it affords in business life.
Full particulars as to rates and service at the nearest office of

THE BELL TELEPHONE COMPANY OF CANADA

We Manufacture Everything in the Loose-Leaf Line

LOOSE-LEAF SYSTEMS
CRAIN
OTTAWA, ONT.

WRITE FOR PARTICULARS.

The ROLLA L. CRAIN CO., Limited

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1,000 White Business Envelopes, $1.00

(PRINTED TO ORDER)

This offer is to get you started. We want your trade, and we don't do cheap-looking work, either. Give us your next job, and you will be satisfied.

G. A. WEESE & SON, 44 Yonge St., TORONTO

Write for Catalogue of Printing.

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Every Canadian who wishes to trade successfully with the Old Country should read

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(The address is 168 Fleet St., London, England.)

The cost is only 6c. per week. (Annual subscription, including postage, $4.80.)

Moreover, regular subscribers are allowed to advertise without charge in the paper.

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Office Trucks
Warehouse Trucks
Factory Trucks

OF ANY SIZE FOR ANY SERVICE

Special Long Steel Frame Trucks for handling Bar Iron, Angle Steel, and Pipe.

MONTEITH, NIXON & CO.

Makers of Good Trucks

256 Macdonell Ave., - TORONTO

Telephone Park 1318.

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Leading Canadian Accountants and Auditors

adjusting and auditing accounts, arranging partnerships or organizing joint stock companies, devising special office systems, making collections and investigations, handling estates, making valuations, etc.

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Chartered Accountant, Auditor, Financial Valuator.
27 Wellington Street East, - - Toronto, Canada.

This Space $15 a Year.

JENKINS & HARDY,
Assignees, Chartered Accountants, Estate and Fire Insurance Agents.
15½ Toronto Street Toronto.
465 Temple Building, Montreal.
100 William Street, New York.

This list is for the purpose of placing manufacturers, wholesale and retail merchants and other readers throughout Canada, and firms abroad doing business in Canada, in touch with the legal profession throughout the Dominion, for the collection of accounts, legal representation,

LEGAL CARDS.

organization of companies, the arrangement or dissolution of partnerships, or assignments, as well as all other matters of a legal nature.

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Barristers, Solicitors, Etc.
Winnipeg, - - Canada.

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This space $30 per year.



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The Writing-in-Sight Typewriter

Will do your work 25% to 50% faster than any other writing machine. Highest award "Grand Prize," St. Louis Exposition, 1904.

UNITED TYPEWRITER CO., LIMITED

7 ADELAIDE STREET EAST, TORONTO *and at* **99 ST. FRANCIS XAVIER STREET, MONTREAL**

HAMILTON LONDON OTTAWA QUEBEC ST. JOHN, N.B.

For Our Classified List of Advertisements See Page 87.

SORT UP YOUR STOCK.

Are **You** short on

SPIRAL PACKING ?

Packings of our manufacture have gained a national reputation amongst power users.

Our **"CANADIAN" SPIRAL** is exclusively used by some of the most exacting Engineers in the world.

Reliable, uniform, always high-grade, **"CANADIAN" SPIRAL** is a winner in competition with all other makes.

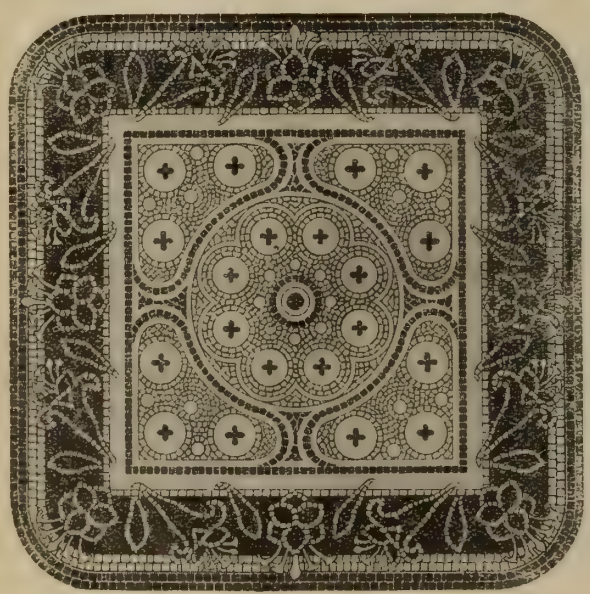
"CANADIAN" SPIRAL will win Trade for you—and keep it.

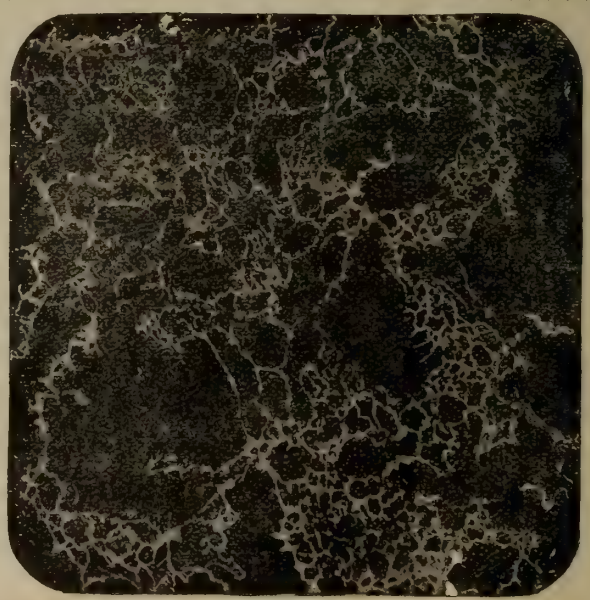
Send a trial order to our nearest Sales Branch. We have distributing warehouses, carrying large stocks, from ocean to ocean. ***Don't delay—write to-day.***

172 Granville St., Halifax, N.S. | Imperial Bank Building, Montreal, Que. | Front and Yonge Sts., Toronto, Ont. | 89 Princess St., Winnipeg, Man. | 403 Cordova St., Vancouver, B.C.

THE CANADIAN RUBBER Co. OF MONTREAL.

LIMITED





KEMP'S ELITE AND ONYX STOVE BOARDS

Will please your customers and bear you a good profit. Elite boards are made both wood and paper-lined ; 12 sizes. Onyx wood-lined ; 12 sizes. Prompt shipment.

KEMP MANUFACTURING CO., TORONTO

KEMP MFG. AND METAL CO.,
McDermot Ave. East, Winnipeg, Man.

KEMP MFG. CO. OF MONTREAL,
58 McGill St., Montreal, Que.

CARBORUNDUM THE MODERN ABRASIVE

A LITTLE more than ten years ago a scientist, in making some experiments with an electrical furnace, produced a little bunch of bright diamond-like crystals which were chemically almost an exact counterpart of the most precious of gems. But it wasn't the real diamond, and therefore, from a scientific point of view, the discovery was considered of little value. Some practical men, however, who had noticed the hardness of the new material and the fact that it would even cut a diamond, saw that as an abrasive it could be made of considerable commercial value. Developments along this line began, and to-day the Carborundum Company of Niagara Falls, N.Y., have an enormous output of what is considered the most satisfactory abrasive yet discovered. It is the purpose of this article to describe the process by which carborundum is manufactured, and its utility in modern commerce.

The raw materials for this industry are granulated coke, glass sand, salt and sawdust, the latter of which is included for the purpose of making the mixture porous, and to allow the free escape of gas. These apparently irreconcilable materials are united to form a homogeneous mass, in electrical furnaces whose power is supplied from the mighty falls of Niagara, and whose heat, though unmeasured, probably approaches very nearly that of the sun itself.

Coke is used in two different sizes to manufacture carborundum. kernels of certain size being used as the core, and a fine powder forming part of the mixture or charge for the furnaces. It first goes through a grinder, which breaks it up into small pieces, and then passes successively through two cylindrical screens, the first of which removes all particles of coke which are too small to form the core, while the second allows kernels of the requisite size to pass through the meshes and fall into the core-bin. Below the bin are scales on which sand, coke, sawdust and salt are weighed out in proper proportions, and conveyed by an elevator to a mechanical mixer-from which the mixture, ready for the furnaces, is emptied into a bin.

A furnace is in the form of an oblong box with internal dimensions of 16x5x5 feet, and the ends have a thickness of about two feet, while in the centre of each are terminals consisting of carbon rods. First, the side walls of the furnace are built up to a height of 4 feet, and half filled with the mixture, when a semi-circular trench is formed, to contain the core, whose top is rounded off neatly so that it is in the form of a solid cylinder, 21 inches in diameter and 14 feet long. The walls are then continued to a height of five feet, and the mixture thrown in and heaped up to a height of about 8 feet. The electric current is now all that is required, and in this connection it is interesting to observe that the Carborundum Company have the second largest transformer in the world, reducing to the required voltage an electromotive force of 2,200 volts.

After the circuit is closed and the current turned on, no apparent change occurs in the furnace room for about half an hour. Then a peculiar odor is noticed, due to escaping gases, and when a match is held near the furnace walls, the gas ignites with a slight explosion. After about three or four hours of the electric current, the side walls and top of the furnace are completely enveloped by a lambent blue flame burning the gas formed from the carbon of the coke and the oxygen of the sand. Some time later the top begins to subside and fissures form along the surface, from which white hot cinders are often "blown" to a height of several feet. It is mainly to obviate this "blowing" that swadust is introduced into the original mixture.

After an operation of thirty-six hours the current is cut off from the furnace, and it is allowed to cool for a few hours. Then the side-walls are taken down and the top raked off until the outer crust of the carborundum is reached. This is cut through with steel bars and the inner crust then removed, disclosing the crystalline carborundum. From the core radiate beautifully colored carborundum crystals to a distance of 10 or 12 inches, and a single furnace will yield about 7,000 lbs. of these crystals.

Removed from the furnace, the carborundum is taken to a crusher which breaks the mass of crystals apart. Thence it goes to large wooden tanks and is treated for several days with diluted sulphuric acid to remove impurities. It is then thoroughly washed and graded according to the size of the crystals.

Carborundum is apparently infusible, for, after a certain temperature is reached decomposition commences without fusion, the crystals being broken up into carbon and silicon. This fact will probably serve to explain why carborundum so far as known does not occur in nature, even to a very small extent. It is also quite insoluble in water, or in any acid. Its hardness is somewhere between 9 and 10 degrees, that of the diamond being 10 degrees. Its specific gravity is less than that of emery, whence it is seen that a carborundum wheel is considerably lighter than an emery wheel of the same dimensions.

In making carborundum wheels, vitrified bond is used for the most part, the mixture being placed in a mould and pressed in a hydraulic press. After being removed from the mould, it is placed on a support made of baked clay, and the vitrifaction of the wheels is carried on in kilns similar to those used in making porcelain. This operation consumes seven days, after which the wheels are placed in lathes and trued up with dressers or diamonds. Another bond is shellac, which gives very satisfactory

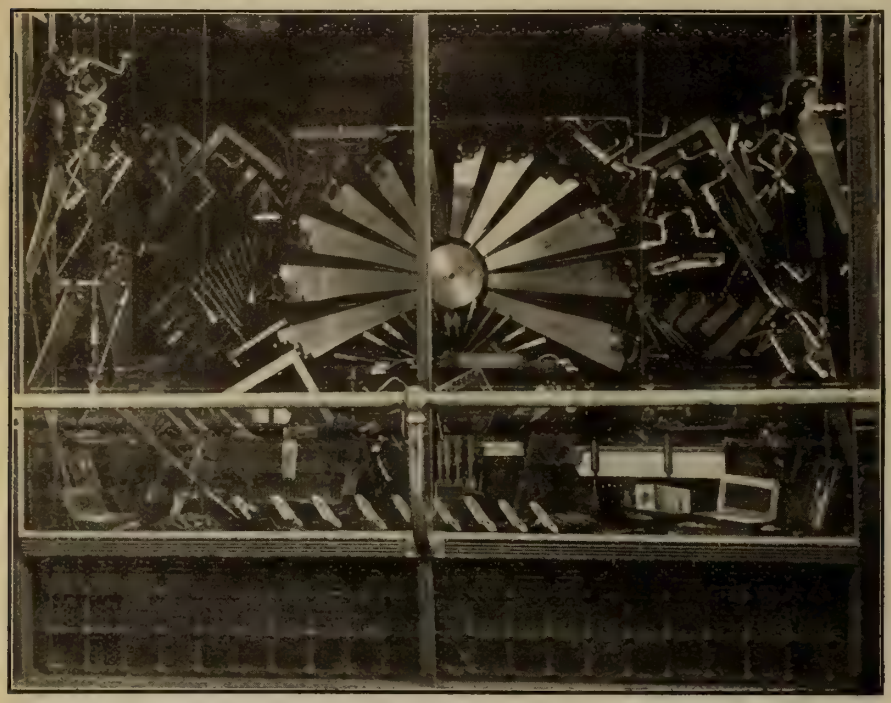


Carborundum Window, Shown by Rice Lewis & Son, During the Exhibition.

results for work requiring very thin wheels, or special forms.

At the present time carborundum is from two to five times dearer than emery, but it does more work more quickly and satisfactorily. Watchmakers use it instead of diamonds, where emery and corundum would be quite unsuitable, and among its numerous other uses may be mentioned finishing the soles of shoes, manufacturing pottery and porcelain, and smoothing up "biscuit ware." In the manufacture of bath tubs, it has been found that carborundum rubbing blocks can do the work in one hour that emery would take a day to do.

Thus the importance of carborundum as an abrasive can hardly be over-estimated. In foundries and machine shops carborundum wheels are by this time most extensively used; carborundum cloths and papers are a boon to carpenters and other mechanics, and carborundum knife sharpeners are being introduced into homes all over the country. In short, the unique qualities of carborundum have given it a pre-eminent position in the world of abrasives.



Handsome Tool Window, Shown by Rice Lewis & Son During Toronto Exhibition.

TWO HANDSOME WINDOWS.

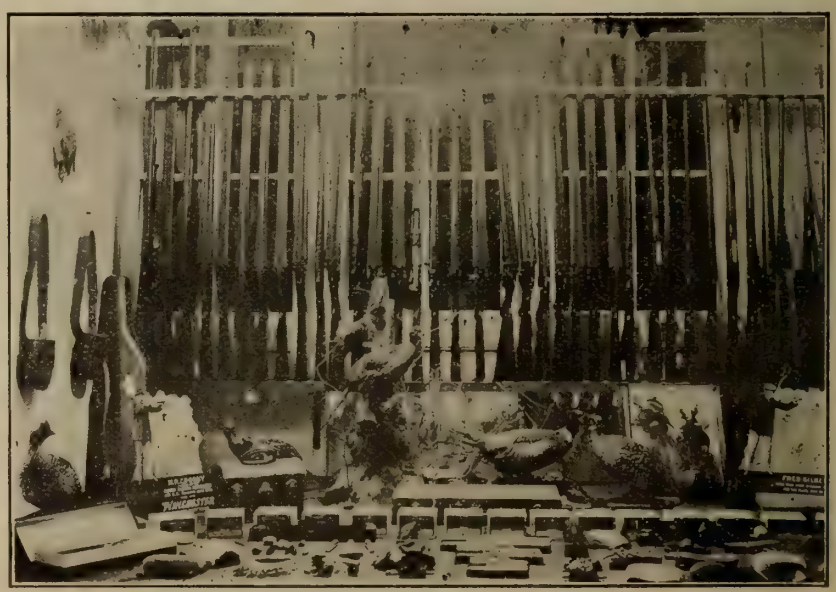
RICE LEWIS & SON, Limited, are never behind in using to the fullest advantage the splendid facilities they possess for displaying goods in their show windows and in drawing customers inside by the attractive showing from the exterior. The window dresser excelled himself, however, in the displays made during the two weeks of the Exhibition, when hundreds of hardwaremen and tens of thousands of other visitors were in the city, and Hardware and Metal's photographer was fortunate enough to secure snap shots of the Rice Lewis windows.

The most interesting window, and the one which attracted the attention of nearly every passer by, was the circular window on the corner of Victoria and King streets, the contents being products of the furnaces and factories of the Carborundum Co., Niagara Falls, N. Y., for whom Rice Lewis & Son are agents. The circular shape of the window prevents the photographer from doing full justice to the display, but enough is shown to indicate the beauty of the exhibit. The centrepiece is a large mass of ore-like black diamond crystals, and surrounding this on the floor and walls, and in cases, are samples of the various forms of abrasives, wheels, cones, oil stones, razor hones, paper, etc., made of carborundum. A beautiful electrical lighting fixture in bronze added to the beauty of the window while a number of cards give the passer by a brief idea of the sources and uses of the articles shown. An invitation to "Come in and get your knife sharpened!" was accepted by hundreds and the demonstrator inside was kept busy sharpening all manner of edged blades, explaining the virtues of carborundum and selling oil stones and hones to the satisfied visitors who had seen dull blades sharpened so swiftly. The company also advertised in the daily papers, offering to sharpen the knives of any who would visit the store.

The second window showed a most complete line of carpenters and mechanics' tools, and the view shown illustrates the manner of display so well that further description is unnecessary. The central arrangement of the saws is very attractive, while the whole display is well balanced and not too crowded.

A SPORTING GOODS WINDOW.

In the illustration this week is shown a sporting goods window prepared by Fred Culk for the retail store of the J. H. Ashdown Hardware Co., Limited, of Winnipeg. The arrangement of the rifles, shot guns and other articles included in the display is shown in the illustration. The window was a very attractive one and it commanded the attention of many passers-by.



A Winnipeg Sporting Goods Window.

AN INTERNATIONAL COMBINE.

The London Times reports that an arrangement has been arrived at between the British and German makers in the screw trade, by which the severe competition which has prevailed for so long in this branch of the trade will come to an end. It is understood that a syndicate has been formed embracing all the makers in the trade and that one uniform price has been fixed, representing an advance of about 50 per cent. on previous quotations. The British market is to be closed to the importa-

tion of German screws. No British orders will be received by German manufacturers after October, and all orders in hand must be executed by December 21st next. In a circular to their customers, one of the largest buyers of German screws in the United Kingdom states: "As the way towards the formation of an international syndicate is now simplified as between British and continental makers, further advances are impending, and it is probable that the British market may shortly be closed to the import of German screws." This new movement, says the Times, is regarded as one of the most important which has taken place in the screw trade for many years.

TRADE INQUIRIES.

Correspondents desiring to get in touch with any of the firms referred to should quote the reference number when requesting addresses. For information write to Superintendent of Commercial Agencies, Department of Trade and Commerce, Ottawa.

956. A London house makes inquiry respecting Canadian consignments of asbestos fibre.

958. A Cape Town firm of commission merchants desires to get into communication with a Canadian manufacturer of wire window screens (adjustable) and doors.

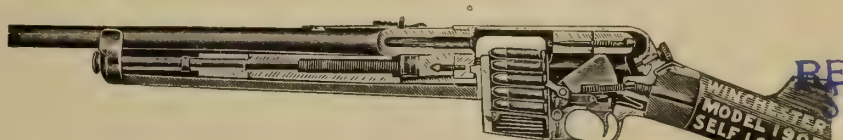
SELF-LOADING RIFLE.

THE Winchester Repeating Arms Co. has just brought out a new rifle in the shape of a self-loading, hammerless take-down in .32 and .35 calibres. It is the first rifle of the self-loading type made for centre fire ammunition, the cartridges it handles being of the modern smokeless powder type, using metal patched bullets. Both of these cartridges give excellent penetration and with metal patched soft point bullets they have great shocking effect on animal tissue.

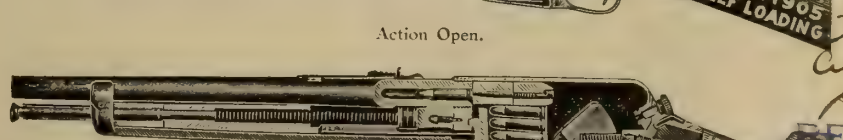


As its name indicates, this rifle is self-loading. The recoil of the exploded cartridge ejects the empty shell, cocks the hammer and feeds a fresh cartridge from the magazine into the chamber, leaving the rifle ready to shoot upon the operator's pulling the trigger. By means of the trigger lock, the trigger can be locked if desired, so that the rifle can be carried with the hammer at full cock when loaded. The magazine is of the box type and holds five cartridges. By inserting a cartridge in the chamber before placing the loaded magazine in the gun, the operator can have six shots at his disposal. If rapid reloading is desired, extra magazines can be carried in the pocket loaded, ready to replace an exhausted magazine in the rifle. The operation of this rifle should not be confounded with that of machine guns, which reload and fire to the extent of their magazine capacity without stopping after the trigger is first pulled. In using the Self-Loading Rifle, it is absolutely necessary to pull the trigger for each shot, which places its operation as completely under the control of the operator as that of any repeating rifle. The operation of this rifle is simple and easily understood. The working parts are few and strong, and as there is nothing complicated in its construction, it is not apt to get out of order when used with ardinary care.

The Model 1905 Self-Loading Rifle is



Action Open.

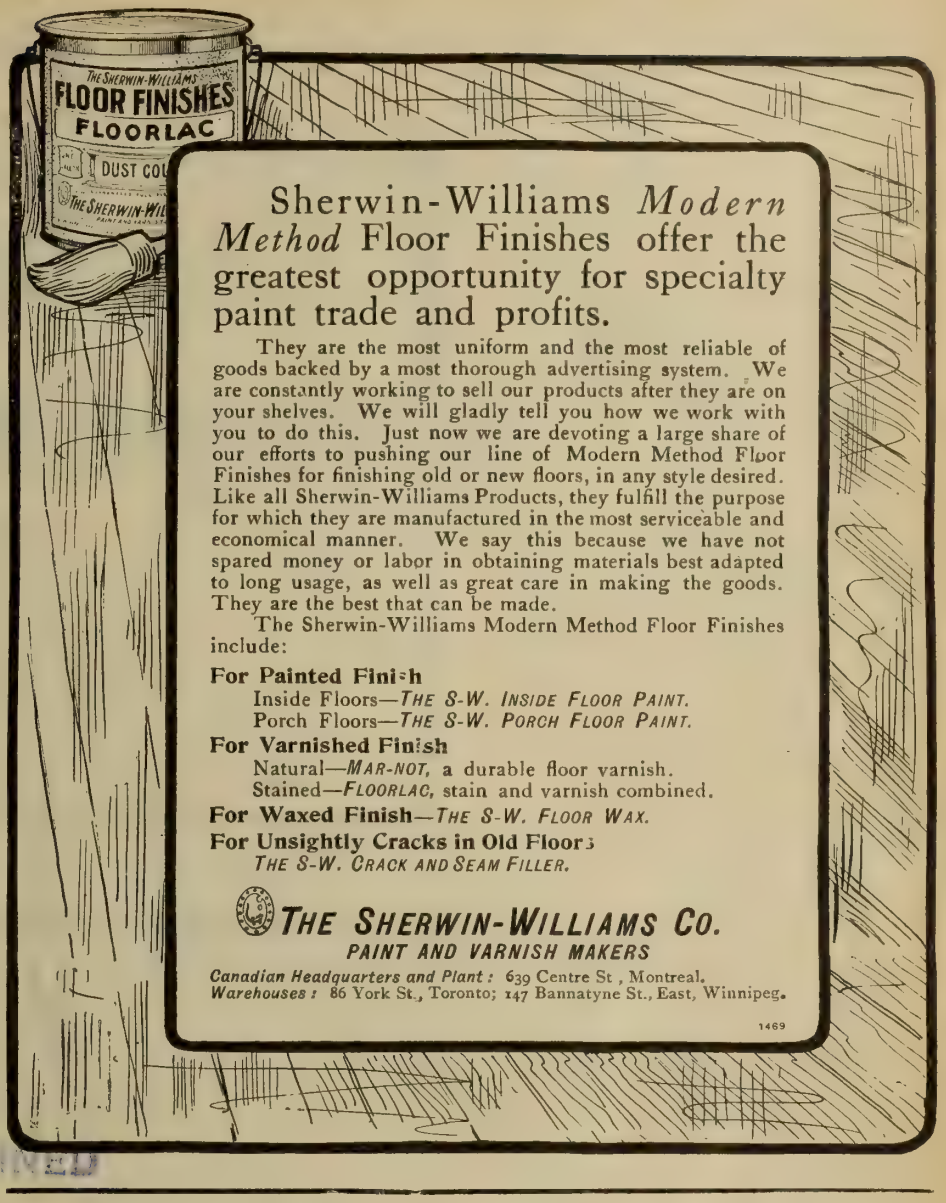


Action Closed.

WIRE NAILS
TACKS
WIRE

Prompt Shipment

The ONTARIO TACK CO.
Limited.
HAMILTON, ONT.



Sherwin-Williams *Modern Method* Floor Finishes offer the greatest opportunity for specialty paint trade and profits.

They are the most uniform and the most reliable of goods backed by a most thorough advertising system. We are constantly working to sell our products after they are on your shelves. We will gladly tell you how we work with you to do this. Just now we are devoting a large share of our efforts to pushing our line of Modern Method Floor Finishes for finishing old or new floors, in any style desired. Like all Sherwin-Williams Products, they fulfill the purpose for which they are manufactured in the most serviceable and economical manner. We say this because we have not spared money or labor in obtaining materials best adapted to long usage, as well as great care in making the goods. They are the best that can be made.

The Sherwin-Williams Modern Method Floor Finishes include:

For Painted Finish
Inside Floors—*THE S-W. INSIDE FLOOR PAINT.*
Porch Floors—*THE S-W. PORCH FLOOR PAINT.*

For Varnished Finish
Natural—*MAR-NOT,* a durable floor varnish.
Stained—*FLOORLAC,* stain and varnish combined.

For Waxed Finish—*THE S-W. FLOOR WAX.*

For Unsightly Cracks in Old Floors
THE S-W. CRACK AND SEAM FILLER.

THE SHERWIN-WILLIAMS CO.
PAINT AND VARNISH MAKERS

Canadian Headquarters and Plant: 639 Centre St., Montreal.
Warehouses: 86 York St., Toronto; 147 Bannatyne St., East, Winnipeg.

1469

made with blued trimmings and a plain walnut stock and forearm not checked. The barrel is round, 22 inches long and is fitted with Sporting front and rear sights. Octagon or half octagon barrels, or barrels longer than 22 inches cannot be furnished for this rifle. The stock is 14 inches long and finished with a rubber butt plate; drop at comb, $1\frac{3}{8}$ inches; drop at heel, $2\frac{1}{4}$ inches; length of gun over all, 40 inches. Fancy walnut stocks and forearms, plain or fancy walnut pistol grip stocks checked or unchecked, and stocks having special length or drop can be furnished for this gun when so ordered at the same list prices as for other models.

These rifles are handled by Frothingham & Workman, Limited, of Montreal, who will quote prices or send circulars giving complete description of their finish and operation.

WIRE SCREENS FOR S. A.

C. M. Kittson, Canadian commercial agent at Cape Town, reports that South Africa, owing to the faet that she has at certain seasons many insect pests, offers a peculiarly suitable market for the exploitation of wire window screens (adjustable variety), and wire screen doors, neither of these articles have up to the present received the attention which the possibilities of the market deserves.

THE HORSESHOE AND GOOD LUCK.

THAT the horse shoe is a symbol for good luck is doubted by very few, with no respect of country, time or place.

The origin of this particular belief is referable to the old legend of St. Dunstan. This versatile English ecclesiastic was a skilled farrier, and one day while at work in his forge the Evil One entered in disguise and requested Dunstan to shoe his "single hoof." The saint, although he recognized his malign customer, acceded, but caused him so much pain during the operation that Satan begged him to desist. This Dunstan did, but only after he had made the evil one promise that neither he nor any of the lesser evil spirits, his servants, would ever molest the inmates of a house where a horseshoe was displayed.

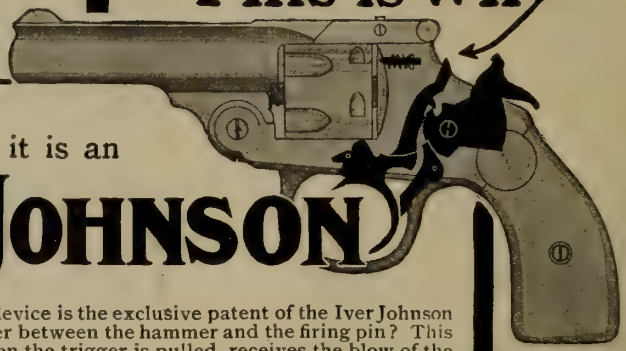
Very different is the story by which the Irishman seeks to account for his liking for the same talismanic symbol. The name "Ironland" or "Ireland" he will tell you originated as follows: "The whole island was once submerged in the sea, out of which it only rose once in seven years, and then only for a short time. Many attempts had been made to break the spell and induce the country to remain permanently above the waters, but all in vain, until one day a daring adventurer threw a horseshoe from a boat on to the topmost peak of the Wicklow Mountains, just as they were disappearing beneath the waves. Then at last the ban was removed. The Emerald Isle began forthwith to rise again from the ocean depths into which it had sunk."

LARGE DEMAND FOR CASE GOODS

THERE is evidence of an improved demand for case goods. This is probably due to a revived taste in giving, for wedding presents, the handsome and effective sets of fish eaters, dessert sets, salad sets, etc., which are so well got up by many of the English cutlery manufacturers. These sets of knives and forks, with pearl or ivory handles, delicately arranged on plush, make an excellent display, and, as the saying is, "look good." There is usually a fair demand at this time of the year for this class of manufacture, but now there are many more selling than usual, and this is an indication that the public taste, which has a knack of running in given directions, is setting strong towards case goods. A popular present a year or two ago was a set of carvers and steel in a case, and newly-married people were invariably in receipt of quite a selection of these articles. Then there came an outcry against carvers, and other things were substituted. Now the dainty pearl-handled fish eaters appeal to the guest's sense of the beautiful, and, though hardly appropriate in nine cases out of ten, the bridal pair may rely upon receiving an assortment of the article in question.

Accidental Discharge Impossible—

This is why



True only if it is an

IVER JOHNSON

The positive safety device is the exclusive patent of the Iver Johnson Revolver. See the lever between the hammer and the firing pin? This lever is raised only when the trigger is pulled, receives the blow of the hammer and transmits it to the firing pin. **That's why** you can throw a loaded Iver Johnson against a stone wall without fear—no discharge can possibly follow, as the hammer **never** touches the firing pin. An Iver Johnson never fails when you **pull the trigger** and never "goes off" when you don't.

Iver Johnson Safety Automatic

Price: Hammer, $5.00; Hammerless, $6.00

Iver Johnsons are sold by dealers the world over, or direct from us if your dealer won't supply

Please send for descriptive catalogue, free upon request. It tells all about it.

IVER JOHNSON'S ARMS AND CYCLE WORKS, FITCHBURG, MASS.

HIGH SPEED STEEL KNOWN TO ANCIENTS.

IN a paper recently read before the Iron and Steel Institute, Mr. J. M. Gledhill stated that the famous Damascus steel was in reality nothing but a form of our modern high speed tool steel, for it contained all the important properties of the latter. Marvelous cutting powers have been attributed to it and recent analyses of the material show that it contained certain percentages of tungsten, nickel and manganese. This shows that a latent high speed steel was in existence centuries ago. All that was found necessary in order to bring out its inherent qualities was to "burn" it, a process which was long thought to destroy its usefulness, but which is now known to produce its greatest adaptability to the work in hand and render it capable of effecting a great revolution in machine shop practice.

NEW LEATHER GOODS FIRM.

GENERAL LEATHER GOODS, LIMITED, is the name of a firm recently incorporated in Toronto for the manufacture of all kinds of leather goods. The factory of the firm is advantageously situated at 1183 Bathurst street, on the line of the C.P.R. and near the Niagara Power Co.'s lines. The plant of the firm has been running four months, and the company has sufficient business on hand to warrant them in making a two-storey addition to their building, on which operations are already well advanced. The firm manufacture ladies' and gentlemen's belts, razor strops, school bags, rug straps, skate straps, harness parts, halters, etc. The managing director is Mr. R. H. Cameron, who has had many years' practical experience in all branches of the business.

A neat showing of small articles like nail clippers, thread cutters, key rings and chains, corkscrews, etc., will catch the nickels and dimes without much trouble.

H. S. HOWLAND, SONS & CO. LIMITED

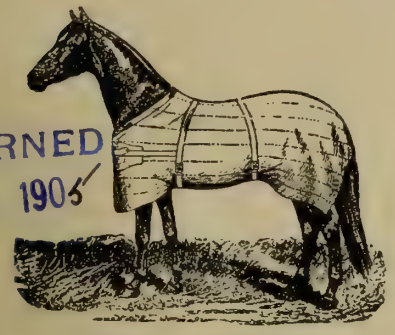
HARDWARE MERCHANTS

Only Wholesale

138-140 WEST FRONT STREET, TORONTO

Wholesale Only

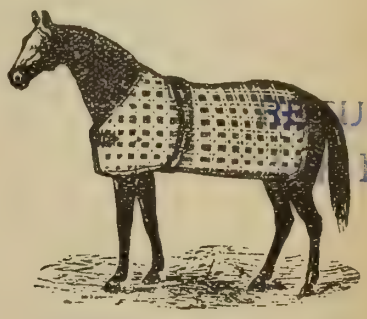
Horse Blankets, etc.



"Stay-on" Horse Blanket

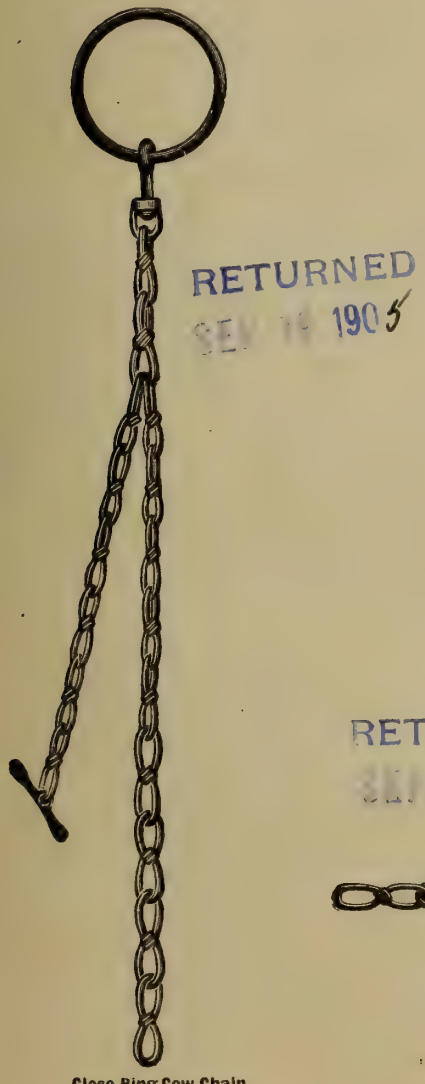


Girths, Plain and Padded



Horse Blanket, Shaped and Strapped

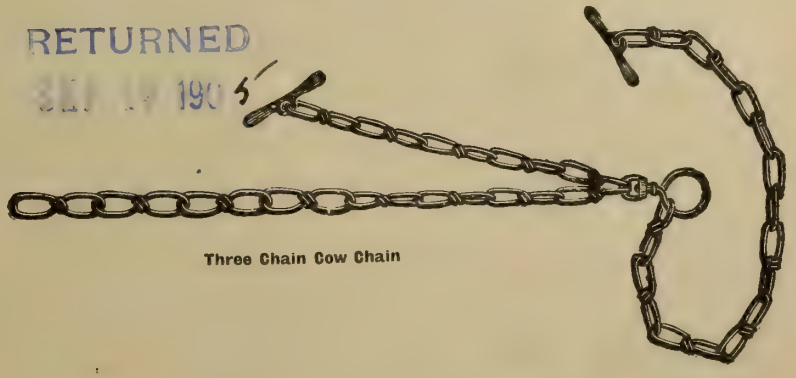
Cow Chains



Close Ring Cow Chain



Stall Fixtures and Chains.



Three Chain Cow Chain



Open Ring Cow Chain

SEE OUR HARDWARE CATALOGUE

H. S. HOWLAND, SONS & CO., LIMITED

GRAHAM NAILS ARE THE BEST.

Our prices are right

We ship promptly

Factory: Dufferin Street, Toronto, Ontario.

INDUSTRIAL GOSSIP

HARDWARE AND METAL would be pleased to receive from any authoritative source industrial news of any sort, the formation or incorporation of companies, establishment or enlargement of mills, factories, foundries or other works, railway or mining news. All correspondence will be treated as confidential when desired.

KEEWATIN Flour Milling Co. have closed a contract for the machinery of one of the largest flour mills on the continent. The equipment will be equal to 40,000 barrels a day, and provision has been made for a further output of 20,000 barrels. The successful tenderers were the Allis-Chalmers Co., of Milwaukee, who have built all the large flour mills in the United States. The amount involved will be about $225,000. A considerable portion of the machinery will be constructed at the works of Allis-Chalmers-Bullock, Limited, in Montreal. The contract calls for the installation of the universal bolter system throughout. The power is derived from the Lake of the Woods, and wherever possible electricity will be used in the operation of the plant. A separate water wheel will be installed to generate the current, and the elevator of 500,000 bushel capacity, the car pullers, the wheat shovels, the passenger and freight elevators, the cooper shops, etc., will be run by electricity. The mill building and elevator, now under construction by the Macdonald Engineering Co., of Chicago, will be completed by the 1st of January. Mr. John Mathers, of Ottawa, is president, and a number of Ottawa capitalists are interested. They are determined to have a mill equal to anything on the continent in operation at an early date.

George H. Hees Son & Co., Toronto, are to erect a five storey office and factory building at Bay and Piper streets.

Grand Forks is likely to be the site chosen for the new smelter to be erected in the Boundary district by the Dominion Copper Co.

The Deseronto Board of Trade have chosen these officers for next year: President, John Dalton; vice-president, W. J. Malley; treasurer, A. G. Bogart; secretary, H. R. Bedard.

Prominent officials of the Plymouth Cordage Co. were in Welland this week concluding arrangements for the establishment of the large binder twine factory to be erected in that place.

Richard Ricardi, of Richmond, Va., who manufactures clothes pins and has both a Canadian and an American patent, is thinking of moving to Canada and views Ottawa with a good deal of favor.

The Brant Milling Co., of Brantford, are to erect a new brick two-storey warehouse and cooperage shop. Up-to-date and fireproof materials will be used throughout. Modern cooperage machines will also be installed.

A new sawmill will soon be added to the large number already doing business on the Fraser River. It will have a capacity of 35,000 feet per day and will be owned by the Maple Leaf Lumber Co., Maple Grove, B.C.

Grand Trunk officials say the failure of the Dominion Steel Co. to deliver 25,000 tons of rails from June to September has forced the railway to order 5,000 tons from the United States on which they must pay a duty of $35,000.

Negotiations are still in progress with Japan for Canada's admission to a treaty that will entitle Canadian goods to minimum tariff in the Mikado's domain. Things have, however, reached such a stage that the acceptance of the treaty is practically assured.

September 12 will long be remembered by the people of Fort William as one of the greatest days in the history of the town, Sir Wilfrid Laurier having turned the first sod of the G.T.P. The town presented a magnificent appearance with its thousands of yards of bunting and British flags.

The annual report of the Canadian Electric Light Co., Quebec, reveals a very prosperous condition of affairs highly creditable to the directors and satisfactory to the shareholders. It shows an increase in revenue, and, therefore, presumably in business, of close upon $8,000, and a surplus on the current year's operations of $2,041.

The land is first cleared of all underbrush and moss. Electrically driven appliances then excavate the peat, pulverize it and scatter it over the earth, where it is allowed to lie for some time, until the moisture is reduced by evaporation. There are then appliances for gathering the peat where it is taken to the plant on the electric motors.

Arrangements are being rapidly completed for the annual meeting of the Canadian Manufacturers' Association, to be held in Quebec on Monday, Tuesday and Wednesday, the 18th, 19th and 20th inst. A large attendance is assured. Lieut.-Governor Sir Louis Jette has invited the delegates to an at-home at Spencerwood on Tuesday, the 19th.

Negotiations have been concluded for the leasing of the Lake Superior Corportion copper plant at the Soo to the Canadian Nickel Co. for the purpose of experimenting in copper and nickel refining by means of electricity. The experiment will start about Sept. 15. If successful, it is intended that the Lake Superior Corporation shall introduce the system.

The Londonderry Iron and Mining Co. is erecting a large shaft house on the property of F. Wheelock at Torbrook Mines. The drilling on the shaft is being done by steam. A lot of machinery will be installed there in a few days, including an air compressor. An engineer to survey railway extension to the mines is expected, after which Mackenzie & Mann will start work on the road with five hundred Italians.

The Manitoba Peat Co.'s plant at St. Frances has commenced operations and fuel will be supplied to Winnipeg this winter. The company was only organized last winter and now it has a splendid plant, electrically equipped throughout. The main building contains an engine, two boilers, a large electrical generator, dryers, compressors and all the necessary machinery. There are in addition large storage sheds. To show that the peat is almost inexhaustible it pointed out that there are nearly 20 square miles of peat bogs.

The report of the Allis-Chalmers Co. for the fourteen months ended June 30, 1905, was disappointing from the stockholders' standpoint. The net profits for the period amounting to $1,146,981 were with the exception of $68,000, used for betterments and depreciation. All that was available for dividends was $68,000. The prospects for an immediate resumption of dividends on the preferred stock are not encouraging. The company's working capital, while comparing favorably with the preceding report, is considerably smaller than it was in 1903 and 1902.

The factory of the Munro Wire Works, Limited, who recently began business in Winnipeg, presents a busy scene of industrial activity and the enterprise promises to develop quickly into one of the most important of the local manufacturing institutions. The factory is splendidly equipped from the power house to the fifth flat. The company manufacture all manner of steel and wire fencing, grills, gates, etc., but make a specialty of wire bed mattresses, and their factory is kept running to its fullest capacity, in fact such a demand has been created for their output that larger premises are in contemplation. A large export trade to Japan is being developed.

The dumping clause as regards steel billets will soon be in operation again, it having been suspended between July 24 and September 30, by a bulletin authorizing collectors of customs to grant permits for the importation of steel billets for use in rolling mills or forges, on payment of the ordinary duty, without special duty, subject to the condition that the quantity imported for any one such rolling mill or forge shall not exceed one-quarter of the total quantity of steel billets rolled or wrought by such mill or forge during the calendar year 1904—the quantity to be established to the satisfaction of the collector at the port of entry by a declaration by a principal official of such rolling mill or forge.

Companies Incorporated.

E. C. Atkins & Co. of Indiana have been authorized to manufacture, sell and repair saws, machinery, tools and other hardware articles in the Province of Ontario with a sure capital of $40,000. Charles D. Ten Eyck is to be the company's attorney.

SEPARATING WATER FROM GASOLINE.

FINE wire gauze will not remove water, but if a chamois skin pocket be carried by a gauze on either side and placed between the gasoline tank and the carbureter, all dirt and water will be removed. The arrangement should be on the order of the device shown in Fig. 1, so that the water may settle into a separator, and be drained off. The separator should be about 4 inches long and 2 inches in diameter. If this is drained each day no water will reach the carbureter unless the chamber becomes filled, which could only be occasioned by rain entering the fuel tank, as the gasoline itself of a

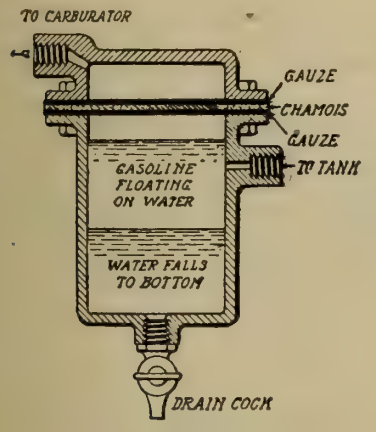


Fig. 1—To Separate Water and Gasoline.

day's usage would not contain that quantity. The strainer placed between the tank and the carbureter is better than one placed at the tank, for the reason that in the latter dirt and water would be forced through the tank strainers by the impact and weight of the fuel entering, while in a strainer placed between the tank and the carbureter the fuel is strained slowly, in fact as slowly as it is used. A first-class water separating strainer is shown in Fig. 2. At the bottom of the separating chamber is a needle valve. On this valve is a metallic float of such a weight as to sink in gasoline and just float in water. When

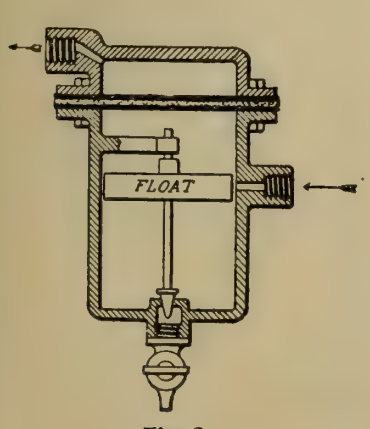


Fig. 2.

the chamber is filled with gasoline the valve is seated, but as soon as water collects the float is lifted, opening the valve and letting the water flow out until the gasoline comes to such a level as the valve seats. The device has the gauze and chamois strainer.—Motor Age.



No. 21. OSHAWA, ONT. SEPT. 16, 1905

IN THE

Perfect Metal Lath is in the front ranks of Metal Lathing, either as regards Price, Process or Principle. It's the **cheapest.** It's made by the **new process,** on the **new principle. Perfect Metal Lath** is the only lath that insurance men can **absolutely** bank on. It is the only metal lath with an **absolutely** accurate key. It is the only metal lath that **will not** corrode. **It's the only metal Lath selling at 10c. per sq. yd.**

FORWARD MARCH

Now, then! Here is your part in the forward movement. You know **the lath**—sell it! This means either your carrying the goods or being the medium of the sale. The contractor or builder must either buy from **you** or some other dealer, **you** if you're **first.** If desired, we will ship direct to the premises where **Perfect Metal Lath** is to be used, so you will have no reshipping to do. Your correspondence with us on the sale will mean only the writing of a letter or two. Reward—**The Profit.** Simple, isn't it? and yet you have never sold any **Perfect Metal Lath.** Get to work at once. "Time is money."

The Pedlar People

of OSHAWA, ONT.

MONTREAL—767 Craig St. OTTAWA—423 Sussex St. TORONTO—50 Yonge St.
QUEBEC—7-11 Notre Dame Sq., Lower Town.
VANCOUVER, B.C.—615 Pender St. SYDNEY, AUSTRALIA—189 Clarence St.
CAPE TOWN, S.A.—141 Longmarket St.

WRITE YOUR NEAREST OFFICE.

EVERY BUILDER

SHOULD USE OUR ROOFING MATERIALS

YOU WILL KNOW THEM BY THE TRADE MARK

"DOMINION BRAND"

LOCKERBY & McCOMB, 65 Shannon St., Montreal

Your Reputation



Is your most valuable asset. You make your reputation by the quality of the goods you sell and by satisfying your customers. When you sell an Atkins Silver Steel Saw you can depend upon hearing from it in a most agreeable way and you take no chances of jeopardizing your reputation. The sale of one Atkins Saw leads to another and so on indefinitely. They are a splendid line to handle. Catalog and discounts on application.

E. C. ATKINS & CO., INCORPORATED Leading Saw and Tool Manufacturers Factories and Home Office . . . **Indianapolis, Ind., U.S.A.**

CANADIAN BRANCH: 56 King St. E., Toronto, Can. *NORTHWESTERN BRANCH: Minneapolis, Minn.*

REASONS FOR
Gurney Cylinder Locks

THE NEED	THE DEMAND	THE CALL
for Locks that were good once, good always	for Locks that were stable and salable	for Locks "Made in Canada," Guaranteed



No. 650

THE GURNEY, TILDEN CO., Limited

BRANCHES:
Winnipeg—Tilden, Gurney & Co., Limited
Vancouver—The Gurney, Tilden Co., Limited

HAMILTON

AGENCY:
Montreal, P.Q.—Charles Nicoll, 85 St. Peter St.

BUILDING AND CONSTRUCTION

TENEMENTS FOR MONTREAL.

IN our list of Montreal building permits, published in the issue of September 9, appears the item: "H. Wener, Logan street, Papineau ward, dwellings, $48,000." Inquiries into the nature of the "dwellings" has developed the fact that the largest and most comfortable tenements on the North American continent are about to be erected in Montreal. The building, when completed, will shelter 116 families, providing each with five or six rooms, electrically lighted, and fitted with bathroom and modern conveniences. The flats will rent at $14, $15 and $16 per month, according to location.

The tenement is being erected by Mr. Harry Wener, manager of the Montreal Waterproof Clothing Co., who recently purchased for the purpose the entire block bounded by Logan and Lafontaine streets, and Wener and Papineau avenues. The project has long been considered by Mr. Wener, and he now has every confidence in its ultimate success. His idea is to build a tenement which can be made perfectly comfortable and homelike, without passing beyond the financial reach of the workingman, who is most in need of such conditions.

Two blocks will compose the tenement (one at either corner of the property) and the smaller of the two has already been commenced on the corner of Logan street and Papineau avenue. It will contain 48 flats, and should be ready for occupancy in February. The other block will, like the first, be built around three sides of a square, enclosing a central court, and will be 164 x 160 feet. It will have two large stores on the ground floor, and about 70 flats in all. Work on it will be commenced in a few weeks.

Mr. Wener reports that he already has more than 125 applications for flats in the new tenement, without counting any of the employes of his factory, who will, of course, be given the preference. The intention is to have a good class of tenants, so far as character and industry are concerned, and Mr. Wener firmly believes that proper arrangements can make life much more comfortable for the poorer people without demanding from them any more than a reasonable rental.

PAROID ROOFING.

An interesting exhibit at the Toronto Fair was the building erected in Machinery Hall of Paroid Roofing material, which is now in general use in factories, stores, dwellings, railway shops, etc., and is becoming very popular as a material for the construction of Summer residences. The accompanying cut is from a photograph of one of Findlay Bros.' foundry buildings at Carleton Place, Ont., that is covered with "Paroid" Ready Roofing, made by F. W. Bird & Son, of Hamilton, Ont.

F. W. Bird & Son have been in business at East Walpole, Mass., for 88 years, manufacturing special materials, and for over 25 years have been making roofings, waterproof building papers, insulating papers, etc. Their exhibit was a neat building, covered roof and sides, also floor, with Paroid roofing material. Thousands of people walked over what was on the floor, and the material does not show a particle of wear, looks as fresh as the day it was put down.

Paroid contains no tar, is slate color, lies smooth on the roof, is attractive in appearance, and requires no paint when laid.

To answer the growing demand in Canada, F. W. Bird & Son have purchased nine acres of land in Hamilton, and are now completing one of the most modern and up-to-date roofing plants on the continent. Paroid is sold largely through dealers. Write to F. W. Bird & Son, Traders' Bank Building, Hamilton, Ont., for samples and their proposition to dealers. We are sure it will interest you.



Building Made of "Paroid" Roofing.

BUILDING NOTES.

S. E. Whittam, Brantford, is erecting a $3,300 residence.

Porter & Son, Winnipeg, will build a large wholesale warehouse.

A $2,300 addition is being made to J. Cosgriff's hotel at Hamilton.

Dr. Francis H. Sterling is building a $7,000 residence at Victoria, B.C.

Mr. Johnston, of Bright & Johnston, is building a $10,000 residence at Winnipeg.

S. M. McKay intends erecting an expensive residence on the river bank at Winnipeg.

Tenders are being called for the erection of an electric light power house at Indian Head.

The works of the Canada Car Co., Cote St. Paul, Montreal, are rapidly nearing completion.

A new business block is being built in Forest, to be occupied by the Arcade Hardware Co., and other stores. The cost will be $8,000.

Louis Payette, the contractor constructing the Grand Seminary, Montreal, is fire-proofing it with cinder concrete and expanded metal.

Swan, Church & Co., contractors for the metal lathing in the Singer Sewing Machine Co.'s works at St. Johns, P.Q., report that the work is almost finished.

The Victoria Cement Co.'s works at Tod Creek, near Victoria, B.C., are being doubled in size, machinery being added to increase the output to 600 barrels daily.

The Grosvenor Flats, which were the scene of the long labor strikes in Montreal, are now almost finished, some of the contractors being already in shape to knock off work.

Harty & Smith's new hotel at Fort Frances is being erected. Another hotel to cost $17,000 is being planned, to be erected in the same town by George A. Graham, Fort William.

Robert Stewart, Guelph, has secured the contracts to erect several new buildings at Cobalt, amongst them being an 80-room hotel, a modern bank building and several residences.

Finley & Spence, architects, Montreal, are inviting tenders for the erection of a large Armory for the 5th Royal Scots, to be situated on Bleury street. The building will be an imposing one, containing drill hall, gymnasium, shooting alley, bowling alleys, and swimming baths.

The saw mill erected by the Messrs. Babbitt at St. Marys, near Fredericton, N.B., is about completed. The boiler and other machinery will be in working order in a short time. The new mill is 30 x 100 feet in dimensions, and will be equipped with the latest machinery. In addition to the mill there is being erected a neat office, blacksmith and machine shop, and a tenement house. T. E. Babbitt, the senior partner, is also erecting a handsome dwelling. Daniel Babbitt also proposes building a residence.

City Dairy Company, Limited, stable, reinforced concrete, College street, $25,000.

STREET PAVING and SIDEWALKS a SPECIALTY

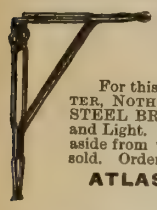
SILICA BARYTIC STONE CO.

OF ONTARIO Limited

Head Office:
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Wat-r Proof Floors for Malt Houses, Breweries, Slaughter Houses, Cheese Factories, Cellar, Stable Floors, etc-

Walter Mills, General Manager
Ask for quotations for Septic Tanks.



Will Hold Up a Shelf!

That's what a shelf bracket is for.

For this purpose there can be NOTHING BETTER, NOTHING CHEAPER than the BRADLEY STEEL BRACKET. It is well Japanned, Strong and Light. The saving in freight is a good profit, aside from the lower price at which the goods are sold. Order direct or through your jobber.

ATLAS MFG. CO.,
New Haven, Conn., U.S.A

"THE EMLYN" SAW BENCH

Made in 6 sizes. Best value obtainable. Specially designed for export With or without "Emlyn" Patent Guard. Sole maker—

CHARLES D. PHILLIPS,

Cables—"Machinery," Newport.

Emlyn Engineering Works NEWPORT, MON., ENGLAND

The Hanover Portland Cement Co., Limited

HANOVER, ONTARIO

Manufacturers of the celebrated "Saugeen Brand" OF PORTLAND CEMENT.

Prices on application. Prompt shipments.

USE
"HERCULES" BRAND
PORTLAND CEMENT
Manufactured by
THE GREY & BRUCE PORTLAND CEMENT CO.
OWEN SOUND
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NEWMAN'S PATENT
INVINCIBLE FLOOR SPRINGS

Combine all the qualities desirable in a Door Closer. They work silently and effectually, and never get out of order. In use in many of the public buildings throughout Great Britain and the Colonies.

MADE SOLELY BY
W. NEWMAN & SONS, Birmingham.

WORK AND PRICES RIGHT
GALVANIZING
ONT WIND ENGINE & PUMP CO, LIMITED.
TORONTO, ONT.

...FULL STOCK...

Salt Glazed Vitrified



Double Strength Culvert Pipe a Specialty.

THE CANADIAN SEWER PIPE CO.

HAMILTON, ONT. TORONTO, ONT
ST. JOHNS, QUE.

MONTREAL BUILDING PERMITS.

Jas. Young, Hope avenue, St. Andrew ward, dwellings, $6,000.

M. Beauvais, Labelle street, St. Denis ward, dwelling, $2,000.

Henri Lauzon, Huntly street, St. Denis ward, dwellings, $3,000.

D. Leclaire, Gilford street, St. Denis ward, dwellings, $2,000.

D. Leclaire, Montana street, Duvernay ward, dwellings, $2,000.

J. H. Lemieux, 96 Laval street, alterations to dwelling, $2,000.

Jos. Garneau, St. Andre street, St. Denis ward, dwellings. $1,500.

Alex. Hogue, St. Hubert street, St. Denis ward, dwellings, $1,500.

Alex. Hogue, St. Hubert street, St. Denis ward, dwellings, $3,000.

F. H. Merault, Gauthier street, St. Mary ward, dwellings, $2,500.

Alderic Lefebvre, Mount Royal street, Duvernay ward, dwellings, $3,500.

Montreal Light, Heat & Power Co., Harbor street, Hochelaga ward, sheds, $2,000.

—

TORONTO BUILDING PERMITS.

Thomas J. Smyth, dwelling, Conduit street, $2,100.

G. Carruthers, brick dwelling, Indian Road, $5,000.

Mr. Wilson, brick dwelling, Langley avenue, $2,200.

William Apps, brick dwelling, Albany avenue, $2,500.

John Brown, dwelling, Summerville avenue, $2,500.

H. Swallow, brick dwelling, Concord avenue, $2,200.

Edmund Hardy, brick dwelling, Rusholm Road, $3,000.

John Snow, roughcast dwellings, Yarmouth road, $1,000.

F. W. Matthews, brick dwelling, College street, $2,800.

E. Stratton, roughcast dwelling, Dufferin street, $2,000.

A. Pike, one pair brick dwellings, Shaw street, $4,000.

John B. Jackson, three dwellings, Dundas street, $5,000.

Major Keefer, brick dwelling, St. George street, $11,000.

A. E. Davis, roughcast dwelling, Ossington avenue, $1,600.

H. F. Squires, brick dwelling, Palmerston Boulevard, $4,500.

John Coates, brick veneer dwelling, 118 Curzon street, $2,700.

G. H. Anthony, roughcast dwelling, Yarmouth road, $1,800.

Edward Jones, roughcast dwelling, 64 Dagmar avenue, $1,000.

Thomas McMahon, brick dwelling, Glendale avenue, $1,800.

W. G. Jones, brick dwelling, on Castle Frank crescent, $3,500.

Dr. M. W. Sparrow, brick dwelling, Queen street west, $5,000.

T. R. Whitlam, brick veneer dwelling, 90 Caroline street, $2,500.

Francis Jones, one pair brick dwellings, Dufferin street, $3,600.

B. E. Walker, addition to residence, 99 St. George street, $5,000.

WE SOLICIT YOUR ORDERS FOR
Trough-Conductor and Elbows
NOW IS THE TIME TO PLACE YOUR CONTRACT, AS PRICES ARE ADVANCING.
WHAT QUANTITY WILL YOU CONTRACT FOR AT A FAVORABLE PRICE ?
METAL SHINGLE & SIDING CO., Limited, - - - PRESTON, ONT.
Alberta Agency—ELLIS & GROGAN, Calgary. Northwest Agency—CLARE & BROCKEST, Winnipeg Montreal Agency—J. B. DAGENAIS, 953 St James Street.

A. M. Heath, stone and brick dwelling, 195 Madison avenue, $3,800.

W. S. Armstrong, brick veneer dwelling, Emerson avenue, $1,500.

J. J. McLaughlin, concrete brick stable, Sherbourne street, $7,000.

J. D. Cholwill, stone and brick residence, Crescent road, $6,000.

William Clark, one pair brick dwellings, Farnham avenue, $6,000.

George Cruise, one pair roughcast dwellings, Pape avenue $2,500.

Fred S. Duff, one pair stone and brick dwellings, Grace street, $4,000.

Mr. Summerville, brick and stone dwelling, Wright avenue, $2,500.

M. B. Vandervoort, roughcast dwelling, 103 Victor avenue, $1,600.

A. Norman, one pair brick and stone dwellings, Olive avenue, $6,000.

A. C. Thompson, brick store and dwelling, Dundas street, $3,000.

W. D. Wilson, three stone and brick dwellings, Bernard avenue $12,000.

W. Pinnock, one pair brick and stone dwellings, Gore Vale avenue, $4,400.

W. Pinnock, one pair brick and stone dwellings, Bellwoods avenue, $4,400.

Samuel Schwartz, one pair brick and stone dwellings, Agnes street, $2,800.

H. S. Mara, three pair brick and stone dwellings, Gore Vale avenue, $11,500.

R. C. Vaughan, two stone and brick dwellings, Roxborough avenue, $4,500.

Charles Mould & Co., four pair brick veneer dwellings, Regent street, $16,000.

Page & Britnell, two pair stone and brick dwellings, Dovercourt road, $9,800.

Anna Fligg, store and dwelling, College street and St. Clarens avenue, $2,000.

E. Taylor, one pair brick and stone dwellings, Hepbourne and Delaware, $4,000.

John Ramsey, one pair roughcast dwellings, 26 and 28 Tiverton avenue, $3,000.

J. S. Montgomery, three pair brick and stone dwellings, Manning avenue, $18,000.

F. Williams, two pair dwellings, concrete and cement blocks, Palmerston avenue, $6,000.

A. A. Barthelmes, one pair dwellings, corner of Kendall avenue and Wells street, $5,000.

George Buckner, one pair brick dwellings, corner of Brooklyn and Dagmar avenues, $3,800.

H. C. Boultbee, six-story brick office building, corner of Queen and Victoria streets, $33,000.

Messrs. King Bros., four pair roughcast dwellings, Symington and Irving avenues, $10,000.

James Davey, one pair roughcast dwellings, corner of Munro and Mt. Stephen streets, $3,000.

Permits for several factories and 104 dwellings are given herewith, the total value amounting to nearly $364,000.

Fairbanks-Morse Mfg. Co., Limited, machine shop, steel and concrete, near northern tracks, on Bloor street $60,000.



A PERMANENT and Handsome Roof.

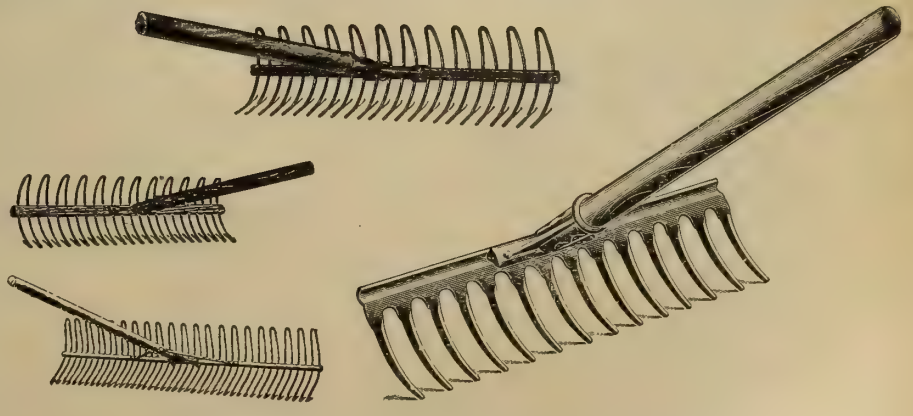


Arrow Brand Asphalt Ready Roofing

Will bring you profitable trade and satisfied customers. Comes in rolls ready to lay, all ready covered with gravel. Requires no experience to lay, and lasts for years without further attention.

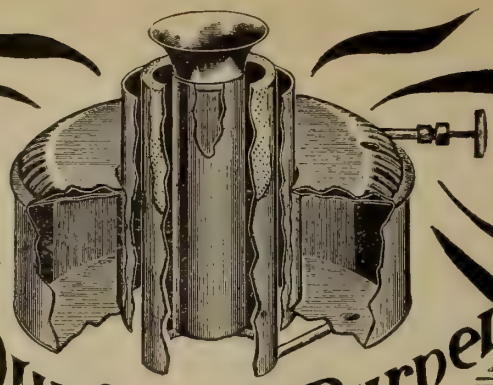
A. C. JENKING & CO, Sole Agents,
Room 215 Coristine Building, - MONTREAL.
Sole agents being appointed in each district. Write to-day.

LAWN AND GARDEN RAKES



Also a large line of Posthole Diggers.
If interested please write for our Catalog.

F. E. KOHLER & CO., Canton, Ohio, U.SA.



Our Safety Burner

The ALUMINUM OIL HEATER

Sales over the million mark solely through superior merit

Explosions are impossible in the Aluminum Oil Heater, because perfect ventilation and perfect combustion are secured by the liberal air passages on all sides of the wick and oil fount—see that safety burner: solid gallery, solid flame-spreader, no perforations there to clog up. No other oil heater has this grand safety burner.

No direct contact between oil fount and wick—a small tube feeds the wick only as much oil as it can take up instantly.

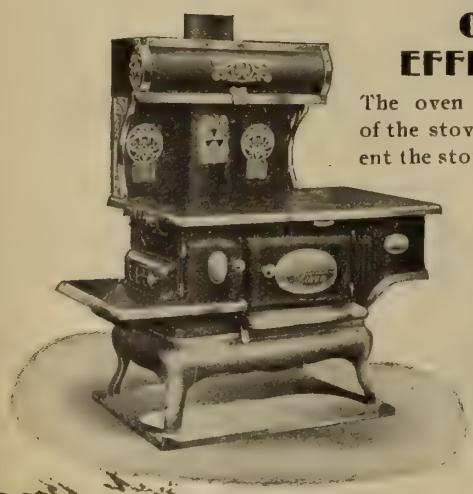
And the Aluminum Oil Heater is handsome in design and finish, thoroughly well made, and the only oil heater which can and does radiate the heat in every direction. Heats by radiation as well as by circulation. Get your orders in early—the demand is swelling larger and larger every week.

We guarantee every one.

Metal Stamping Co., Dept. 12.—Jackson, Mich., U.S.A.

W. J. McMURTRY, Galt, Ont., Canadian Agent.





OVEN EFFICIENCY

The oven is the "heart" of the stove. If it is inefficient the stove is "dead."

In

The Empire Queen Range

the highest degree of oven efficiency is attained. Heat is evenly and quickly distributed, and this does not mean, as with many other stoves, a lack of heat from the cooking holes. So you see **THE EMPIRE QUEEN RANGE** is a "sort" of "useful" stove—just the kind of stove enterprising dealers should handle. Information gladly furnished.

The Canadian Heating & Ventilating Co. Limited

OWEN SOUND, Ontario

THE CHRISTIE BROS. CO., Limited, 238 King St., Winnipeg, Man., Western Agents.

THE CANADA STOVE AND FURNITURE CO., 126 West Craig St., Montreal, Que., Agents for the Province of Quebec.



DID YOU EVER

think how important it was to have on hand always, for particular people,

Sterne's Asbestos Stove and Furnace Cement

They will take no other. Neither should you. We give you the goods and the price—what more?

WRITE TO-DAY FOR PARTICULARS

G. F. STERNE & SON, MANUFACTURERS, *BRANTFORD, ONT.*

Accurate Fitting

We have 300 styles of **Fire Bricks** made from the highest grade of fire clay, **every one accurate fitting,** ensuring thorough satisfaction. We also are equipped to quote you low prices on A1 quality of **Furnace and Stove Cement** and **Stove Castings.** Catalogue on application. Drop us a post card.

JONES BROS., - Bracondale P.O., Ont.

STOVES AND TINWARE

SOMETHING NEW IN TIN CANS.

DESPITE an old saying to the contrary, it is a fact that there is always something new in this world for some of us. That which may be new to some is perhaps old to others, but The Max Ams Machine Company, New York City, is making something in tin cans that seems to be new all the way through. Their system embodies an entirely new idea in canned food products, and successfully disposes of the present manner of soaking the interior and soiling the exterior of the cans with objectionable solder and acids. Heat is not required to fasten the tops and bottoms, and the holes are unnecessary. These cans are constructed on sound, sanitary principles, eliminating all the objectionable features now prevailing in other methods.

This method consists principally in applying to the flanges of the covers, by means of a "lining machine," an odorless, tasteless and non-deleterious compound and asbestos in such a manner as to make an absolutely airtight seam without the use of solder or acids ; making the cans cheaper, more attractive in appearance, and more durable than any on the market now used in processing food products of all descriptions.

Here are some of the purposes for which the new seam sanitary can is available : All kinds of fruits, both in syrup or water. All kinds of vegetables, all kinds of meats, dried, smoked or otherwise. All kinds of fish and fish products, dried, in oil, vinegar or brine. Syrups or molasses, honey, maple syrup, condensed milk, plum pudding, soups, butter, etc. Also all purposes where processing is not essential but an hermetically tight can is required, such as drugs, salves, teas, coffees, spices, paints, dry or wet, pastes, etc.

ENAMELWARE REGULATIONS.

THE Hungarian Government has issued an order intended to stop the employment of deleterious substances in the manufacture of enamelware and other articles used for the preparation or storage of food and drink. The order provides that the tin used for making enamel for cooking and drinking vessels, as well as in the manufacture of spoons, syphon-tops, tinfoil and tubes and fittings for wine and beer, etc., may not contain more than 1 per cent. by weight of lead. Suspected goods are to be tested by taking two samples and washing them, first in alcohol, and next in ether or chloroform. One of the samples is then to be moistened with 0.6 per cent., and another with 4.2 per cent. acetic acid, and left exposed to the air for twenty-four hours, after which they must be boiled for one hour with acid of the same strength respectively. The order does not apply to water-pipes in ordinary use. No enamel may be used for the manufacture of culinary utensils which, after an hiur's boiling in 6 per cent. acetic acid, gives a solution containing any trace of lead, copper, cadmium, arsenic, antimony, zinc, barium, or other poisonous metallic substances.

GURNEY COMPANY WINS.

AT Osgoode Hall last week Mr. Justice Magee handed out a consent judgment in the injunction proceedings instituted about two years ago by the Gurney Foundry Company against several trade unionists to restrain them from interfering with the company's employes or customers. The judgment is a victory for the Gurney Company.

The defendants in the case were R. H. Emmett, J. H. Barrett, of the Moulders' Union ; C. Kernish, C. Curtin, A. Stockholme, of the Stove Mounters' Union ; J. Slack, J. Acheson, of the Polishers' Union, and James Wilson. The judgment restrains them from publishing or circulating placards, handbills, etc., calling on the public to boycott the company. They are also restrained from "interfering with and intimidating the plaintiffs' workmen and agents, and wrongfully persuading them to break their contracts of employment with the plaintiffs and wrongfully preventing, procuring, or persuading workmen or agents from taking employment from the plaintiffs, and from wrongfully and maliciously watching and besetting the railway stations from the approaches of the plaintiffs' factory for such purpose."

The trouble between the company and the union dates back about two years, when there was a general strike, and the methods adopted by the strikers led to injunction proceedings being instituted.

FORT WILLIAM STOVES.

IN a recent interview Mr. Harold William, stated that his firm had Copp, of W. J. Copp & Son, Fort just shipped its first carload of stoves to British Columbia. Mr. Copp said the product of the foundry is limited on account of not being able to get the men they want. "We have now about 40 men and could easily use 15 more, but it seems impossible to get them, especially moulders. We have had to call in some of our salesmen because we are not able to fill the orders and I consider that a failure to fill orders does more harm to a business than anything else."

They have lately added a tinning plant to their foundry and are now making their own tin plates. Considerable saving is thus effected as they have to import the copper sheets and the duty is much less on them in an unfinished condition.

STOVE PIPE ELBOWS.

E. T. Wright & Co., Hamilton, have on the market what they claim to be the strongest and neatest stove pipe elbow ever produced. This elbow, (Cooper's Improved Patent), is having a very large sale, which is well merited, as each year this firm have been improving on their elbow until it is now perfected, and only wants the trial of the trade to prove its value. See their advertisement on this page.

SOL-A-RINE

The Great Polish



For all planished metals, Liquid Form, Screw Top Tins. No stock complete without it. What the trade say : "Sells better than any other."

Send for Circular

H. F FALKINER,
60 George St., TORONTO

OAKEY'S The original and only Genuine Preparation for Cleaning Cutlery, 6d. and 1s. Canisters

'WELLINGTON' KNIFE POLISH

JOHN OAKEY & SONS, Limited
Manufacturers of
Emery, Black Lead, Emery, Glass and Flint Cloths and Papers, etc.

Wellington Mills, London, England

Agent:
JOHN FORMAN, - 644 Craig Street
MONTREAL.

For bicycles, firearms, candlesticks, door plates, taps, nickelware—in short, metal surfaces of all descriptions, use

YORK

Metal Polish, Liquid or paste. Quick, clean, brilliant. 10c. and upwards.

Sample Free.

ANGLO-CANADIAN SUPPLY CO.
3 Wellington St. E., TORONTO

Cooper's Improved Patent One-Piece Stove Pipe Elbows



The Heaviest and Best Elbow on the market. Measures 23 inches long at the back.

Send in for sample dozen.
Polished or Common.

E. T. WRIGHT & CO.,
Sole Manufacturers and Patentees
HAMILTON and MONTREAL.

The New

National Oak Heater

for Hard or Soft Coal, Lignite, Coke or Wood.

Smoke consuming. Double Heater from floor. Duplex Grates. Double Mica Door. Straight, Deep Firepot. Deep Reflector Ring. Hot Blast Ring is entirely outside—does not obstruct interior. Smoke Pipe Collar is in rear of double-heating collar. No Elbows or Offsets required to connect with double-heating flue.



Made only by

THE MOFFAT STOVE CO., LIMITED

WINNIPEG WESTON, ONT. CALGARY

No other manufacturer in the world has a stove just like this. In brief, it's the biggest, tallest and best stove of its kind ever offered. Places you absolutely beyond competition. Seize the opportunity and write for the agency to-day.

BASE BURNERS

ARE NOW IN DEMAND

RETURNED
SEP 19 1905
To O Vickers
our Book 41
Page 48



The base burner you want to buy is the base burner that will sell—the one with some individuality.

The GRAND IDEA is just a little different from anything else on the market.

A LITTLE BETTER AND A LITTLE MORE UP-TO-DATE.

The GUELPH STOVE CO., Limited

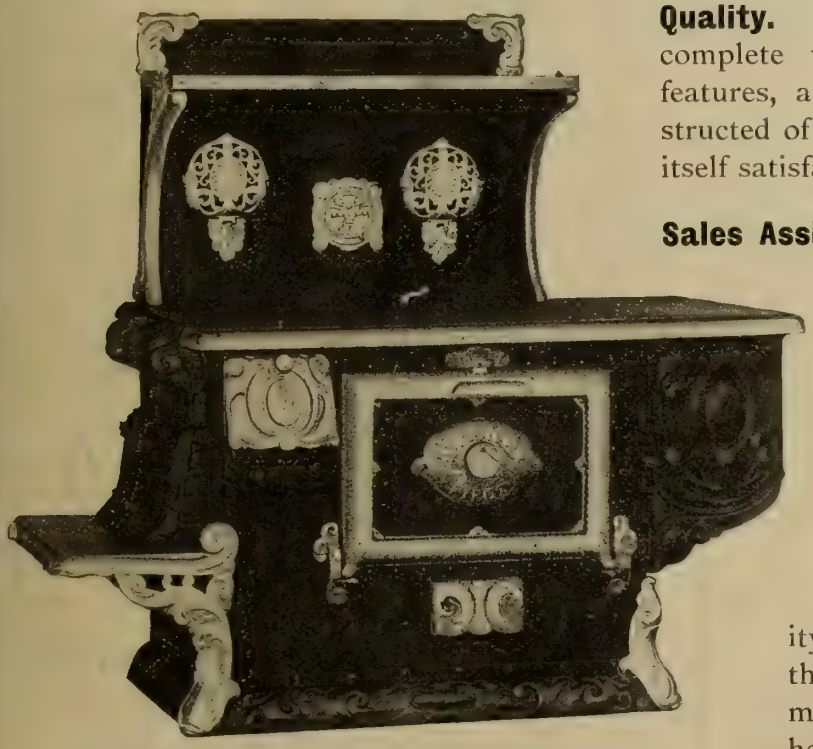
Guelph

Walker "Pilot" Steel Range

OUR MOTTO :

"Quality will be remembered when price is forgotten"

Dealer's Profits. The dealer's profit on the sale of a **Walker "Pilot"** is frequently double what the ordinary range affords, and the price to the consumer meets competition.



Cut showing ***Walker "Pilot" Range*** with High Shelf and Reservoir. Note handsome appearance obtained by adding the ***Walker Hearth Construction,*** an entirely new feature in steel ranges.

Quality. The **Walker "Pilot"** Range is complete with all modern and desirable features, and is properly and honestly constructed of the best material, and has proved itself satisfactory wherever sent.

Sales Assistance. We assist the dealer in every possible way in the sale of the **Walker "Pilot"** Range, and are ready at all times to work with them for our mutual advantage.

This Combination of **Profits, Quality** and **Sales Assistance** will easily permit you to control the Range Trade of your locality, and to build up a business larger than heretofore thought of, and a money-maker that will make your heart glad.

The Walker "Pilot" agent is going to be **the** stove-man of your town, therefore it will be well to obtain agency before it is too late, and order on a sample range for your floor.

If you have not got a copy of our catalogue on file, send for it. It is free and shows other money-making lines.

The Walker Steel Range Co., Limited,

Grimsby, Ontario

BRITISH AMERICA ASSURANCE COMP'Y

FIRE AND MARINE.

Incorporated 1833

CASH CAPITAL, $850,000.00.

TOTAL ASSETS, $2,043,678.59.

LOSSES PAID SINCE ORGANIZATION, $25,868,544.80.

HEAD OFFICE, - BRITISH AMERICA BUILDING,
Cor. Front and Scott Sts., Toronto.

HON. GEO. A. COX, President. J. J. KENNY, Vice-President and Managing Director.
P. H. SIMS, Secretary.

WESTERN ASSURANCE COMPANY. Incorporated 1851

FIRE AND MARINE

Head Office Toronto, Ont.	Capital -	$1,500,000.00
	Assets, over - -	3,300,000.00
	Annual Income -	3,890,000.00

HON. GEO. A. COX, President.

J. J. KENNY, Vice-President and Man. Director.

C. C. FOSTER, Secretary.

Money

CAN BE SAVED BY MEANS OF AN ENDOWMENT POLICY.

YOU CAN ONLY SECURE SUCH A POLICY WHILE YOU ARE IN GOOD HEALTH.

Pamphlets and Full Particulars regarding the New Accumulation Endowment Policy sent on application.

Confederation Life ASSOCIATION

W. H. BEATTY, President.

W. C. MACDONALD, ACTUARY. J. K. MACDONALD, MANAGING DIRECTOR.

HEAD OFFICE, - TORONTO, CANADA.

FINANCE

CANADIAN banking methods will show proof of their excellence during the next three months. In the United States, where the branch bank system does not exist, the annual consternation is on as to how the western banks are going to get enough money to move the crops. The banks throughout the west, on account of the small population of the towns, are small, and as the call throughout the year is for loans and the deposits are small, they have not sufficient capital to handle the business which is put upon them during the harvesting season. Various attempts are made by means of Government deposits to tide them over the next few months, but the farmers and merchants of the west suffer greatly from the difficulty in getting money.

This condition does not obtain in Canada at all. By means of branch banks the big banking institutions are enabled both to plant banks where they could not live independently and to supply these with unlimited money to meet any extraordinary conditions. Here, as in the United States, the greatest wealth is in the east. Thus here the branches in the east receive much more deposits than they have calls for good loans. On the other side, the branches in the west have calls for loans almost exclusively. Accordingly the east feeds the west, and good profit is made from both branches where a single bank in either place would have difficulty in living.

CAPITAL PAID UP, - - $1,000,000.
RESERVE FUND, - - 1,000,000.

THE METROPOLITAN BANK.

DIRECTORS

R. H. WARDEN, D.D., President S. J. MOORE, Esq., Vice-President
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THOS. BRADSHAW, Esq. JOHN FIRSTBROOK, Esq.,

HEAD OFFICE, - TORONTO.
W. D. ROSS, General Manager.

GENERAL BANKING BUSINESS TRANSACTED

SAVINGS DEPARTMENT
at all Branches.
ACCOUNTS SOLICITED

Drafts Bought and Sold.
Letters of Credit Issued.

THE AUER GAS LAMP



Delightful to read by.

Gives the light of 100 Candles and Costs Less Than Coal Oil.

No smoke or smell. The whitest, clearest, softest light for reading or sewing. The different styles are suitable for store, church or home. SATISFACTION GUARANTEED. Catalog on Request.

AUER LIGHT CO., MONTREAL



ASBESTOS SAD IRONS

AN IRON FOR EVERY PURPOSE

SENSATIONAL SAD IRON ADVERTISING

We are determined to make "ASBESTOS SAD IRONS" a household word throughont the country. EVERY WOMAN is our prospective customer, and we won't rest until every woman is convinced that she must have Asbestos Sad Irons.

In order to accomplish this result, we are spending thousands of dollars in general advertising. And for the benefit of the trade we offer

$1,000.00 in Cash Prizes

for the best local advertisements and Window Displays of Asbestos Sad Irons.

If any hardware dealer who reads this advertisement has not received the details of our Advertising and Window Display Contests, he should write for full information at once.

These contests have been planned for the benefit of the retail dealer. Every Asbestos Sad Iron that is sold passes through the hands of some dealer, who makes a good, clean profit on that iron. Are you coming in for your share of the sales?

The way to be assured of your share is by letting the people of your community know that you sell Asbestos Sad Irons. Enter our contests and you will get publicity, sales, profits—besides standing the chance of getting a substantial cash prize.

We take it that every hardware dealer is acquainted with the merits of Asbestos Sad Irons. If YOU are not, send for our complete descriptive booklet. Return the attached coupon and we shall immediately send the booklet and details of our Advertising and Window Display Contests.

ASK YOUR JOBBER FOR PRICES.

The Dover Mfg. Co.

CANAL DOVER, OHIO.

BOX 824.

COUPON

The Dover Mfg. Company, Canal Dover, O. Box 824.

Gentlemen,—We have not Asbestos Sad Irons in stock. Please send descriptive booklet and detailed information concerning your Advertising and Window Display Contests.

Name .....

Street Address.....

City..... State.....

"Famous" Base Burners

SERIES 230

RETURNED
NOV 15 1905
To Owner
Cut Book 43
Page 26



Made also for Parlor

Three-Flue Base Burner

For Hard Coal

This stove is exceedingly heavy and durable, while the quality of the castings, finish of the nickel parts, ornamentation, close fitting of the doors, mica frames and all joints are of the very best workmanship.

Has been given a new and beautiful nickel dress, making the stove thoroughly modern in appearance.

The grates are a heavy duplex pattern, and are strong enough to grind up the hardest clinkers without breaking.

The fire-pot can be easily taken out by sliding the lower part of the magazine up and drawing the pot out through the front doors. Is replaced in the same way. The pot revolves, which saves continuous wear on one spot.

The three-flue construction, which is found only on this stove (others having but two flues), gives an increased radiating surface and produces nearly one-half more heat from the same amount of fuel.

Printed matter, including all our Base Burners, sent free to any dealer.

The McClary Manufacturing Co.

LONDON, TORONTO, MONTREAL, WINNIPEG, VANCOUVER, ST. JOHN, N.B. HAMILTON

"Everything for the Tinshop."

HARDWARE AND METAL

President:

JOHN BAYNE MACLEAN

The MacLean Publishing Co.

Limited

Publishers of Trade Newspapers which circulate in the Provinces of British Columbia, North-West Territories, Manitoba, Ontario, Quebec, Nova Scotia, New Brunswick, P.E. Island and Newfoundland.

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Subscription, Canada and United States, $2.00
Great Britain and elsewhere - - 12s
Published every Saturday.

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NEW ADVERTISEMENTS:

The Moffat Stove Co., Weston, Ont.
Rogers, Herbert & Co., London, Eng.

THE LAND OF GOLD.

WITH a golden harvest in the west ready for the reaping, golden prospects in every line of manufacture, winning golden opinions abroad as to her wonderful resources, whether of farm or forest, river or mine, surely this Canada of ours must be that land of promise, known in fable only to the ancients, where there would be peace and plenty and abundance for both man and beast. This much despised country of snow and ice, stunted pine trees and famished wolves, has come out from the shadow of ignorance and prejudice under which she has been unwillingly held by other people, and has emerged into the glorious sunlight of her own possibilities. The cry of the word gold from some inaccessible district where the metal is to be found has set the nerves of men tingling with excitement. They have forsaken wife and family, home and kindred and all attendant comforts, endured untold privations, famine itself, and dangers without end, all in the hope of gathering in a share of the yellow metal. This happened so recently as to be still fresh in the memories of all, and yet these very men in getting to the Yukon passed through a country where more gold awaited them than has up to the present been found in the richest mining discovery known to man. In the best year that the Klondyke has seen much less gold was produced than will this Fall pour into the pockets of the fortunate farmers of the west. Fifty million dollars is the conservative estimate placed upon the value of the wheat crop alone now being harvested, and this to be divided, comparatively speaking, among a small number. Why does humanity allow men to live in misery and squalor and want in the slums and hovels of great cities, when they might be independent and happy and enjoy the sunshine and gladness of our unspeakably great and incomparably golden western land?

No less an authority than the New York Wall Street Journal predicts that the centre of the next great world movement will be in Canada, a prime agent in connection with which will be the new transcontinental railway with termini on the shores of the Atlantic and Pacific Oceans. When the cost is considered, which is estimated anywhere from $150,000,000 to $200,000,000, it must be realized that the spending of that amount alone will mean much in the next five years in Canada. Aside altogether from benefits which its construction will bring to Canada, through the opening of an entirely virgin territory to settlement and production, the mere fact that such an enormous sum of money is to be expended in the country, largely in the shape of wages and for supplies which will be of home production, is a sufficient guarantee of great general prosperity during the period of building at least. But when it is considered that the present wheat-producing capacity of the Canadian west is only two per cent. of the equally good growing land which will be thrown open to cultivation by the construction of this great national undertaking, the possibilities are simply staggering. It means that within ten years the production of wheat in Canada will be limited only by the ability to find the labor to cultivate the land and handle the crops. This development means a coming economic change which must be taken into consideration as a world's factor. Canada is now producing about one-sixth of the wheat raised in North America. Her new facilities will increase her ability so vastly that it is evident that she will before many years control the grain markets of the world, and in that fact there is much food for thought for the agriculturist of the United States.

Only second in importance to her wheat production, if indeed it long remains second, will be the return promised from the forests and mines, now practically inaccessible, but to be opened to the world with the completion of the Grand Trunk Pacific Railway. So far we have referred only to the building of the main line of something less than 4,000 miles, but it is the purpose of the Government of the Dominion to build innumerable branches, so that the most remote parts of the main line will be brought into touch with the existing railroads not only of Canada, but of the United States. One of these lines is already under construction—from Toronto to Lake Temiskaming, about 300 miles north in a straight line from the city on Lake Ontario.

Everything indicates that Canada is full of mineral—the precious metals, coal, iron, copper, tin, nickel, phosphates, and, in fact, everything that the requirements of the world demand abound, to say nothing of oil. These fields are thus far untouched. How valuable they are may be gathered from one accidental find on the Temiskaming Railway at Cobalt. Granting that there may be exaggeration about the glowing reports from this district, it must be admitted that sufficient has been shown to raise the hopes of Canadians that this hitherto unexplored country may prove an Eldorado. At least enough has been found to justify scientific search for precious and other metals, and it must be confessed that the mining history of Canada warrants the most thorough exploration. How greatly this will be accelerated by the construction of the new road needs no argument to prove. Important finds of oil and coal have already been announced by the surveying parties, and altogether there seems to be good reason for the optimism which prevails in Canada at the present time.

THE TARIFF COMMISSION.

WINNIPEG has been the scene of a meeting of the recently appointed Tariff Commission, but in point of numbers the sessions were not a very marked success, the people of the prairie section being now too absorbed in the problem of harvesting the wheat crop, and the matters incidental to this problem, to devote much thought to the oft-discussed question of protection versus free trade.

Advocates of both of these principles presented their views to the Commission, however, and Hon. Mr. Fielding has learned that the western farmers and merchants take a different view of the tariff problem than the eastern manufacturer.

Mr. Walter Martin of the Tilden-Gurney Company told the Commission that the importation of cheap American stoves was killing the Canadian trade, and declared that unless something was done Canadian manufacturers would be out of it. He favored a tax of $2 or $2.50 generally on stoves in addition to the 25 per cent. on those now being brought into the country. Mr. James Drew of the Gurney Foundry Company of Toronto, spoke in the same vein. Mr.

Ashdown, the large hardware wholesaler, however, opposed the views of Mr. Martin and Mr. Drew.

Mr. Ashdown also took strong exception to the dumping clause of the Customs Act, and said it sometimes left a dealer in doubt as to what his goods cost him until after he had fixed his price and sold them. He cited experiences in buying earthenware, and said he considered the dumping clause is a hold-up, and would sooner pay the difference in the cost to the American manufacturer than to the Canadian Government. As a choice of evils he would sooner have a higher tariff than the dumping clause. He asked that if it be continued a higher margin between the home and the export price than five per cent. be allowed, and that Canadian dealers be given some allowance for freight like the American dealers. He reminded the Commission that the stove representatives had spoken for the manufacturers. "A great body of our people are consumers," he added, "and are interested in lower rates of duty. The farmer has to compete in the market of the world with his produce, and he naturally thinks there should not be more duty placed upon imported goods than is necessary for purposes of revenue. When you go so far as protection you get beyond revenue. In a large number of cases the present tariff is beyond a revenue tariff. I would ask that the duty be not increased, but, on the contrary, whenever it is beyond the revenue-producing basis it should be lowered."

TOOL MANUFACTURING IN CANADA.

NEGOTIATIONS of notable significance and of great importance to the hardware and machinery trade are approaching culmination.

The Niles-Bement-Pond Co., one of the largest machine tool manufacturers in the United States have secured a controlling interest in the John Bertram & Son, Limited, of Dundas, Ont. As the negotiations are not yet fully completed it will be impossible at the moment to give full details of the changes likely to result from this development, yet Hardware and Metal has learned from official quarters that one result of the change will be that Niles-Bement-Pond tools will be made in Canada in the Bertram works. This will mean the erection of several new buildings at the latter works, and it will probably result in an increase of fully 100 per cent. in the number of men employed at the works in Dundas, and an even larger increase in the output from that concern.

The causes that have led up to this development can be said to date back even as far as 1864, when the firm of McKechnie & Bertram was established in Dundas, Mr. John Bertram being the junior partner. While the tools at first made by this concern were somewhat crude as compared with the present output, great care was taken from the start to make every machine rigid and of great strength. The result has been that an enviable name has been built up, and to-day the firm have the reputation of making a line of machine tools which combine in a most satisfactory degree the rigidity of British tools with the up-to-date features of American productions.

The John Bertram Co. have from the start kept in full touch with the progress in machinery construction the world over as well as with industrial progress in Canada. The result has been that they have been to a large degree successful competitors for business when large orders, such as the Canada Foundry Co., and C.P.R. shops, have been on the market.

Niles-Bement-Pond Co. have also, in recent years particularly, been paying much attention to the Canadian market, and have, when heavy tools were desired, probably been the most successful tenderers among the U.S. concerns for business in Canada. They have, however, been greatly handicapped by the duty of 25 per cent. on their tools, as well as by the stiff competition of Canadian firms. As the American firm is exceptionally strong financially, they followed the inevitable course of seeking arrangement with the strong competitors in Canada which would enable them to compete for business in this market more effectively. These negotiations have culminated in the purchase of controlling interest in the Bertram works.

Now the two organizations will be combined to insure greater efficiency in both production and sale in Canada. So far these has been no change personally of the Canadian organization, and as far as can be learned no vital changes will be made. Fuller details will be given in a later issue.

CANADIAN TRADE WITH ASIA.

THE close of the war in the East will undoubtedly bring about a great commercial development in the countries which are immediately interested.

Japan, Corea, China, through Manchuria, will all be heavy buyers of raw and manufactured goods. A great share of this business should come to Canada. We already have a foothold in the East and with careful cultivation the market possibilities there should prove unlimited.

During the year ending June, 1905, Canada exported over $2,000,000 worth of goods to Japan, China and Corea. There is not one of the items in that list which could not be indefinitely increased. The principal items are cotton, flour, canned salmon and other fish, leather and its manufactures, metals and their manufactures, provisions, lumber and wood pulp. In every case the consumption is large and Canada is in the best situation to supply the demand.

Our transportation facilities are better than those of the United States as the boat trip from Vancouver is two days shorter than from any American port. Moreover, in China at the present time there is an intense prejudice against everything American. This should place Canadian products on a still better basis.

Manufacturers would do well to look into this market carefully. There is no doubt that unbounded propserity will follow the opening up of new provinces and countries to Japan's enterprise.

When the great numbers of men whom Japan has kept in the field during the past two years are turned to peaceful avocations and the regular business of the country is resumed, there will be a great call for foreign manufactures.

SCREW THREAD STANDARD.

GOOD work is being done by the Engineering Standards Committee of Great Britain and if suggestions made in a recent report issued by that body are carried out it will result in the abolition of various discrepancies of practice which have been annoying to engineers and mechanics using screwed bolts and pipes. The report issued relating to this matter is not yet complete as the final standardization involves the further collection of data relative to the gauging of screw threads and plain cylindrical surfaces. It was found, however, that the pitches originally formulated by Sir Joseph Whitworth meet general requirements, hence they were incorporated in tabulated form in the report. However, it is universally admitted that the finer threads are desirable in certain cases, so that a second table has been prepared relative to fine screw threads. For screw threads of less than ¼-inch diameter the dimensions recommended by the British Association Small Screw Gauge Committee have been adopted. A point not definitely settled was a decision regarding the best means of securing interchangeability between male and female screws.

THE ABUSE OF CREDIT.

THE credit system as an institution is probably one of the few things which must ever remain with us. In its use it is one of the greatest conveniences of commerce. Abused, it becomes at once a positive curse, and the toughest problem of business.

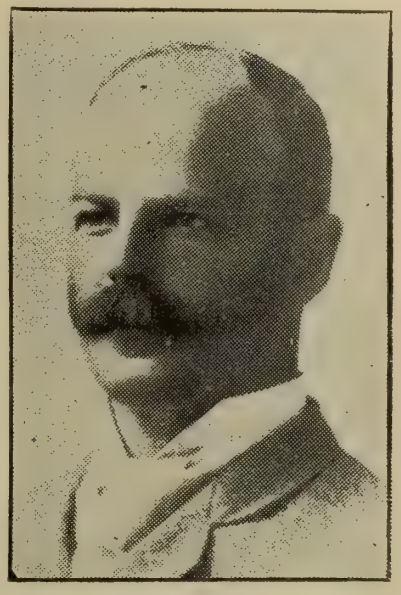
Constantly our attention is being directed to troubles arising from the abuse of the credit extended by enterprising storekeepers in their anxiety to secure an increase of trade. The storekeeper is often at his "wits' end" to scrape together sufficient cash to satisfy his wholesale men, whilst at the same time a glance at his accounts reveals a satisfactory balance. The reason is his inability to effectuate collections.

It is almost impossible for the country store to arrange prices to compensate for the extent of credit expected. Prices are, to a large extent, public knowledge. Almost all commodities of daily consumption are quoted periodically in the daily papers, and the people who want credit are keen enough to keep their eyes on these quotations, besides which the issuing of catalogues, etc., from large departmental stores, is a fruitful means of keeping the country districts posted with the latest lowest prices, based on the principle of "cash with order." It is a most remarkable fact that among these very people who expect low prices are found many large and prosperous farmers. The result to the storekeeper is most disastrous. He has to supply his goods in competition with these cash terms, and is expected to allow the payment to await the convenience of the farmer, which often means until his crops are harvested. Even to this many a storekeeper would not raise objection, for he can easily negotiate the note of a well-to-do farmer. Our information, however, tells us that the farmer's attitude to his store account is one of great injustice. With his other accounts, such as implements, etc., he has to show a measure of regard. The large firms who run such businesses are not as easy as our amiable and friendly storekeeper; they secure themselves pretty soundly by holding a safe lien until the last final payment. In addition, too, they cover their debt by a note, carefully stating a substantial interest for any future extensions in part or whole, generally never less than 7 per cent. The farmer, therefore, is much more likely to let his "store" account slide in favor of the ever-increasing implement "note," really using the storekeeper's money to pay his implement account. Now this, on the face of it, is a gross injustice, and one that cannot be taken up too strongly.

Our retail friends in Manitoba and the Northwest are about starting a campaign to put down credit entirely, owing to the injustice experienced and to the impossibility of getting prices equivalent to the credit enforced by their customers. We wish them every success.

HARDWARE MERCHANT CHOSEN.

SINCE the change of Government in the Province of Ontario Hon. J. P. Whitney has honored two of the Province's best known hardware merchants with public office, the Hon. Frank Cochrane, of Sudbury, having been taken into the Cabinet as Minister of Mines, and Mr. Edwin R. Rogers, of Toronto Junction, known in all parts of Ontario as the president of the hardware section of the Retail Merchants' Association, being appointed Inspector of Prisons and Public Charities to fill the place made vacant by the resignation of James Noxon.



Mr. E. R. Rogers,
Inspector of Prisons and Public Charities.

The newly-appointed inspector was born in the county of Peterboro, in the village of Ashburnham (which now forms part of the city of Peterboro), some forty odd years ago. His boyhood days were spent there and he was educated at the Union School and from there passed through Trinity College School, Port Hope. Deciding on a mercantile career Mr. Rogers entered the dry goods business in Toronto in 1876, spending two years there and going to Uxbridge in 1878, where he was engaged in the hardware business.

From there Mr. Rogers turned his way westward in 1882 and entered the employ of J. H. Ashdown, hardware merchant, in Winnipeg, where he remained two years, going on to Calgary, where he engaged in the hardware business for five years, then accepting the position of clerk of the supreme court of the North-west Territories at Calgary, Alberta, leaving there in 1898 for Toronto Junction, where he has been engaged in the hardware business for the past seven years.

Mr. Rogers has been actively interested in athletic sports of all kinds, and has done much to forward the interests of the several clubs where he has resided. He is a son of the late Robert Rogers, who was a defeated Conservative candidate in East Peterboro in the late 70's and a brother of R. B. Rogers, superintending engineer of the Trent Valley Canal, and Colonel James Z. Rogers, R.O. 57th Regiment. He is a son-in-law of Henry Pellatt, Toronto. During the last Provincial elections Mr. Rogers was financial agent for the Hon. J. W. St. John, Speaker of the House, and was appointed license commissioner.

The duties of the position of Inspector of Prisons are being rearranged, the plan involving the doing away with the old scheme of each inspector having a certain amount of control over specific institutions, and the adoption of the direction of all the business connected with the institutions from the offices at the Parliament Buildings. Thus Mr. Rogers, who is a business man of experience, will have charge of the purchasing of all supplies for institutions under direct Provincial control. This will relieve bursars of much of their present responsibilities and work, and it will also, it is believed, enable the department to dispense with several assistant bursars and storekeepers, whose places will not be refilled.

The responsibility of Mr. Rogers' position, the purchasing of about $1,000,000 worth of supplies annually for the institutions under his care, is very heavy and it is his intention to dispose of his business as soon as a suitable purchaser is found. His retirement from the retail trade will be a distinct loss as he was one of the most enterprising retailers in the Province and one of the most active workers in endeavoring to organize the retail hardwaremen into an association for mutual protection and advancement. His experience in this direction is that much better results will follow from the form of organization existing in Manitoba and the Northwest, where the hardware trade is organized on an entirely separate basis from other retail merchants, than the system tried in Ontario which has the trade organized as a section of the Retail Merchants' Association. Mr. Rogers has followed the work of the Western Hardware Association in their reports in Hardware and Metal closely and he commends their work highly.

Mr. Rogers' position will bring him in close touch with hardware merchants, a large portion of the million dollar expenditure under his control being for hardware, plumbing and heating supplies, and his long experience and knowledge of the trade will make him a valuable man for the important position he has been chosen to fill. The best wishes of the publishers of Hardware and Metal, and of the trade generally, will go with Mr. Rogers in his new sphere of labor.

Echoes of the Canadian National Exhibition at Toronto

CANADA'S National Exhibition is over. The great fall Fair broke all previous records for interest and attendance. The weather of course could not have been improved upon. The special attractions were such as to astound us, great children that we are, and back of it all there were the substantial exhibits, wonderful and convincing proofs of the greatness of this young Dominion and vital with suggestion of the magnificent future that lies before us.

After all, the human element is the most wonderful and interesting feature of Canada's National Exhibition, and as the exhibits approach in their perfection and potentiality to man himself, so they grow in interest to the eager crowd of men and women who flock each year to Toronto to see and know the new thing that the subtle mind and conjuring hand of the inventor has brought into being.

Year after year the indefatigable directors search out the length and breadth of the land for new special attractions, and here again the human interest shows its strength. A prince of the blood, a Chinese potentate, the Irish Guards Band, or a regiment of American soldiers on a friendly visit, are the attractions that bring out the people by the hundred thousand and work up their enthusiasm to the cheering point, and who will forget who has once heard the ringing cheer of 25,000 or 30,000 of enthusiastic humanity stirred to the depths by the sight of a splendid human spectacle.

But were one to consider it, what is more interesting and wonderful at the great Exhibition than the very people who flock perennially to see and admire the wonders of which they themselves constitute the chief part?

With every year the crowd grows and will continue to grow, not merely because of the merits of the Exhibition, great as they are, but because we all, admit it or no as we will, want to be with the crowd. It is an established fact that if you let it be known that a crowd will be at a certain place at a certain time, the crowd will assemble of itself and find amusement of its own devising.



Canadian National Exhibition—Dodge Shafting and Pulley Exhibit.

Of the first importance both from the points of attractiveness and educative influence were the exhibits in the Process Building, this year more extensive than at any previous Exhibition. It was difficult most of the time to make your way past the crowds held interested against the railings where swiftly driven machinery was turning out manufactures of various kinds with a celerity that was amazing and an accuracy beyond praise.

In the Manufacturers' Building the drawn and fatigued appearance of the attendants as the Exhibition drew to a close showed how severe the tax had been upon their energies. The demonstrating plan was everywhere adopted and you were invited to try this dainty or sample that food product to a degree that threatened you with acute indigestion should you yield to a tithe of the invitations extended.

It was in the Stove Building, however, that the hardware visitor found himself most at home, the many magnificent displays made by the manufacturers, together with the steady advance made in the introduction of new ideas and improvements being sufficiently interesting to induce the progressive retailer to spend some hours amongst the products of the foundries on exhibit. Next to the Stove and Manufacturers Buildings, Machinery Hall was the most interesting spot for hardware and metal merchants, and on the grounds and in the other buildings were also many attractive displays which were inspected with interest by hundreds of readers of Hardware and Metal.

Dodge Bearings as Power Savers.

As usual the Dodge Manufacturing Co., of Toronto, make an attractive show of power transmission machinery in Machinery Hall. A new feature of their exhibit this year was a practical demonstration of the small amount of power actually required to drive shafting with ordinary babbitted bearings when both the shafting and bearings are properly

finished and properly erected. A heavy steel shaft loaded with large pulleys is set up in Dodge Ball and Socket Hangers which are fitted with regular Dodge Self-Oiling Bearings (the good kind), the whole being driven at a high speed from a pulley on the line shaft above, by means of a very fine silk fish line. This was very interesting to many mechanics and power users who at first thought the Dodge Company had gone in for some new fangled sectional bearing, but when they were shown how little power there is really lost through journal friction, "under proper conditions," some of them opened their eyes, especially when they read the following card which accompanied the exhibit:

"Authorities state that in a properly designed shafting equipment the loss in power by journal friction should not exceed ten per cent. and by no means or method is it possible to reduce this loss by more than ten per cent."

And as one man of experience said, "If I saved the whole thing I wouldn't be saving much judging from the way that thing works." The Dodge Company are inviting power users to consult them on the "bearings" question.



Canadian National Exhibition—James Morrison Company's Display of Plumbing and Electrical Fixtures.

Brass and Electrical Goods.

Sparkling with brilliance from hundreds of lights in beautiful brackets, chandeliers and lamps, the exhibit of the James Morrison Brass Mfg. Co., Limited, was one of the most striking in any of the buildings, and certainly was the centre of attraction in Machinery Hall. Three classes of goods were shown, one end being devoted to plumbing goods, the other to brass goods and engineers' supplies, the walls and ceilings being used to show to advantage the beautiful electrical, gas and combination light fixtures manufactured by the company's experts.

The collection was most complete, and the various designs represented the latest creations. Special attention was given to the array of dining room fixtures, while lights for drawing rooms, halls, dens, etc., were also shown. The house fixtures were shown in brush brass, antique brass, copper, oxidized and gold lacquered finish, and the lights were enclosed in bulbs and various shapes of art colored glass, the color effect and design being in advance of anything heretofore shown. Some newel post and table lamps in the form of bronze figures were particularly attractive. The most beautiful of all, however, was a running fountain for the conservatory, its design being very original, and five colored bulbs being used to diffuse their rays through the running water.

In the plumbing section one closet was shown working automatically under the Quinn flushing valve, the operation of the device being exceedingly simple. Two others were fitted with the Nethery flush valve, one being under direct and the other under tank pressure. The "Astoria" closet, a feature of which is that there is always water in the bowl, occupied a prominent place. A marble slab, deeply countersunk, with plate glass mirror back, was probably the most attractive fixture in this section, it being one of the finest pieces of work ever done in Canada. It is fitted with a combination Primus waste for hot and cold water. Two other articles which attracted a lot of attention were an iron enamelled French bath with four inch roll rim, nickelplated fittings and porcelain handles, and a nickelplated shower bath with silk curtains. Combination shaving glasses on a nickeled stand completed the display.

Brass manufactured goods are shown in profusion, and the selection made for the exhibit comprised some of the most modern articles in brass on the market. The Heinz steam trap, a great steam saver, came in for much attention. An hydraulic gasoline torch for brazing was on exhibition and proved a great drawing card for those interested, also the J. M. T. valves and automatic injectors, Hancock inspirators, ship-telegraph gongs for single and twin engines were also shown complete.

Charley World, the company's popular traveler, was in charge of the exhibit, and genial Fred Armstrong and Arthur Betton were also in attendance to hand out pretty blotters to the ladies and the "glad hand" to customers.



Canadian National Exhibition—The James Morrison Brass Manf'g. Co.'s Brilliant Exhibit.

Huron Stoves and Ranges.

The Huron Red Hot Furnace for hard coal, soft coal, wood or coke, manufactured by the Western Foundry Company, Limited, Wingham, attracted a great deal of attention from stove and hardware dealers who visited the Stove Building at the Exhibition. It is a coal furnace, but, having a very large feed door, is convenient for wood burning. A general utility furnace, one, at least, that gives perfect satisfaction, is a rarity, but the Huron furnace fills this exacting bill in every particular. The Huron is built low and is, therefore, especially useful in low cellars. It is easily mounted, and, in short, is powerful, economical and superior. The Huron enjoys a rapidly growing patronage.

The Huron Steel Range for hard or soft coal or wood is a range of unquestioned superiority, beautiful in design, elaborate in ornamentation and perfect in construction. In addition to these points the manufacturers claim for it that it contains many features of merit that are new and desirable.

The "Crown Huron" is a new range fresh from the pattern shops, and especially designed to fill the demand for an up-to-date medium sized cooker with all the desired modern appliances. It is very moderate in price, and just suitable for such households where the larger and more expensive ranges are not needed. It has plenty of nickle ornamentation, and a full set of nickle bands, nickeled oven panel and shelf and nickeled pot shelves, etc., and therefore has the appearance of a much more costly range.

The manufacturers claim that the ordinary sheet flue does not heat the oven bottom evenly, this being the reason why ranges do not bake uniformly. The shortness of the fire travel is also said to consume a great quantity of fuel. In the two flue used in the "Crown Huron" the heat is evenly distributed, consequently the oven will always bake the same on every part, and owing to the fact that the heat travels completely around the oven twice before passing out of the smoke collar, the heat units generated in the fire box are consumed before being lost by passing up the chimney, with the result that it is possible to do the same amount of work as in a sheet flue range on a considerably less amount of fuel.

In addition to these lines the Western Foundry Company manufactures the "Art Huron" base burner, a stove of which it is justly proud, and other lines such as hotel steel ranges. Correspondence is solicited from hardware merchants.



Canadian National Exhibition—Exhib't of Western Foundry Co., Wingham.

Perfect Idea Ranges.

The Guelph Stove Company's display in the Stove Building was handicapped from the insufficient amount of space allowed, but the company made the most of this with a very handsome display, their new "Perfect Idea" range being one of the most studied and admired stoves at the Exhibition. The detachable nickeled rim, easily removed for blackleading when cleaning, is a strong feature of the ornamentation. The high shelf, high closet (steel), water-front and gas attachment (two lids) are all points worthy of emphasis on the "Perfect Idea." Other lines shown in the exhibit were the well-known Kelly furnace, Grand Idea base burner, and New Idea hot blast.

Exhibit of Dominion Belting.

Large maple leafs characterized the belting exhibit of the Dominion Belting Co., Hamilton, in the Machinery Hall. It consisted of three large piles of their "Maple Leaf" stitched cotton duck belting, tapering from bottom to top in different sizes. The dressing made specially for this belting was also on exhibit, the whole making a neatly arranged and interesting display.

"Maple Leaf" belting is made from duck specially woven for this firm, and contains the least possible stretch with the greatest consistent strength. It is machine folded and lock stitched with special strong cord, each row of stitching being entirely independent of the other rows. The belts are waterproofed and are rendered impervious to steam, oil or gasses, and remain flexible under afl conditions. It is uniform in weight and can be made any length desired without joints, endless belts being a specialty.

This belting is manufactured with machinery of patented design, gotten up by the company, and there is only one style of belting made by them, the "Maple Leaf." For main drives and heavy work such as lumber mills, brick-yards, mines, etc., "Maple Leaf" belting is specially efficient. During the last year the company have done a very large business in main drive belts. For this purpose the company claim that the "Maple Leaf" is the surest belting on the market. During this season they have sold over 200 belts in the 12 to 30 inch sizes. Until they started three years ago the Dominion Belting Company claim that the production of belting for main drives was in an experimental state, but since then

"Maple Leaf" makes a sure drive. "Maple Leaf" belting is now stocked by hardware merchants from the Atlantic to the Pacific and in all sizes.

What users say for an article is very significant, and any wishing to get a book of testimonials should apply to the Dominion Belting Co. Among those who give flattering testimonials are : Laking, Patterson & Co., Hamilton ; Imperial Paper Mills of Canada, Ltd., Sturgeon Falls ; the Good Roads Machinery Co., Ltd., Hamilton ; the Lachute Shuttle Co., Ltd., Lachute Mills, Que. ; Wm. Laking, Haliburton, Ont. ; F. W. Fearman Co., Ltd., Hamilton ; the Dowswell Mfg. Co., Ltd., Hamilton; Canada Linseed Oil Co., Ltd., Montreal, and others.

N. H. Walker and R. N. Rose had charge of the exhibit, their geniality making many friends for their company as well as leaving possible customers with a favorable impression of the goods.



Canadian National Exhibition—Dominion Belting Exhibit.

The "Empire" Stoves.

The Canadian Heating and Ventilating Co., Limited, of Owen Sound, had a splendid display of their products in the Stove Building, the arrangement of the display being in the nature of a semi-circle with the "Empire Queen" range as the centrepiece. Grouped around this in neat fashion were the "Empire King" furnace, the "Empire" steel range, the "Empire Ideal" baseburner, and the "Empire Oak." All of these lines are winning great favor, and contain many features which the dealers find to be strong talking points to customers in both town and country. The Empire Ideal Base Burner is one of their most popular lines, and is handsome, modern, perfectly fitted with first-class stove flue construction. The flues are made of heavy, soft sheet steel, entirely separated from one another, from ash wall and from back plate. Cold air is taken in at bottom and circulates around entire circumference of both flues, against ash wall and against back plate. Its heating capacity is greater (with less fuel) for these reasons than any other base burner on the market.

Every stove has double heater attachment, large base heating circular flue, screw draft, removable fire-pot and feeder, improved duplex grate and shaking ring, in addition to all the features usually found in the highest grade base burners. The nickeled parts are swing cover, dome, corner scrolls, name plate, rails, base and legs, entire ash-pit door, knobs, turnkeys, and hinge-pin tips. Made with or without oven.

Dealers wishing territory should communicate with the company at once, as prompt action will be well repaid by future results.



Canadian National Exhibition—Empire Stoves, Ranges and Heaters.

Blackwell's Varnishes.

On the eastern balcony in the Transportation Building stood an exhibit of more than passing loveliness, not only on account of its unique beauty, but because of the surpassing quality of the material employed. It is a well known fact among decorators and paint makers that white enamel that is a true white is the most difficult of all colors to produce. There are many so-called whites, but, on examination, one finds them bluish white, greenish white, and the most common of all, yellowish white.

James Langmuir & Co. have brought the enamel part of their business to perfection, and their exhibit was an attestation of that fact as it stood a monument of glistening white, "As pure as snow, as chaste as ice," but with a soft, liquid brilliancy that reflects the high character of that material and proclaims the truth that "Homolite" Enamel is the white enamel par excellence of this continent, and as one of the catchy little verses informs the beholders :



Canadian National Exhibition—Exhibit of Blackwell's Varnishes in Transportation Building.

"If you would live in spotless town,
No porch should e'er be green or brown.
No other color should be seen
Than Porch White with its silken sheen."

Porch White and "Homolite" are destined to have a great sale in this country, if one is to judge by the large number of orders which have been taken for them by the salesmen in charge of the exhibit, and the many comments of admiration made by visitors. And as one decorator tersely remarked, "You have a line of goods that you have not to create a demand for. The decorators of this country have tried everywhere to get a white enamel like what you are producing, but have signally failed. The demand is here, all that you have to do is to supply it, which you evidently can do. I am going home now to tender on a contract for white enamel work that I refused to tender on before because it has to be white, and I despaired of being able to fulfill the requirements, but with your "Homolite" Enamel I can win out and do work that will do me credit."

Many such expressions were heard on every hand, while the firm were being constantly congratulated on the extraordinary whiteness and beauty of their exhibit and its attractiveness. Architects and decorators vied with each other in expressing their admiration for the delicate beauty and beautiful gloss of porcelain-like "Homolite," while the ladies became enraptured over it, everyone of them having parlors or rooms, furniture or mantles, or chairs that they were going to have enameled with Homolite. The poet of the James Langmuir & Co., Limited, catching the fever of enthusiasm, on the occasion of his visit to the exhibit, brought forth the following verse as most fitting the circumstances :

When dainty maids forsooth would please,
They robe themselves in snowy white.
And so, with minds at perfect ease,
We offer you our "Homolite."

Nor are dainty maids the only ones who recognize the fetching qualities of snowy white. As all who visited the Manufacturers' Building are aware, the T. Eaton Co.'s exhibit, perhaps the most costly, as it certainly was the most magnificent, exhibit on the grounds, was finished with the snowy white "Homolite." Whatever that celebrated company undertakes is completed with that thoroughness and attention to detail that have made their name synonomous with perfection, as they are never satisfied with any but the best productions. The selection of "Homolite" for their exhibits is a compliment that the James Langmuir & Co., Limited, were quick to appreciate, and they have not failed to direct the attention of visitors to the splendid character of their displays and the superiority of the finish of their stands.

Although James Langmuir & Co., Limited, are a new firm in Canada, Mr. James Langmuir, the president, is not unknown to fame among the paint manufacturers of Canada, owing to his long connection with Harrison Bros. & Co., of Philadelphia, of which well-known house he was vice-president. Consequently, he is one of the best posted, technically and practically, among the paint producing fraternity on this continent. The skill, knowledge and enterprise possessed and acquired in a long, active administrative life in the United States he is now bringing into force in his native country and city, and the paint consuming trade at large can rely upon receiving from James Langmuir & Co. the fairest possible treatment and the finest productions that accumulated wisdom can make.



Canadian National Exhibition—Page Wire Fence Exhibit from Rear.

The most attractive features of the exhibit were the doors done in cabinet polish varnish, one of them being done two years ago, and without preparation of any kind appeared to have been varnished only a few days. Several ordinary house doors finished in very high lustre interior Amborine varnish also attracted a lot of attention. A variety of gums and samples of varnishes in bottles and tubes were also shown, while the entire exhibit, stand, pillars, railings, etc., was done with "Homolite." The company's desire to meet the trade in the outlying districts met with very gratifying results, large numbers visiting the exhibit.

Page Co.'s Log Cabin.

For genuine originality there was nothing on the grounds to outclass the log cabin constructed of wire fencing and gates manufactured by the Page Wire Fence Co., Walkerville. Situated on the lake front, near the Manufacturers' Building, the log cabin was a centre of attraction, particularly for farmers and for hardware dealers who find wire fencing one of their best selling lines.

The structure was constructed entirely of Page products, the walls being made of large bundles of the White Brand Page Fencing, while the doors, windows and roof were formed of gates.

In addition to the cabin the display included a large number of gates of various types, including both plain and ornamental scroll designs, the whole being surrounded by a Page wire fence, 10,000 miles of which are in use on railways, and, according to the company's representatives, more miles of which are in use than of any other kind.

As an added protection to wearing qualities of the wire, Page fencing and gates are coated with white enamel paint. Zinc lead is used. This not only helps to preserve the wire, but the white makes the goods more sightly, and greatly improves the appearance of property which it encloses.

To the hardware trade the white brand has a special significance. Enterprising dealers take pride in giving the goods a prominent place in their stores, for, unlike plain, the white gives a decided showy appearance.

Dealers handling "Page" goods are in a position to meet the requirements of all their trade, because of the many different styles they manufacture in both heavy and light weight fences. The Page Co. also makes poultry netting, metal gates, window guards and lawn fences—in fact anything in fancy wire and iron work. Besides their head office and factory at Walkerville, the company has branches at Toronto, Montreal, St. John and Winnipeg.



Canadian National Exhibition—Exhibit of Mantles and Lighting Fixtures.



Canadian National Exhibition—Front View of the Page Wire Fence Company's "Log" Cabin.

"International" Gas Lights.

The exhibit of the International Gas Appliance Co., Limited, of 25 and 27 Richmond street west, Toronto, was a source of attraction to the visitors at the Canadian National Exhibition this year and the amount of interest shown in their new "International" light will be reflected in enquiries for these lights from hardware dealers. This light is premier among a host of lights that have been introduced to the trade during the past year. It is economical in consumption of gas and prolific in light and at the prices quoted to us by their representative they should certainly prove a leader with every dealer in gas appliances.

Their exhibit also included a comprehensive set of samples illustrating the various stages in the manufacture of their mantles. They have equipped their factory with the latest type of machinery and engaged the most experienced help that can be obtained and the results are in accordance with the care

and precision expended on their productions, and it is highly gratifying to notice that Canadian mantles can more than hold their own in price and quality with the imported article. The company is comparatively a young concern and since their first exhibit last year when they were awarded a medal and diploma have made wonderful headway and by the untiring energy and courtesy of their manager, Mr. W. M. Campbell, and his staff of assistants, the company has forced its way to the front and holds a strong position in its own particular line. Their travellers carry a full line of samples which we commend to the notice of our readers.

Most of our readers are in some way interested in the goods carried by the International Gas Appliance Co., Limited, and a visit to their show rooms will repay any one handling the goods. As their name implies, they are "International," and the best and latest things in gas lighting from the United States and Europe are to be found there, and it is necessary for dealers to be up-to-date in this as in any other line.



Canadian National Exhibition—Splendid Display of Telephone City Stoves.

Telephone City Stoves.

Amongst the magnificent display of stoves, ranges, furnaces, etc., in the Stove Building, the exhibit of heaters made by the Telephone City Stoves, Limited, Brantford, stands out for originality of design and practicability for heating purposes. The heaters are unlike all others shown and the exhibit of "Telephone City" top draft heaters for coal, wood and gas is, therefore, of special interest to the stove dealer who is on the lookout for progressive ideas.

The well known and successful "Telephone City" top draft, air-tight wood stoves call for brief notice, although their good qualities are known to hundreds of dealers. The merit of these consists in better material, heavier linings, removable tops, and a convenient and practical ventilating check damper and condenser. This line commands a ready sale and gives universal satisfaction.

The "Mohawk" series of air-tight wood stoves is a lower priced line of excellent value to meet the demand in some sections for a low priced stove.

The success of the "Telephone City" top draft coal heater, introduced last year, encouraged the company to enlarge the line and for this reason they can supply four sizes of single and one double heater in two series. The "Fifty" series have sheet iron tops with hinged covers, and the "Sixty" series have cast iron nickeled swing tops and base and are very handsome. The predominant feature of these coal heaters is the quick and economical production of heat, and its steady maintenance. They carry fire for fifteen to twenty hours and are easily managed and controlled. They are furnished with either a draw centre shaking or the Ransom duplex grates, and an excellent ventialting check damper goes with each coal heater.

A neat 24-page booklet distributed by the company describes and illustrates the product of the company better than can be done in a short article, and dealers unfamiliar with the "Telephone City" line will act wisely in sending for a copy. Not only are the stoves valuable for heating, but the top has an arrangement by which cooking can be easily done and sad irons can also be heated. Innumerable points of merit are mentioned in the booklet while recommendations from hardware merchants and others who use the heaters in their stores are also given. Mr. Yeigh, who was in charge of the exhibit, has received many orders from dealers who have been impressed with the heaters shown.

Gurney Foundry Exhibit.

The Gurney Foundry Co., Limited, of Toronto, must have been well repaid for the bright idea of arranging a model hotel kitchen. It was certainly up to date, and excited the admiration of all those interested in that line of goods. The kitchen was complete even to minor details such as wall furnishings. One of the special features of the kitchen was a John Bull steel plate heavy duty hotel range fitted with boiler, high shelf and canopy. Another special feature was a grill gas range with eight ovens and canopy. This is something new on the

Canadian market, and great credit is due the company for the production of this range, which was designed and built at the Toronto works. From the numerous enquiries being received by the company for this range, it is almost certain to come into general use for quick restaurant work. The carving table which was displayed in the model kitchen is another up-to-date production of the Gurney Foundry Co. The cast iron top of the table was partly enamelled and partly nickeled, which was to demonstrate that the firm make them either way. The bake oven, the Bain Marie cook table and the warming closet were also features of the kitchen exhibit well worthy of special attention. The kitchen exhibit was completed by a fine display of copper and aluminum pots, pans and urns. On the whole, this model kitchen display could only have been produced by a first-class firm.

In conjunction with the model kitchen was the stove exhibit in which was shown the famous Imperial Oxford range in numerous designs and the Oxford Chancellor steel range in every design, even to the yacht range, and in their new dress excited much admiration. The new steel gas range shown is certainly a beauty, and attracted considerable attention. A very prominent position in the exhibit was held by the Oxford Laurel double heater, both with and without oven. This is the very latest style, and from what Mr. Hancock, their northern representative, who was looking after the firm's interests at the Exhibition, said and also from the genial smile of the Toronto sales agents, it might be judged that sales in that line had been very gratifying.

From the general appearance of the furnace exhibit, three sizes of a line of eight being shown, it might well be supposed that the firm have had no small success in the furnace trade.



Canadian National Exhibition—A Corner of the Gurney Foundry Display.

forts of Mr. Hancock and those associated with him at the Exhibition will result in increased business for the firm. Dealers will also reap some of the good results of the work at the Exhibition, in that those who have been introduced to the products of the Gurney Foundry Co. at the Exhibition will be on a lookout for them when they go home.

Imperial Varnishes and Colors.

A pyramid of paints and varnishes in the exhibit of the Imperial Varnish and Color Company, Toronto, attracted attention to a remarkable extent. The display was in the Manufacturers' Building and was a splendid showing of the large variegated colors giving the whole an artistic effect, the beauty of which would have to be seen to be appreciated.

Steel Troughs.

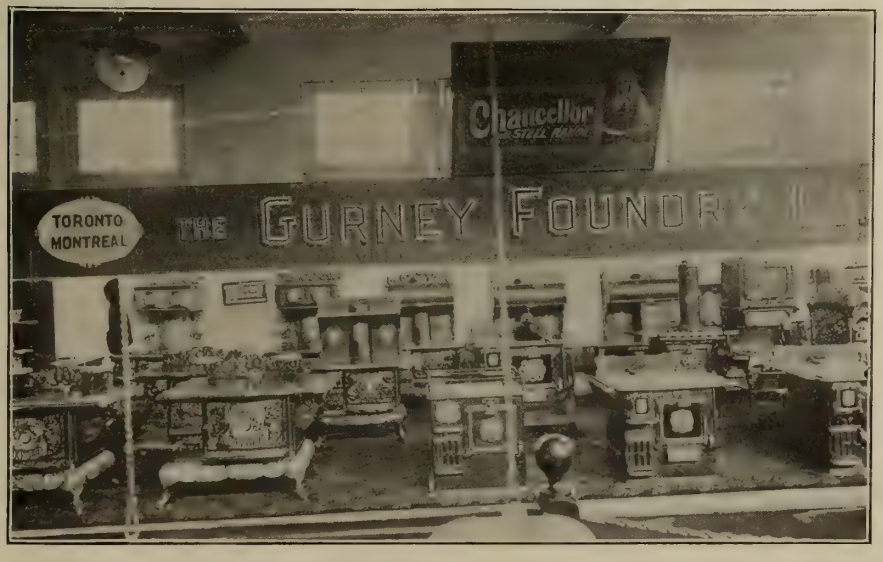
A display of steel troughs exhibited in Implement Hall by the Steel Trough & Machine Company, Limited, Tweed, was inspected with interest by thousands of farmers and by dozens of hardwaremen who have become familiar with the firm's goods through their advertisement in Hardware and Metal. Merchants who did not visit the Exhibition and have not yet handled these lines should send for descriptive literature illustrating the hog troughs, storage tanks, feed boards, stable troughs and stock watering outfits, feed boxes, foot warmers, etc., manufactured at the works at Tweed.

Pease Furnaces.

Most artistic was the exhibit of the Pease Foundry Company in the Stove Building, our illustration showing enough of it to give a fair idea of the beauty of its arrangement. While the company had no space to spare, the exhibitors showed good taste in leaving plenty of floor space around their furnaces and heating apparatus. Too often exhibits are crowded owing to lack of space, but the Pease booth was a pleasing exception to this rule.

Two rows of goods were shown, the front row taking in several of the smaller sizes of "Economy" and "Economy Jr." boilers and water heaters, some very artistic radiators and on the end a massive wood furnace. Along the wall in the background about a dozen samples of "Economy" and "Florence" hot water and steam heaters and "Victor" furnaces were shown, as well as some "Colonial" and "Imperial" side wall registers.

Two furnaces which attracted considerable attention were the "Economy" combination for both hot water and steam, and the new style of "Economy" burning wood, hard or soft coal, a feature of the latter being that no gases



Canadian National Exhibition—Oxford Stoves and Ranges, Shown by the Gurney Foundry Company.

On the whole the exhibit was worthy of the large and enterprising Gurney Foundry Co. No doubt the energetic e-f line of goods manufactured by the company, comprising gums, varnishes, paints, dry colors, oils, white lead, etc.,

can gather around the doors. The "Victor" is a cheaper but very popular line.

This was the first occasion when the "Florence" and "Economy" heaters have been on exhibit at any Fair. The latter is made in twelve sizes for use in residences, and ranges from 275 to 2,700 feet of hot water radiation. It has many special features contained in no other boiler on the market. Its oscillating grate actually sifts its own ashes, while the grate can easily be turned on edge to have the fire-pot cleaned. Another important point is that the top surface of the grate can be got at with a poker. The fire-pot is unusually fitted with corrugated sides and dome. This construction gives double the direct fire surface of that of any previous one. Another feature is the centre nipple connection which permits a free flow of water through the heater without passing over surface exposed to air. There are also churches and other public buildings requiring ventilation. It is so constructed as to utilize the heat radiated from the combustion chamber, and the sides of the heater as well as through the smoke pipe, and warming the air used for ventilating. Radiators are placed in the various rooms desired to be heated. The company claim that this heater will heat and ventilate large school buildings with at least 40 per cent. less fuel than the same work has ever been done by any other kind of heater. The popularity of this new line is indicated by the fact that it has already been adopted for heating schools at Berlin, Guelph, Moose Jaw, Regina, Winnipeg and other important towns and cities this year.

Another branch that the Pease Foundry Co. has recently gone into is that of manufacturing registers, they making a large variety in all different styles of finish. Carloads are being shipped to all parts of the Dominion and this branch of the business bids fair to become very important. In order to take up this line the company have built a new plant containing 37,000 square feet of floor space, five acres being acquired on Shaw street, near the C.P.R. tracks in the northwestern part of Toronto. It is also the company's intention to build a modern up-to-date foundry on this site this fall. For the present the Mimico plant will be continued but by next year the new plant on Shaw street will be constructed, and they will be made large enough to accommodate all of the manufacturing branches of the company. The Mimico plant will then be disposed of. This advanced move on the part of the company allows them to "put all their eggs in one basket" and will greatly systematize their work and allow of greatly enlarged productions the facilities for manufacturing being several times greater than at present.

The company are exhibiting their new line of "Colonial" and "Imperial" Sidewall Registers, the new device showing provision for heating from two to six rooms through the trunk system from one pipe off the furnace. This system can often be ased to save heating room in the cellar, and for using half the number of pipes. It is obvious that it will reduce the amount of heat wasted in the furnace room; a large volume of air moving through the pipes provides for this, and it is not liable to be influenced by prevailing winds and other points which sometimes interfere with the working of warm air furnaces. These registers are very economical for small houses, and an additional advantage is that with a sidewall register floor space is saved and the cutting of carpets, etc., is avoided.



Canadian National Exhibition—Artistic Display of Furnaces and Heating Apparatus, Manufactured by the Pease Foundry Company.

many other important details in the "Economy" which are worthy of consideration.

The "Florence" boiler is the first made in Canada for both hot water and steam and is also the first individual heater. It ranges from 600 to 1,200 square feet of radiation and weighs from 17,000 to 18,300 pounds. The company consider the prospects exceptionally bright for the "Florence" leading all others for fine points and for fine residences and other large buildings of all kinds where ventilating is not required.

The Pease Foundry Co. also manufacture the "Economy" Steam Heater and Ventilator, which is too large to be shown in such an exhibit as can be made at the Exhibition. The heater weighs from 8,000 to 12,000 pounds. It is the latest invention of the company, and is intended for use in schools,

Many other lines manufactured by the company were not shown in the exhibit. Some of them, however, were illustrated in pictures or cuts, and described at length in some very interesting booklets by the company, prepared for distribution. Copies of these books can be secured by addressing the company at its office on Queen street east, Toronto.

Metallic Roofing.

An interesting exhibit in the Manufacturers' and Liberal Arts Building was that of the Metallic Roofing Company, Toronto, their entire exhibit being made in their own factory. Much of the material used was embossed steel, while metallic ceilings and walls and ornamental designs of fixtures were also shown.

Standard Silver Co.'s Exhibit.

Very handsome indeed was the exhibit of the Standard Silver Co., Limited, Toronto, and very complimentary were the remarks passed on its appearance. Without doubt these were fully warranted, not only because of the arrangement of the exhibit, but also because of the quality of the goods exhibited. As can be seen from the accompanying illustration, the exhibit consisted of a room neatly finished in white and gold on the outside, which colors gave the neat and attractive appearance to the exhibit. Surmounting the room was a standard bearing the name of the company, the gold letters standing out from the blue background with a brilliant effect. The room was provided with show windows on both sides, the entrance being at the corner, in which was exhibited the standard goods of the company. These goods included tea sets, coffee sets, waiters of all kinds, tilting sets, ice pitchers, berry dishes, fruit dishes, salad bowls and servers, cake plates and baskets, baking dishes, soup tureens, butter dishes, biscuit jars, pickle casters, breakfast trays, celery jars, card receivers, bon-bon dishes, cups, prize trophies, cups, etc., combination sugar bowl and spoon holders, spoon trays and holders, syrup jugs, egg sets, dessert sets, chocolate pots, fern pots, smoking sets, hotelware, toast racks, and other goods. Two special features of this display of goods were a lacrosse trophy and a 20-inch tray. These were finished in copper and pewter, and presented a unique as well as an attractive appearance.

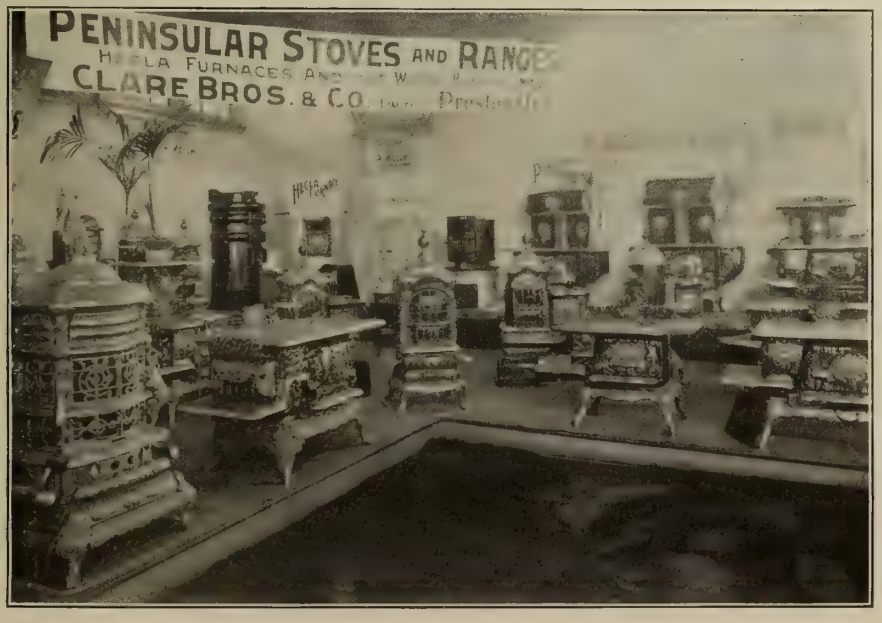
The room itself was neatly furnished, and served as a reception room where the company received their customers and customers' friends. In there was displayed a handsome silverware cabinet of polished oak, with brass trimmings, being the Oriental type of cabinet. It contained a tea set, waiter and flatware, significant of the high quality and well guaranteed goods made by the Standard Silver Co.



Canadian National Exhibition—Handsome Display of Silverware.

It is difficult from appearance to tell whether silverware is of good wearing quality or not, and in order to assure their customers and their customers' customers of the high quality of their goods, the company have a special guarantee worded as follows: "The purpose of a manufacturer's guarantee is to assure both dealer and customer that the goods will wear satisfactorily. Every piece of hollow ware bearing our trade mark is guaranteed by us to be of the very best quality, and warranted to wear satisfactorily. This guarantee is a signed and sealed document, which we print for every dealer and send, neatly framed, upon request."

In order to help their dealers in the advertising of Standard silver goods the company are in the habit of supplying to them small booklets, on which is printed the dealer's name, and which contains illustrations of some of the most useful silverware, and also a copy of the guarantee. These the dealers can distribute throughout their respective districts. This, without doubt, is a valuable assistance to the dealer in his silverware trade.



Canadian National Exhibition—Display of Clare Bros. & Co., Preston.

Hecla Warm-Air Furnace.

Clare Bros. Company, Limited, Preston and Winnipeg, had a splendid showing of Hecla furnaces and Peninsular stoves and ranges in the south-eastern corner of the Stove Building. The arrangement of the exhibit was very attractive and thousands stopped to inspect the goods on exhibition. The illustration shows the display of stoves, steel ranges, heaters, wall registers, etc., on the floor, and the ranges, furnaces, boilers, base burners, oaks, etc., on the elevation in the rear, but to appreciate the exhibit it had to be seen.

The Hecla is a Canadian furnace, made from a Canadian design, by Canadian workmen, for a Canadian climate. It is of the most careful construction, and its design insures in a marked degree those essentials of a successful furnace, durability, power, economy, and easy management. It differs from others in having a fuse joint which prevents gas

leaks, while the cast dome prevents burning out.

Peninsular ranges and stoves are so well known that it is unnecessary to elaborate at length upon their good features. However, improvements are made from year to year. The manufacturers are ever willing to adopt new ideas and this insures the securing by the public of the very latest in stoves when they buy a Peninsular.

The sheet steel oven radiates heat quickly and saves fuel and time. The ovens are also ventilated, thereby preventing soggy baking and keeping the oven pure. Grates can be removed without disturbing fire linings or water front.

Peninsular ranges are constructed with a view to getting the best results with the least consumption of fuel. In order to reach this end, much thought and money has been spent in experimenting to get the area of the flues the proper size to assist combustion and carry an even heat to all parts of the oven.

Clare Bros. & Company invite correspondence from dealers who have not studied the quality of their goods. Booklets illustrating the various lines made by them will be supplied on request.

The Walker Steel Range.

A very busy space in the Stove Building was that occupied by the Walker Steel Range Co., Limited, of Grimsby, Ont., who are manufacturers of "The Walker Line of Ranges and Heaters," including the well-known "Walker Pilot Steel Ranges."

All of their goods are the very latest production of the patternmaker's art, the Walker Pilot especially being noted for its many excellent and exclusive features.

Many pleased users of their ranges were among those who called, and the trade not only verified this fact, but spoke strongly in favor of the company's sales system, guaranteeing, as it does, proper profits.

All of their goods are unconditionally guaranteed, and this fact, combined with the excellence of the goods and assurance of proper profits, combines to make the agency for this line a valuable one. The company still have some unoccupied territory, and good dealers will be given the agency in those districts. An exhibit will also be made at London Fair.

Canada Metal.

The usual enterprising spirit was shown by the Canada Metal Co. in their exhibit in the Machinery Hall. The exhibit consisted of metals of all kinds, together with some manufactured goods. Of metals in ingots they had a fine display of aluminum, copper, tin and pig lead. Babbit metal of course formed a very prominent part of the exhibit, and the company no doubt are ready to demonstrate the high quality of their metal for bearings. An interesting feature of the exhibit was the display of piping, including phosphor-tin pipe, lead pipe and lock tin pipe. Of interest to electricians and wire-men was the complete display of fuse wire. Among the kinds of solder shown was wire solder for canners' use. Perhaps the most attractive part of the exhibit to those not directly interested in metals in general and also to printers was the display of type metal, including as it did several semi-circular forms for newspaper presses. The company pays special attention to this line of metals, and now have very numerous customers.

The growth of the business of this firm is shown by the extension of their plant during the past year, and from the progressive spirit ever shown by the firm, it might well be supposed that their business will continue to expand as it has done in the past.

The Bowser Oil Tank.

Few exhibits at the Exhibition were of greater general interest than that of the Bowser system of oil storage, better known as the Bowser oil tank. Situated at the extreme easterly end of Machinery Hall, the exhibitors were allowed a remarkably small space and were compelled to leave out one of the best features of their exhibit after having specially prepared for the display.

The showing was, however, a remarkably good one and hardware merchants, grocers, manufacturers and heads of large industrial plants were found at all times at the booth securing information regarding the Bowser system, and studying the working of the perfect self-measuring and perfection syphon.

S. F. Bowser & Company, the patentees of the system, manufacture at 530 West Front street, Toronto, and Fort Wayne, Indiana, pumps and tanks for the storage and handling of oils of all grades, delivery being made direct to the customers' cans in retail stores, direct to autos or launches, direct to the oilers used around mills or factories, and to the mixers in paint works. The system offers economy in oil and in labor with perfect safety and cleanliness as well as checking purchases and sales. Possibly the most important outfit is one for handling gasoline or benzine con-



Canadian National Exhibition—Walker Steel Range Company's Display.

sisting of a tank of heavy galvanized sheet steel placed outside the building, either buried in the ground or in a shed and attached to a powerful pump inside the building capable of delivering an exact gallon, half gallon, quart or pint of oil from such outside tank a distance of 250 feet direct or up to any reasonable elevation.

This outfit (cut 41 in catalogue) is entirely evaporation proof and complies with the most rigid demands of the insurance companies in Canada and the United States. In a recent fire in a garage at Providence, R.I., the gasoline caused no danger whatever and the pump worked perfectly after the fire was extinguished. The firm's representative, Mr. J. B. Bates, reports a growing demand for this style and where they have been used no single instance so far exists of disappointment or of danger. Furniture factories are using them for benzine with pump on fifth floor of building.

A similar outfit (cut 15) for handling linseed, turpentine, or other non-lubricating oils, with tank in basement of building and pump on first or higher floors, has the advantage of taking up but little floor space and handles linseed without gumming and turpentine without evaporation.

A new style of tank and pumps has recently been put on the market for use in lumber mills, power plants, lithographers, cotton and linen mills or any place where "oilers" are in need of filling. This outfit (cut 51) delivers 1 quart, 1 pint and ½-pint at a stroke and can be placed in the engine room or other position securing economy in distribution, economy in labor and safety in storage. Many of the leading firms in Toronto, Montreal and other cities are placing second or third orders for this style.

The machines for measuring coal oil, either from tank on floor of store (cut 19) or in cellar (cut 1), offer accuracy, cleanliness, safety, speed and delivery and it is established that at least 2 per cent. more oil can be sold from a Bowser outfit than in any other way, a better quality of oil being furnished as well.

Many of the railway store departments are using the long distance systems of this firm, as many as 25 different classes of oils being handled in a separate oil house basement with pumps conveying the oil to other floors or transferring it through underground pipes to other parts of the plant. A very large order for this style was lately shipped to Scotland and men from Fort Wayne, Ind., went over to install it.

As showing the increasing popularity of the Bowser system, Mr. J. B. Bates reports that at our Exhibition he received calls and enquiries for goods from Siam, Indo-China, British Guiana, Switzerland and London, Eng. Visitors from New York, Chicago and other cities in the States also expressed their entire satisfaction with outfits which some of them had used upwards of 10 years and handed in addresses of others who are desirous of buying.



Canadian National Exhibition--The Bowser System of Oil Storage.

The manufacture of these goods in Toronto is managed by Mr. H. Rodgers, and to him and Mr. O. Cooley, one of his assistants, is largely due the handsome decoration of the exhibit in Machinery Hall. The Canadian business is solicited in the Northwest by Mr. T. Cragg, Mr. N. Rosconi in Quebec and two travellers in the Maritime Provinces. Headquarters of the firm are at Fort Wayne, Ind., where a large plant is operated. The display made is most creditable but would have been far more comprehensive had more space been available.

Capewell Horse Nails.

The Capewell Horse Nail Co., Toronto, whose interesting and attractive exhibit in the Main Building is pictured on this page, is a recent addition to the already large list of Toronto manufacturers. Their plant, at 48 to 56 Duke street, is completely modern and up-to-date, and the product of the factory is already favorably known in all parts of the world.

The exhibit at the Fair arrested the attention of every lover of horse flesh, the neat arrangement of the horse nails and the display of handsome horseshoes being such as to attract all passers-by. A neat souvenir in the form of a finger ring, made of a horse nail, was presented to visitors. Capewell nails were exceedingly popular, and are being called the "fit-well," not only because of the neat fit of the souvenir ring, but also because of their strength and ease on the horse's foot.

Capewell nails are "Made in Canada," they are the best driving nails, the best nails to hold, the safest to use, and the most perfect in form and finish. These claims made for them are being substantiated by actual use.

Capewell nails never split in driving. They never crimp in the hardest hoof. They are flexible to clinch, and the clinch holds against any strain in service. Their perfect points make a clean cut hole in the most brittle hoof. They are absolutely uniform in length, breadth and thickness.

They are made from the best Swedish iron rods, specially imported, the quality of which is improved in compactness, tenacity, and uniformity of temper, by the Capewell process, controlled exclusively by this company.

As demonstrated by actual mechanical tests, the company's literature states that the tensil strength of the Capewell is one-half greater than that of any other nail made. Thus it is that Capewell nails never break under the heads, but hold the shoe until it is worn out. There will be no loose shoes to tighten for nothing.

The accompanying testimonials have been selected from hundreds of equal merit, simply to indicate to any strangers to Capewell nails, in Canada or other lands, the opinion of smiths who use their nails in different classes of work and in various parts of the world.

At the present time Capewell nails are exported to nearly all countries for use in armies and other exacting service. In



Canadian National Exhibition—View of Capewell Horse Nail Company's Exhibit.

the hot and dry parts of the country, and in the heaviest work, it is acknowledged that the Capewell is the nail which gives at all times the best satisfaction.

All Capewell Horse Nails, from Nos. 5 to 12, are packed in five-pound paper boxes, five of these boxes being contained in a wooden box of 25 pounds. The small sizes, 3, 4 and 4½, are packed in one-pound paper boxes, 25 to a wooden box. Both Regular and City heads are supplied in all sizes, the Regular being larger than the City heads. The company is confident that its nails are what it claims for them—"The best in the world."

Samples and catalogue free on application.

Brantford Cordage Exhibit.

"Maple Leaf" brands of binder twine were shown in the Implement Building, and attracted a lot of attention amongst farmers and hardware merchants. The central feature of the display was a pyramid of twine, another being the strong sack shown in the photo, the sack being prepared ready for shimpent. Some Manila hemp from which the twine is made, was also shown.

The four "Maple Leaf" brands are sold by hardware dealers in all parts of the country, the Cordage Company having had to install much new and up-to-date machinery in order to meet the growing demand for their twine. The company meet the association prices, and claim to make the best quality produced in Canada, their output being very large.

Four lengths of "Maple Leaf" twine are made—500, 550, 600 and 650 feet to the pound—these being designed to meet all the varied conditions affecting the use of binder twine. They are adapted for binders of all makes and conditions, if properly adjusted, in all kinds of grain.

In the manufacture of these brands every detail is carefully guarded. The fibre used is the longest, strongest and cleanest obtainable. There is complete system and close attention in every department, and with every process of the preparing, blending, spinning and balling. A careful examination and comparison reveals the fact that "Maple Leaf" brands are even, clean, free from tow bunches and fine spots, and are also long and strong.

These are the characteristics which mean so much to the twine user in the busy harvest time. With "Maple Leaf" twines there is no clogging of the tensions, no tangling and breaking, no time wasted in re-threading the needle, no scattering of grain in unbound sheaves, no loss of time, money and patience.



Canadian National Exhibition—Brantford Cordage Co's Exhibit of Maple Leaf Binder Twine.



Canadian National Exhibition—Owen Sound Wire Fence Company's Display.

Owen Sound Wire Fencing.

Occupying a prominent position among the wire fencing displays on the lawn near the lake front, the Owen Sound Wire Fence Company, Limited, had a well-arranged showing of wire fencing and metal gates, the important feature of the Owen Sound fence being that nothing but the best high carbon steel spring wire is used in the strands, and the Dillon Hinge-Stay which overcomes the principal objection that has ever been raised against wire fencing, viz., the bending of the stays or uprights when weighted down. Farmers who have tried or examined the hinge-stay principle give it their hearty endorsation. Mr. Goldsmith, the companionable representative of the company, also emphasizes the superior quality of wire used, the company making a fence of No. 9 wire throughout.

In the exhibit steel gates occupied a prominent position, a bridge being erected of them and one being also set up in working order, it being inspected by thousands of farmers during the Fair weeks. Gates are made in various sizes, from 3 to 14 feet in length.

High carbon hard steel wire is used in all the strands while No. 9 medium tempered wire is used for stavs. The manufacturers guarantee this wire to stand a pressure of 2,300 pounds and over, this being more than sufficient for any use which fencing may be put to on the farm. People climbing aver the fence do not bend it out of shape, the wire used in the strands being of coiled spring. This keeps the fence tight at all times and a weight on the fence merely causes it to lay to one side on its hinges, springing back into shape as soon as the weight is removed. The same features render the fence impervious to extreme heat or cold, this overcoming the objection to wire fencing owing to the action of frost upon it.

The Dillon Hinge-Stay Fence is not a cheap article. The aim has been to make it perfect in every detail, its quality making it cheaper than inferior fences in the long run. Various styles are manufactured, one being made particularly for the prairie land of the west.

While lower in price it combines durability and safety, being designed to replace barb wire at small cost. The company makes a specialty of pushing business through hardware merchants and they report a marked increase in business, the demand being ever on the increase. Illustrated printed matter will be sent on request.

The E. W. Gillett Co., Limited.

The exhibit of E. W. Gillett Co., Limited, in the Manufacturers' Building, was acknowledged by visitors to be one of the richest, most artistic, and attractive of the entire Exhibition. To the general hardware trade this immortal Don Quixote says, "All comparisons are odious." How far the truth of this saying may be applied to the various exhibits at the Exhibition visitors are able to judge for themselves. Certain it is that the display of E. W. Gillett Co., Limited, this year admitted of no comparison, and while in a general line similar to that of last season, some attractive advertising features were added that did not fail to arrest the attention of visitors. The large electrical cabinet in the centre told of the virtues and qualities of Magic Baking Powder, Imperial Baking Powder, Gillett's Lye, Gillett's Cream Tartar, etc. Two smaller revolving electrical devices displayed on two sides of the exhibit pertinent ads. of the firm's products. E. W. Gillett Co., Limited, have a reputation of making only one grade of goods, and that "the best," and the enormous increase in sales from Newfoundland to Dawson City shows that the public and trade do appreciate the Gillett Co.'s efforts to supply them with thoroughly reliable and absolutely pure goods.



Canadian National Exhibition—Exhibit of E. W. Gillett Co., Limited.

company's famous Gillett's Lye is a familiar and popular article. The manner in which Gillett's Lye is growing in favor indicates that the public are learning of the hundreds of ways in which this useful article may be used. The hardware merchant, more than any other, is in a position to bring the qualities and uses of Gillett's Lye to his customer's attention, and, aided by the extensive, continued and educative advertising the company is doing, the trade's interest should lie in encouraging the sale of Gillett's Lye more and more.

In the main aisle, near the eastern door, was the exhibit of E. W. Gillett Co., Limited, Toronto. Cervantes in his

Moffatt's National Stoves.

National Stoves and Ranges manufactured by the Moffatt Stove Company, Weston, constituted a most creditable and conspicuous exhibit at the entrance of the Stove Building. The order of the display was especially attractive, a row of steel and cast iron ranges occupying an elevated position in the background, in the front being a line of cast iron ranges and in the intervening space an assortment of different styles of heating stoves, base burners, oak heaters and air tights. All were well polished and nickeled and the whole gave an effect which excited attention, while the variety was convincing.

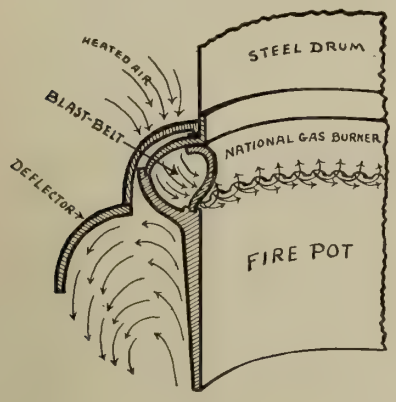
The Canada National Steel Range is a special line which interests the housewife. The ovens are thoroughly ventilated. Fresh air passes through the oven continually in proper quantities, so that quick baking and perfect operation are not interfered with.

The Classic National Range is another popular line, being one of the handsomest in America. The grate system permits the removal of the bars at any time they become worn out, without disturbing the waterfront or fire box linings. There are no complicated mechanical features to get out of order. The big square ovens of the Classic National, one inch larger than other ovens, are ventilated with a steady stream of pure heated air.

Mr. Moffatt states that a very large trade is being done in the west, steel ranges and the Alberta Hot Blast with

duplex grates being the principal stoves in demand.

Housewives who have had trouble in the past with thermometers in oven doors will find this difficulty overcome in the Moffatt ranges. The inside of each oven door is lined with a pressed tin reflector which centralizes the air upon the thermometer, there being an opening behind the instrument while at all other points it is closely attached to the



No. 1

door. In addition to this the company has made a contract with a leading American firm to make a special thermometer which the Moffatt Company guarantees to indicate the exact temperature when properly placed on the door.

Another feature worthy of note is the new nickle guard rail which is attached to the top of the range, a circulation of cold air keeping it from becoming tarnished. The fact that the Moffatt Company confines its business entirely to stoves and ranges, not manufacturing furnaces, hotel goods or other side lines, should be a strong recommendation for their goods. Mr. Moffatt states that no other Canadian company specializes upon such exclusive lines as does his firm.

A splendid catalogue (No. 2) has just been issued by the company and will be sent any dealer who desires a copy.

One of the company's leaders for this season is the "National Oak Heater," the "king of all oak stoves." When made with double heater the cold air is taken from the floor. Magazines can be fitted in each size for hard coal. The front nickle reflector and nickle wings are finished in their new process brilliant nickle.

Cut No. 1 shows the double hot blast system. Air is taken through screw draft and passes around the superheating chamber, entering fire-pot through slots, consuming all the gases, and also checking the fire when necessary. The mica door is protected with a wire gauze which prevents the mica from smoking when burning soft coal. Bottom and top of steel drum are flanged and fastened air and gas tight to rings. Cut No. 2 shows the duplex grate with annular shaking ring. This is separate and inhependent, and can be withdrawn without removing a single plate or bolt.

Dealers desiring exclusive territory should write the company for particulars.



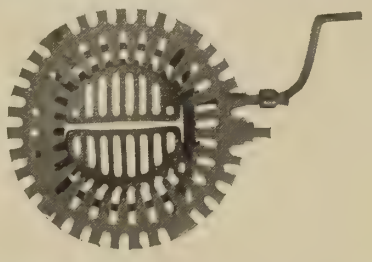
Canadian National Exhibition—Display of Moffat's National Ranges.



Cnnadian National Exhibition—Moffat's Display at Entrance to Stove Building.

The Borden Co.

A display that attracted much attention at the Toronto Exhibition was the well arranged exhibit of the Borden Company, manufacturers of hand and power pipe-threading machinery, hand stocks and bolt stocks, 16 Sheppard street, Toronto. Their popular solid adjustable dies as applied to these hand stocks and hand and power machines is



No. 2

a distinctive feature and demonstrates itself in being simple, more practical and easier running, such as is well suited to meet the requirements of the trade. All the dies are constructed with inserted segments of high grade steel, which can be replaced, when worn out, at a small cost. The hand machines are constructed entirely of malleable iron and each one carries with it an unconditional guarantee. The Borden Company, to show the confidence they have in their hand machines, are willing to loan to any one sufficiently interested one of these machines on ten days' free trial. Another feature in connectian with these machines is their saving in time, which alone is a very important consideration to anyone having occasion to use threading machinery.

* * *

The important place which gasoline is filling was clearly demonstrated in the Process Building. Engines of a variety of sizes and styles were there in evidence and commanded not only attention but interest of a practical kind

* * *

The show of cattle was one of unsurpassed interest. Many of the beasts shown, we venture to say, could not be surpassed anywhere.

Home Treasure Ranges.

One of the prettiest exhibits in the stove building was that of the D. Moore Co., stove founders, Hamilton, makers of the popular "Home Treasure" range and the "Happy Home" line. Their steel range, the "Premier Treasure," is a beauty in style and construction, and its merit is winning for it an exceptionally large sale both in the east and in the western Provinces.

The exhibit occupied the northeasterly corner of the stove building, and a great deal of work has been put upon the decoration of the background and arrangement of the stoves. No less than 90 stoves and ranges were shown, and had more space been available an even better showing would have been made.

The Moore Co. are also manufacturers and importers of tinners' general supplies, and have agencies at Winnipeg and Vancouver. Their foundry was established in 1828, and the firm was one of the pioneer stove concerns in Canada. The exhibit was in charge of Mr. J. W. Parish, who has been kept busy handing out beautiful pin trays to thousands of ladies who have visited the exhibit, admired the artistic display and inspected the good features of the stoves and ranges shown. In addition to the lines named a splendid assortment of "Art Treasure" and "Empire Treasure" base burners, and "Oak Treasure" stoves were displayed, the company being very proud of their base burners and oaks, they having several other styles of the former which were not on exhibition owing to lack of space.

Permanent woodwork has been erected, the pillars and framework being attractively ornamented with bronze figures and electric lights, while above and behind there is a background of bunting. The color scheme is quite striking, and the corner should make a nice home for the Moore Co. in future years.

The Canadian Fairbanks Co., Limited.

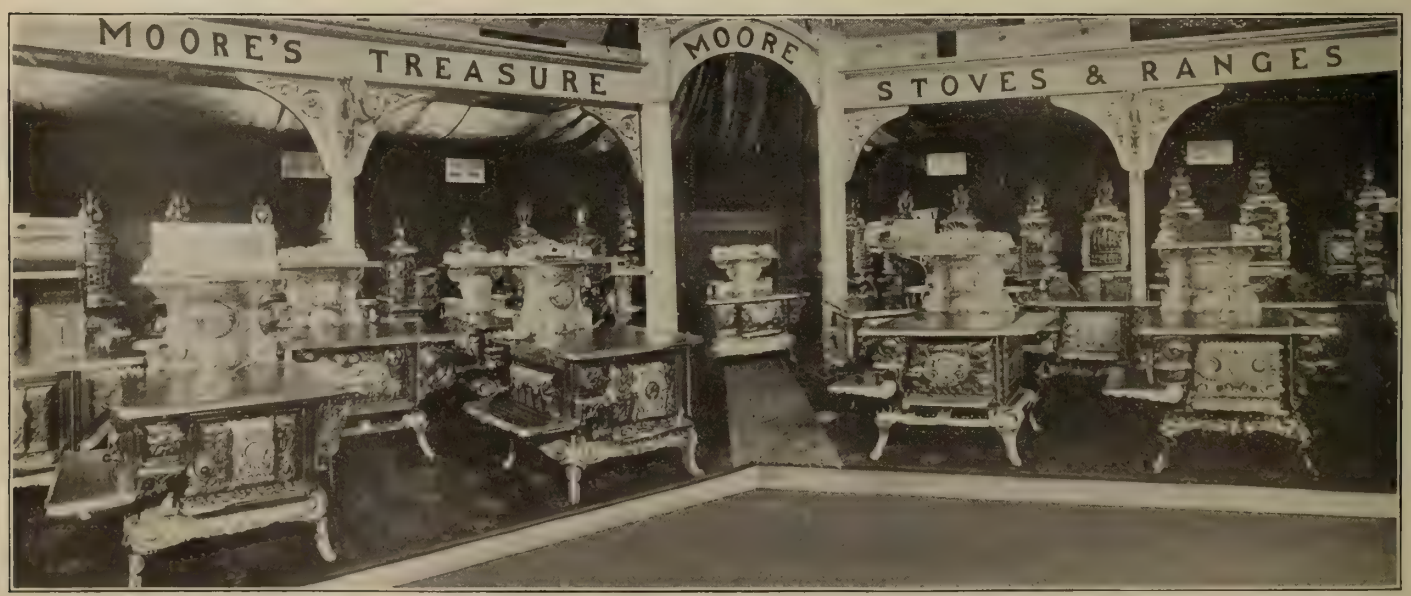
The Canadian Fairbanks Co.'s exhibit in Machinery Hall is one which attracts a great deal of attention. It is splendidly arranged, and is representative of their leading lines. Their display of Fairbanks Standard Scales is indeed a credit to them, scales of all sizes and for all purposes being tastefully arranged. Viewing it one cannot but feel that they have justly earned the world-wide reputation which they enjoy.



Canadian National Exhibition—View Showing Some Fairbanks Scales.

As already mentioned in our previous editions of Canadian Machinery, the Canadian Fairbanks Co., Limited, are now the exclusive Canadian selling agents for Fairbanks, Morse & Co.'s lines of gas and gasoline engines, steam pumps, windmills, hand push and motor cars, etc. They are now building a Canadian factory to be located in Toronto, where all these lines will be manufactured. The exhibit of gas and gasoline engines is a creditable one. Their farm engine, known as "Jack of all Trades," was one which attracted considerable attention, being in constant operation and seemingly perfect in every detail. This is an engine of 2-horse-power, being specially designed for farm use. It will pump water, saw wood, shell corn, run cream separators, etc. Their line of vertical and horizontal engines showed up exceedingly well, all running constantly.

They also displayed a complete line of Fairbanks' asbestos and bronze seated globe and angle valves, both brass and iron ; Pratt & Cady renewable seat ring gate valve and check valves ; the genuine Pratt & Cady asbestos packed steam cocks ; Dart's patent bronze ground joint unions ; Yale & Towne's chain hoists, as well as a Taylor & McKenzie hand punch that was worthy of more than passing attention.



Canadian National Exhibition—D. Moore & Company's Exhibit.

Markets and Market Notes

(For detailed prices see Current Market Quotations, page 82.)

Quebec Hardware Markets.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 15, 1905.

COLD weather is needed to stimulate trade, which, however, is going along evenly at the present time. A cold spell, however, would induce people to buy in much greater volume.

Montreal wholesalers state that the commercial travelers' tax still has the effect of keeping American salesmen away, and is seriously handicapping the local jobbing interests.

The best sellers at present are skates and snowshoes, which are being booked in good volume. Ammunition still keeps its position at the head of the list, and sales are really tremendous.

Cast iron hollow-ware has been advanced during the week, the present discount being 32½ per cent. only. Wrought brass butts are also on the upward move, the current price being 12½ per cent. advance on list.

Prices on lanterns have been withdrawn by one of the largest manufacturers, and a return to a profitable schedule will be made. This will not seriously affect any of the local interests, however, as stocks are said to be large enough to demoralize the lantern trade for some time.

Axes—A good healthy movement is seen. We quote the following prices: Chopping axes, unhandled, $6 to $9.50 a dozen; double bitt axes, $9.50 to $12 a dozen; handled axes, $7.50 to $9.50; Canadian pattern axes, $7.50 a dozen.

Handles—Conditions remain the same as at last report. Prices are: Axe handles No. 3, $1.35; No. 1, $1.90 a dozen; adze handles, 34 inch, $2.20 a dozen; pick handles, No. 2, $1.70; No. 3, $1.50 a dozen.

Sewing Machines—Business is looking up as the busy season approaches. Hand sewing machines, $11 each net; complete machines with stand, $18 and up, according to quality.

Lanterns—The trade is said to be stocked up for any emergency. Prices have been withdrawn by one of the largest firms manufacturing lanterns, but we are still authorized to quote: Cold Blast, $4.50; No. 0 Safety, $5.50.

Rivets and Burrs—Normal conditions prevail. We quote as follows: Best iron rivets, section, carriage and wagon box, black rivets, tinned do., copper rivets and tin swede rivets, 60, 10 and 10 per cent.; swede iron burrs are quoted at 60 and 10 and 10 per cent. off new lists; copper rivets with the usual proportion of burrs, 45 per cent. off; and coppered iron rivets and burrs in 5-lb. carton boxes at 60 and 10 and 10 per cent.; copper burrs alone, 30 and 10 per cent., subject to usual charge for half-pound boxes.

Screws—There is no falling off to be noted in the trade. Our prices are: Round head, bright, 82 1-2 per cent.; flat head, bright, 87 1-2 per cent., brass, round head, 75 per cent.; brass, flat head, 80 per cent.

Bolts and Nuts—The usual demand is apparent. Our quotations are: 3-8 and smaller, 60 to 10; 7-16 and larger, 55 to 5.

Wire Nails—Sales are satisfactory, a steady tone being maintained. We quote: $2.10 to $2.20 per keg f.o.b. Montreal.

Cut Nails—Fair quantities are being shipped. We give prices: $2.20 per keg f.o.b. Montreal.

Horseshoes—Blacksmiths and dealers in blacksmiths' supplies are placing large orders at the following quotations: P.B. New Pattern, base price, $3.50 per 100 lbs., M.R.M. Company latest improved pattern iron shoes, light and medium pattern No 2 and larger, $3.65. No. 1 and smaller, $3.90, snow pattern, No. 2 and large, $3.90, No. 1 and smaller $4.15. Light steel shoes, No. 2 and larger, $3.90, No. 1 and smaller, $4.15; featherweight, all 1 to 4, $6.75. Packing—Up to three sizes in a keg, 10c. per hundred pounds. More than three sizes, 25c.

Sporting Goods — Ammunition and rifles are still the features. This has been a great season for ammunition so far. Our prices are as follows: Canadian made shells, black, 25 and 5 per cent.; smokeless, 25, 10 and 5 per cent.; American centre-fire cartridges, list net; sporting and military, 10 per cent. advance on list; primers, $2.05 per thousand; American loaded shells, 20 per cent. discount; B.B. caps, $2.00 per thousand; standard shot, $6.50 per hundred lbs.; chilled, $7 per hundred lbs.; buck and steel, $7.50 per hundred lbs.; ball, $8 per hundred lbs. We quote discounts 15 per cent. on shot, f.o.b. Montreal, Toronto, Hamilton, London, St. John and Halifax.

Building Paper—There is naturally a better movement as the Fall advances. The period just preceding the close of navigation is always one of activity. Prices are still the same.

Cordage—No change has occurred in prices. The trade is satisfactory.

Cement and Firebrick—The quietness reported last week still continues, and there is little activity manifested at the present time. We quote: $1.80 to $1.90; Belgian, $1.60 to $1.90 per barrel; ex-store, American, $2 to $2.10 ex-cars: Canadian Portland, $2 to $2.05. Firebrick, English and Scotch, $17 to $21, American, $30 to $35.

Coil Chain—The demand is improving, good orders being received from all parts of the country. Our quotations: 5-16 inch, $4; 3-8 inch, $3.75; 7-16 inch, $3.55; 1-2 inch, $3.35; 9-16 inch, $3.30; 5-8 inch, $3.20; 3-4 inch, $3.05; 7-8 inch, $3; 1 inch, $2.95.

Apple Parers—The fruit season is creating a very brisk demand. Our quotations are as follows. Little Star, $4.85; Hudson, $5; Rocking Table, $5.25; Turn Table, $6; Canadian, $4.50.

Skates—Nearly every order just now includes skates, and they are being shipped in all directions to wideawake retailers. We quote: 25c to $2.50, according to quality.

Sleigh Bells—From now until Winter there will be an active sale of these goods. We quote as follows: Back straps, 30c. to $2.50; body straps, 70c. to $3.50; York Eye bells, common, 70c. to $1.50, pear shape $1.15 to $2; shaft gongs, 20c. to $2.50; Grelots, 35c. to $2; team bells, $1.80 to $5.50; saddle gongs, $1.10 to $2.60.

Horse Blankets—Our quotations are unchanged, as follows: Jute, unlined, $4.50; 3-4 lined, $9.50; full lined, $12; 16-oz. Hessian, unlined, $6.50; 3-4 lined, $11.50; full lined, $14, and up to $24; Kersey blankets, $9 to $21; all wool, $24, $30, $48 and $60.

Snowshoes—Although the season is very early, numerous inquiries are being received. Prices are from $15 to $35 per dozen pairs, according to quality.

Ontario Hardware Markets.

Office of HARDWARE AND METAL,
10 Front Street East,
Toronto, Sept. 15, 1905.

IN general the hardware market is feeling the reaction of the two Exhibition weeks, and although business is fair there is not the activity that marked the two Exhibition weeks. All the travelers are now on the road again, and orders are now coming in through them.

Sporting goods are a prominent feature on the market at present, and the demand for shot guns and ammunition is increasing every week. Rifles, too, are beginning to come forward. Washing machines have an excellent demand, and step ladders, too, are moving quickly. There is an excellent demand for building materials of all kinds, including paper, wire nails, cement and fire brick. Rivets and burrs, bolts and nuts, and screws, also, have an excellent demand. Prices continue unchanged.

Sporting Goods—Shot guns and ammunition have an ever-increasing demand at present, and rifles are beginning to be a feature. There has been no advance in shot, as was expected last week.

Washing Machines — An increasing demand is reported.

Chain—Fall trade is beginning to pick up. We quote as folows: 1-4 inch, $6.50; 5-16 inch, $4.45; 3-8 inch, $3.85; 7-16 inch, $3.70; 1-2 inch, $3.55; 9-16 inch, $3.45; 5-8 inch, $3.35; 3-4 inch, $3.25.

Extension and Step Ladders— The opening of Fall has brought an increased

trade. We quote: Step ladders at 10c. per foot for 3 to 6 feet, and 11c. per foot from 7 to 10 feet ladders. Waggoner extension ladders, 40 per cent. off.

Galvanized Wire—Business is quiet this week at unchanged prices. We still quote: $2.37 1-2 f.o.b. Cleveland.

Coiled Spring Wire—Demand for all classes of wire has been good and the trade are well satisfied. Prices continue the same.

Barb Wire—The market is quiet this week.

Wire Nails—Trade is very large, but stocks are ample for all demands. Prices are the same.

Cut Nails—There is a very satisfactory trade being done. Quotations are: $2.40 per keg f.o.b. Toronto.

Horseshoes—Good business is being done and a large Fall trade is looked for. Our quotations are: "P.B." base, $3.65; "M.R.M. Co., latest improved pattern" Iron shoes, light and medium pattern, No 2 and larger, $3.80; No. 1 and smaller, $4.05; snow No. 2 and larger, $4.05; No. 1 and smaller, $4.30; light steel shoes, No. 2 and larger, $3.95; No. 1 and smaller, $4.20; featherweight, all sizes, 0 to 4, $5.50; toe weight, all sizes, 1 to 4, $6.75. If shipped from factory 15c. less.

Axes—It is a little too early to expect much business, but trade is good.

Cutlery—Trade is increasing and case goods particularly are in demand.

Skates and Sleigh Bells—Large orders are booked for future shipment, an increased trade being indicated by the orders in hand.

Horse Nails—Trade is active at unchanged prices.

Screws—Demand is strong and some mills are talking of increasing their plants. Prices are firm.

Rivets and Burrs—A particularly good trade is reported. Prices remain as before.

Bolts and Nuts—There is an excellent trade being done.

Cordage—Sorting orders are coming in. Red Cap, 11 1-2c.; Tiger, 10 1-2c.; and Our quotations continue as follows: Standard, 9 1-2c.; Cordage: manila, 15c.; British manila, 11 1-2c.; sisal, 10 1-2c.; double lathyarn, 10 1-2c.; single lathyarn, 10c.; sashcord, "Hercules," 30c. to 32c.; "Star," 36c. to 38c.; cotton twine, 3-ply, 24c.; 4-ply, 29c.; calking cotton, 16 1-2 to 17c.; cotton waste, colored, 6 3-4c.; white, 11c. to 13c.

Cement—There is no change in the market this week. Business is very good. We quote as follows: For carload orders f.o.b. Toronto, Canadian Portland, $1.95 to $2; American Portland, $1.95 to $2. For small orders ex warehouse, Canadian Portland, $2.20 to $2.25; American Portland, $2.20 to $2.25.

Firebrick—Demand is strong owing to repairs to plants during the warm weather. We quote: English and Scotch firebrick, 27c. to 30c.; American low-grade, 20c. to 25c.; high-grade, 27 1-2c. to 37 1-2c.

Building Paper—A good business has been done so far this season. Prices are firm.

Hides, Tallow, Skins and Wool—The market in these goods continues to be unsatisfactory. Prices have still further stiffened, although not showing perceptible advance in quotations. Arrivals are coming in somewhat slowly, and demand keeps well to the front. The present state of this market is attributable to what is considered an unhealthy competition between rival buyers, and by no means warranted by the true conditions. We quote:

Hides, inspected, No. 1 per lb.		0 12
" " " 2 "		0 11
Country hides, flat, per lb.	0 10½	0 11
Calf skins, No. 1, selected		0 14
" " No. 2		0 12
Lamb skins and pelts, best city slaughter		0 85
Rendered tallow, per lb.	0 04	0 04½
Unwashed wool, per lb.	0 16½	0 17
Wool-washed fleece	0 26	0 27
Rejections	0 20	0 22
Pulled wools, super, per lb.	0 22	0 24
" " extra "	0 24	0 25

Canadian Metal Markets.

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill Street,
Montreal, September 15, 1905.

As foreshadowed in our last report, the tin market has succumbed to persistent bearing on the metal exchange, and the price dropped during the week. At time of writing it has stiffened again to almost its old figure, but fluctuations are so frequent and sudden that no safe prediction can be made for the immediate future. In the United States the price is as strong as ever, and as the visible supply all over the world is very short, there is no doubt but what tin will again advance as soon as the bears have been driven from their attack on the corners. On the whole, the present year has been an extremely good one for tin dealers.

Lead also weakened very perceptibly as a result of the peace declaration, but firmed up again, and is now quoted but little below last week's price.

Welcome news to dealers will be the fact that local jobbers have been offered antimony at a price £2 under the previous quotation, but this is still too high to induce buying. It only serves to show the tendency of the market, and a return to normal conditions is hoped for.

The advance of copper has been stopped, though the market is as yet too strong to forecast lower prices.

Trading in pig iron has been quite satisfactory. Though no large orders have been placed, a few lots of one and two hundred tons have been sold, thus helping to keep up the prices.

Canada Plates — There is nothing new to chronicle this week. Prices are: 52's, $2.35; 60's, $2.40; 75's, $2.45; full polished, $3.60; galvanized 52's, $3.75, $3.85; 60's, $4, $4.10.

Copper—No further advance has taken place this week. The prices given are very firm, however, and the output of the mines is all well contracted for. We quote: Ingot copper, 17½c.; sheet copper, 24¾c.

Ingot Tin—A decided weakness developed in the early part of the week, but a slight recovery brought the prices back somewhat. The existing weakness is attributed to better arrivals, and the tightness of money. Our prices are: 36c. to 36½c. per lb.

Pig Lead—Slightly easier conditions exist this week, the current prices being firm at $3.70 to $3.80 per 100 lbs.

Boiler Tubes—Business continues exceptionally good. Prices still remain firm.

Pig Iron—The demand is normal and there are no indications of excitement. The prices given below are for import orders, and shipments direct from the blast furnaces. Orders from stock will not be accepted at these figures. We quote:

"Disc," No. 1	$16.50	delivered	Montreal.
"Dom.," No. 1	17.50	"	"
Usual difference in price for lower grades.			
Ferrona No. 1	$18.00	delivered	Montreal.
" No. 2	17.50	"	"
" No. 3	16.50	"	"
" No. 4	16.00	"	"
Londonderry	$18.50 to $19.00	"	"
Glengarnock	18.25	"	"
Gartsherrie	19.25	"	"
Carnbroe	18.50	"	"
Carron No. 1	19.50	"	"
" (special)	18.50	"	"
Ayresome No. 1	18.50	"	"
" No. 3	17.75	"	"
Summerlee	18.50 to 19.00	delivered	Montreal.
Clarence No. 1	17.75	"	"
" No. 3	17.25	"	"
No. 1, Cleveland	17.50	"	"

Tool Steel — We still quote: Colonial Black Diamond, 8c. to 9c.; Sanderson's, 8c. to 45c., according to grade; Jessop's, 13c.; Jonas & Clover's, 10c. to 20c.; "Air Hardening," 65c. per lb.; Conqueror, 7 1-2c.; Conqueror High Speed steel, 60c.

Merchant Steel—The trade remains in a satisfactory condition. We give the following prices: Sleigh shoes, $1.87 1-2; tire, $2.07 1-2; spring, $2.75; toecalk, $2.62 1-2; machinery iron finish, $2; reeled machinery steel, $2.75; mild, $2 and upwards; rivet, $2 and upwards. Net cash thirty days.

Cold Rolled Shafting— We quote prices: Cold rolled shafting, 3-4 ing quoted: Cold rolled shafting, 3-4 inch to 7-16, $3.75 per 100 lbs.; inch and a half to 3 inch, $3.50 per 100 lbs.

Galvanized Iron—The market is very strong, and importers are now paying from 5 to 10s. a ton more than last week, with prospects of a further advance. Prices to jobbers have been advanced in accordance therewith. Makers decline to take orders for delivery far ahead, showing the strong feeling for a further advance. We quote to consumer: Queen's Head, 28 gauge, $4.15; 26 gauge, $3.90; 22 to 24 gauge, $3.65; 16 to 20 gauge, $3.55; Apollo, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.75; 16 to 20 gauge, $3.40; Fleur-de-Lis, 28 gauge, $4; 26 gauge, $3.75; 22 to 24 gauge, $3.50; 16 to 20 gauge, $3.40; Comet, 28 gauge, $3.95; 26 gauge, $3.70; 22 and 24 gauge, $3.45; 16 to 20 gauge, $3.40; Bell brand, 28 gauge, $4; Gorbal's "Best Best," 28 gauge, $4.15;; "Windmill Best," 28 gauge, $3.95; Sword and Torch, 28 gauge, $4.05; in less than case lots, 25c. extra.

Black Sheets—Strength is the characteristic feature of the market. We quote: 28 gauge, $2.15; 26 gauge, $2.10; 22-24 gauge, $2.05; 19-20 gauge, $2.20; 8-10 gauge, $2.30.

Antimony—Jobbers are now getting better prices from the producers, but the price is still considered too high, and we are as yet quoting 16c.

Tin Plates—Have not felt the weak-

LAFARGE (non-staining) CEMENT

for setting, pointing and backing Limestone, Granite or Marble where freedom from discoloration is desired. Send for descriptive catalogue.

Drain Pipes, Sewer Bricks, Fire Bricks, Building Bricks, Portland Cement, Road Paving Bricks and Blocks.

F. HYDE & CO.

KING, QUEEN and WELLINGTON STS. MONTREAL

Deseronto Iron Co.

LIMITED

DESERONTO, ONT.

Manufacturers of

CHARCOAL PIG IRON

BRAND "DESERONTO."

Especially adapted for Car Wheels, Malleable Castings, Boiler Tubes, Engine Cylinders, Hydraulic and other Machinery where great strength is required; Strong, High Silicon Iron, for Foundry Purposes.

"MIDLAND"

BRAND.

Foundry Pig Iron.

Made from carefully selected Lake Superior Ores, with Connellsville Coke as Fuel, "Midland" will rival in quality and grading the very best of the imported brands.

Write for Price to Sales Agents

Drummond, McCall & Co.

MONTREAL, QUE

or to

Canada Iron Furnace Co.

MIDLAND, ONT. Limited

Get our prices for

GALVANIZED FLAT SHEETS

THE "VANDA" BRAND

For all purposes requiring the best quality.

It is "deadflat," well galvanized, true to gauge and specially soft for working-up. We guarantee every sheet bearing our brand.

C.F. JACKSON & CO., Limited

Wholesale Merchants

Ormidale Block, Vancouver, B.C., and Liverpool, England

Direct Importers of:

Metals of every description, Wire Rope, Portland Cements, Firebricks, Ore Sacks, Grain Bags, etc. etc.

ening in ingots, and we still quote: Cakes, $3.75; charcoal, $4.

Ingot Zinc—Prices are unchanged at 6½c. to 6¾c.

Scrap Metal—Although foreign prices for scrap iron are higher at present, the Canadian mills are holding it down on the local market. There is not enough activity in the Canadian trade to warrant an advance. Scrap copper remains at our last week's prices, but the supply seems very short We quote the following prices. Copper and wire, 13 3-4c.; light copper, 12 3-4c.; heavy red brass, 11 1-2c.; yellow brass, 9 1-4c.; light brass, 6 1-2c.; lead, 2 5-8c.; zinc, 3 1-4c.; machinery cast scrap, $13; wrought scrap, $12; stove plate scrap, $9; mixed scrap, 75c. to 90c. per 100 lbs.; old rubbers, 5 1-2c. to 5 3-4c. per lb.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front street east,
Toronto, September 15, 1905.

THE metal market continues strong, and the general market is much the same as last week, with the exception that galvanized sheets are firmer. Tin is still rather weak, and antimony continues very scarce. There is no change in prices.

Pig Iron—Many of the mills are booked ahead with orders and stocks are light. Quotations continue unchanged, as follows:

Middlesboro, f.o.b., Toronto	$20 00	$20 50
Hamilton, No. 1, at furnace	18 00	18 50
" No. 2, "	17 50	18 00
Midland, No. 1, "	....	18 50
" No. 2, "	....	18 00
Radnor, at furnace	....	30 00
Londonderry, at furnace	16 50 to	17 00

Bar Iron—There is a very active market. The mills are running to their full capacity. We quote: $1.85 base, f.o.b. Toronto, with discount of 2 per cent., net cash.

Tin—The market continues weak.

Tin Plates—Demand is active with prices not so firm.

Galvanized Sheets— The demand is very good, and prices are much firmer than last week.

Brass— Conditions are unchanged, business being active. Discounts continue at 10 per cent.

Lead—The market continues strong, with stocks light and demand very active. Prices are very firm. We quote: Pig lead, $4 per 100 lbs., and bar lead, $4.80 per 100 lbs.

Zinc Spelter—There is an active demand. Prices are steady: 7c. per lb. for foreign and 5 1-2 to 5 3-4c. per lb. for domestic.

Copper—Higher prices are looked for and present figures are very firm. Our quotations are as follows: Ingot copper, $17.50 per 100 lbs., and sheet copper, $21.00 per 100 lbs.

Antimony—In spite of the excesive prices ruling, there is an active demand. Stocks are very light.

Old Material—Copper and brass are very firm and stocks are very light. Dealers' buying prices are as follows: Heavy copper and wire, 13 1-2c. per lb.; light copper, 12c. per lb.; heavy red brass 11 1-2c. per lb.; heavy yellow brass, 9 1-2c. per lb.; light brass, 7 1-2c. per lb.;

SANDERSON'S TOOL STEEL

"The most reliable tool steel on the market."

LARGE ASSORTMENT IN STOCK.

A. C. LESLIE & CO.

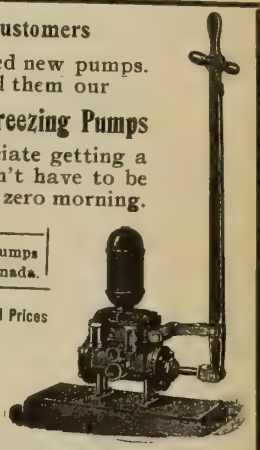
MONTREAL.

Ask your customers if they don't need new pumps. If they do sell them our

Standard Anti-Freezing Pumps

They'll appreciate getting a pump that doesn't have to be thawn out every zero morning.

—McDougall Pumps
—Made in Canada.



Write for Catalogue and Prices

The R. McDougall Co. Limited. Galt, Ont.

THE NAME

MORTON

is sufficient guarantee that

B.C. BRAND DRILL STEEL

is reliable—the steel that sells. Secure particulars from:

D. W. CLARK, P.O. Box, 521, Toronto.

CANADIAN REPRESENTATIVE.

NOVA SCOTIA STEEL & COAL CO., Limited

NEW GLASGOW, N.S.

Manufacturers of

Ferrona Pig Iron

And SIEMENS-MARTIN

OPEN HEARTH STEEL

CONDENSED OR "WANT" ADVERTISEMENTS.

Advertisements under this heading, 2c. a word first insertion; 1c. a word each subsequent insertion.

Contractions count as one word, but five figures (as $1.000) are allowed as one word.

Cash remittance to cover cost **must** accompany all advertisements. **In no case** can this rule be overlooked. Advertisements received without remittance cannot be acknowledged.

Where replies come to our care to be forwarded, five cents must be added to cost to cover postage, etc.

WANTED.

WANTED by young man with thorough knowledge of the hardware business, position as travelling salesman, best of references given. Address Box F, HARDWARE AND METAL, Montreal. [38]

SITUATIONS VACANT.

WANTED—A competent salesman, one who has had experience in the sale of gas and gasoline engines. Apply by letter to The Canadian Fairbanks Co., Limited. 26-28 Front St. west, Toronto. [37]

WANTED, at once, good tinsmith and furnace man; wages 22½c. per hour; 25c. overtime; steady job. Wire Ingram & Davey, hardware. St. Thomas. [f]

WANTED, young man as salesman in general store; send references and state salary. Address L. Welch, Oil Springs, Ont. [f]

WANTED a good all-round woodworker; one who understands running machines. Apply, stating wages, to Wm. Trench & Son, carriage builders, Richmond Hill. [f]

BUSINESS CHANCES.

IF you wish to buy or sell a business anywhere in Western Canada, it will pay you to communicate with us. We have some good legitimate propositions on our list; handle nothing else. Address The Business Brokers, 611 McIntyre Block, Winnipeg, Man. [tf]

TENDERS will be received by the undersigned executors of the late James M. Martin for the purchase of the good-will and stock in trade of the hardware business of the firm of Martin Bros., of the city of Rossland. An inventory may be seen and particulars obtained from the executors.

Wm. Martin,
W. M. Wood,
Executors. [39]

FOR SALE.

A FIRST-CLASS foundry in good running order, equipped with cranes and overhead trolley, machine shop and pattern house; works are situated on two acres of land at New Toronto, just outside city limits, with splendid shipping facilities; modern plant in every respect. Address Pease Foundry Co., Limited, 191 Queen street east, Toronto. [38]

GALVANIZING AND TINNING
THE CANADA METAL CO.
TORONTO, ONTARIO.

tea lead, $2.40 per 100 lbs.; heavy lead, $2.60 per 100 lbs.; scrap zinc, 4c. per lb.; iron, No. 1 wrought, $9 to $10, No. 2 wrought, $3 to $5; machinery cast scrap, $13; stove plate, $10; malleable and steel, $5; old rubbers, 5c. per lb.; country mixed rags, 65c. per 100 lbs.

Coal—Anthracite is meeting with an increased demand. We quote: Anthracite in cars at bridges, grate, $5.25 per gross ton; egg, stove and nut, $5.50 per gross ton; pea, $3.90 per gross ton.

Standard Hocking, soft coal, in cars, f.o.b. at mines: Lump, $1.35; 3-4 inch, $1.25; run of mine, $1.05; nut, 90c.; N. P. and S., 60c.; slack, 40c.; box cars 10 cents per ton additional.

Youghiogheny soft coal in cars, bonded at the bridges: 1 1-4 inch, $2.45; 3-4 inch, $2.35; mine run, $2.35; slack, $1.80 to $1.90.

For Manitoba, British Columbia and Maritime Provinces markets see pages following.

UNITED STATES METAL MARKETS

Advance proofs furnished HARDWARE AND METAL by The Iron Age, September 14, 1905.

A REVIEW of the whole iron industry justifies the general statement that it is enjoying great present activity and a brilliant promise for the future. The usual doubts as to an adequate amount of work for the Winter months have not even arisen this year and the outlook is for work at high pressure well into next spring. Added to this come reports of a distinct improvement in England, whose business has been lagging until lately, the Continent having sent cheerful reports since the early Summer.

There have been further heavy purchases of steel rails, the Pennsylvania Company leading with over 179,000 tons, distributed among the mills on the line of the road. The Missouri Pacific has added 25,000 tons to former orders and the Harriman lines 32,000 tons. The Soo line has purchased 10,000 tons and the Wheeling & Lake Erie 5,000 tons. The Tennessee Company has orders on its books aggregating over 210,000 tons, which will keep the works busy far into 1906, while the Colorado mill is committed far ahead. It is understood that the New York Central is negotiating for 160,000 tons and there are besides in the market one system for 35,000 tons and another for 50,000 tons.

An interesting situation is developing in relaying rails, which are very scarce, because the roads, finding it impossible to secure prompt deliveries on new rails, are loath to part with what relayers they have.

It is reported that to-day negotiations will be closed for the sale to the Steel Corporation of 10,000 to 15,000 tons of Bessemer pig for September delivery. During the past week smaller interests have taken moderate blocks of 2,500 and 5,000 tons of Standard Bessemer from dealers at the range of $14.85 to $14.90. Valley furnace and some fair sized lots of basic pig have also been placed.

It is estimated that the leading interests will need between 35,000 and 40,000 tons per month of Bessemer pig during the balance of this year.

There are indications of renewed buying of basic pig iron by the eastern steel makers. One large plate mill in eastern Pennsylvania has just purchased 20,000 tons for delivery running into 1906, and there are feelers which will probably lead to large business during the next fortnight.

Some pretty large requirements for foundry iron are coming up in the Pittsburg district, between 25,000 and 30,000 tons being referred to as the requirements of some large consumers. Some of the leading melters in the Chicago district are in the market for lots of 5,000 tons and under. Some business has been closed in the Cincinnati market, but on the whole the southern furnaces are not apparently pushing sales. Reports of the acceptance of $11.50 to $11.75 for No. 2, Birmingham, by some of the smaller furnace interests continue to come. The large companies are firm.

The estimating departments of the fabricators of structural material are exceedingly busy, so that the prospect of a large volume of work is excellent. The pressure for deliveries of material continues heavy.

In the plate market there has been increasing activity in anticipation of an advance. Thus far the tendency toward higher prices has found its only expression in the withdrawal of the usual $2 concession in the price of narrow plates, 14-inch and under.

The tonnage in the wire trade continues heavy. Prices, which have been ruling for some time past on the basis of 1.70c per lb., have been advanced to 1.75c.

The pipe trade is active. It is stated that the National Tube Company has 93 per cent. of its capacity at work.

The monthly blast furnace returns collected by The Iron Age show that capacity in operation remained almost stationary during July and August, the weekly output being at the rate of about 410,000 tons. The production during August is estimated at 1,841,000 tons, of which the Steel works produced 1,186,050 tons.

LONDON METAL MARKETS.

From Metal Market Report, September 13, 1905.

Pig Iron—Middleboro No. 3 foundry is quoted at 48s. 6d, and Scotch warrants at 47s. 6d, making prices as compared with last week 3d higher for Middleboro and 2s. higher for Scotch warrants.

Tin—Spot tin opened weak at £146 7s. 6d, futures at £145 12s. 6, and after sales of 140 tons of spot and 370 tons of futures closed easy at £146 2s. 5d for spot and £145 10s. for futures, making price as compared with last week £2 10s. 1d lower on spot and £2 7s. 6d lower on futures.

Copper—Spot copper opened weak at £69, futures £68 17s. 6d, and after sales of 100 tons of spot and 250 tons of futures closed quiet at £69 for spot and £68 17s. 6d for futures, making price as compared with last week 5s. lower on spot and 2s. 6d lower on futures.

Lead—The market closed at £13 17s 6d, making price as compared with last week 7s. 6d lower.

Spelter— The market closed at £26, making price as compared with last week 7s. 6d lower.

The Dominion Antimony Company, St. John, N.B., have let the contract for a $75,000 plant at their West Gore mine, Nova Scotia.

Nova Scotia Trade News

Halifax, N.S. Sept. 13.

TRADE during the past week has been remarkably quiet. Jobbers report orders coming in very slowly. This fact is attributed in part to the approaching Exhibition in this city. Dealers say that their customers hold back their orders, and taking advantage of the cheap excursion rates on the railways they come to the city and purchase supplies direct. The fair this year promises to be most successful. Manufacturers are taking a deeper interest in it, and some of them are making large exhibits.

The market has seen several changes since last report. Lead pipe has advanced ten cents per hundred pounds. It is now quoted at $4.99 per 100 pounds. Sheet lead is also stronger. The advance is said to be due to the rise in the price of pig lead. Sheet zinc is being quoted at $7.50 for No. 8. This is for 100 pounds (cash lots) and over. Less than cash lots, 8 cents per pound. The advance amounts to 25 cents per 100 pounds. Zinc spelter is quoted at $7.25 per 100 pounds, an increase of 25 cents on the hundred.

Dealers are also looking for an advance in brass and bronze goods. The Maritime manufacturers have conformed to the request of the trade of the Province and dropped the price of wire nails to $2.15 base. This means a total reduction of 15 cents, and local dealers are now in a much better position to compete with the Montreal men.

There has been a drop in the price of cotton sheets and mounted nets. Cotton sheets (standard) are now quoted at $4.65, and mounted cotton (standard) at 6.35. These are jobbers' prices. The retail prices are beyond those figures.

The Autumn trade gives promise of being a little backward. The time has arrived when the lumbermen should be ordering their supplies, but so far none have come to hand.

A new find of coal is reported at Debert, Colchester county. It has long been supposed that other good seams were beneath the one being worked, and last spring two Government core drills were put to work, and within the last three weeks three new seams have been discovered, underlying the one being worked, at depths of 80, 100 and 140 feet. These seams range in thickness from three to fifty feet of solid coal. The quality of the coal is said to be exceptionally good.

The announcement during the week that the large fish and former hardware firm of Black Bros. & Co., Limited, had gone into liquidation caused quite a surprise throughout the Province. The firm of Black Bros. is heavily indebted to the Bank of Montreal. William Duff, of Bridgewater, has been appointed receiver by the court.

Prices quoted here follow :

Lead pipe	$ 4 99
Sheet zinc, in casks	7½c.
" " 5 sheets and over	7¾c.
Less	8c.
Pig lead, per lb	3¾ to 4c.
Bar iron, base	$ 2 00
Wire nails, base	2 15
Cordage	....
Manila, base	15c.
Manila, British	11½c.
Sisal, base	10½c.
White Lead (Brandram's)	
B.B. Genuine	7 25
Decorative	6 75
B.B. No. 1	6 25
B.B. No. 2	6 50
Barbed Wire, less than carload lots.	2 55
" " carload lots	2 45
Horseshoes, for quantities	3 85
Galvanized iron, 20 tons, 30 gauge.	4 00
Black sheet iron	2 25
Pole axes, polished	7 00
" " black	7 50
Double bit axes, polished	12 00
" black	13 00
Lanterns, cold blast	5 00
Turpentine	94 to 96
Boiled oil	54
Raw oil	51

Suggest a "Metallic" Front to your neighbor for that new building.

Pages 384 to 399 of our Catalogue show styles that cannot fail to please him and reveal to him possibilities in sheet metal work he never thought of. A quick sale at a good profit will surely be the result.

We make up these fronts in a great variety of beautiful designs.

Nothing is too simple or too intricate for us to undertake.

New trade and extra profits are in store for live dealers who don't overlook the local possibilities of "Metallic" building materials.

OUR NEW $10,000 CATALOGUE We have just issued the most complete Catalogue ever offered to the Metal Trade. It is a veritable encyclopedia of all that's practical and beautiful in the Art Manipulation of Sheet Metal. Book contains 440 pages, superbly bound and illustrated. We send it free upon request, to any builder, contractor or dealer of responsibility.

THE METALLIC ROOFING CO.
OF CANADA, Limited
(Established Twenty Years)
Toronto and Winnipeg

We also manufacture:

"Eastlake" Metallic Shingles
"Metallic" Ceilings and Wall Plates
"Metallic" Cornices, Skylights and Ventilators
"Metallic" Siding (stone, brick, etc.)
"Impervia" Fireproof Windows
"Empire" Metallic Shingles
"Metallic" Crestings and Finials
"Metallic" Corrugated Iron
"Hayes" Metallic Lathing
"Metallic" Eavetrough and Conductor Pipe
"Metallic" Pressed Zinc Ornaments
"Richardson's" Pressed Metal Doors and Sheet Metal Building Material of every description.

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MINES AND METALS.

Active work is progressing at the new gold find at Seal Harbor, Guysborough county, N.S.

* * *

The Nova Scotia Steel & Coal Co. are opening another new colliery between Sydney No. 3 and Little Bras d'Or cut.

* * *

A valuable deposit of fire clay is stated by the local press to have been found within the limits of the town of Baddeck, C.B. It is located on property owned by Mr. C. M. Campbell, and a depth of 12 feet of material has been found so far. The Dominion Iron & Steel Co. are making tests of the clay, which is described as of superior quality.

* * *

Dr. Haanel, Dominion Superintendent of Mines, points out that in the United States some anxiety is beginning to be manifest about the iron supply. Formerly they would not look at ore containing only 55 per cent. of iron, but now they were very glad to get it. Very soon they would be willing to take ore with much less content of iron. In the United States also much less discrimination is being shown with respect to the sulphur content of ore.

R. E. Harris, president of the Nova Scotia Steel Company, completed an important deal in Newfoundland last week, when he purchased from the local owners the submarine ore areas on the north of Belle Isle. The ore deposits on the island are beginning to run short, and from present appearances it looks as if the supply will last but a few years longer. It is this that has compelled the company to look elsewhere, and they will now determine whether or not the ore runs out under the sea. One of their tunnels is about one hundred feet from the sea and about the same distance below the sea level, and the ore has increased in thickness by nearly two feet since going underground. Should the venture prove a success, the company will have a supply for many years, but it will cost them more than $100,000 to prove that the ore is workable.

LEAD OUTPUT IN B. C.

FULL returns of the lead production in British Columbia during the fiscal year 1904-1905 and the bounty paid by the Dominion Government are at hand. The returns from southeast Kootenay show a very large increase over the figures of the previous year.

The returns of shipments to the Canadian Reduction Works at Trail from July 1, 1904, to June 30, 1905, show that the St. Eugene mine produced 6,247,508 lbs. of lead, and the North Star 2,082,903 lbs. of lead.

The total shipment of the Province was 29,874,756 lbs. of lead; of this amount 70 per cent. must be credited to the St. Eugene and North Star mines.

The total of lead produced and treated in Canada amounts to 33,730,546 lbs., and the bounty paid amounted to $240,288.

The amount of lead exported was 21,972,988 lbs., on which the bounty paid was $96,579. The grand total for the year is 55,703,534 lbs. of lead produced and $336,886 paid in bounty.

As you know we are headquarters for

Polished Plate Glass
Rough Rolled Plate
Wire Glass
O.G. Single Strength
C.S. Double Strength
Plain Ground
Enamelled
Plain Colored
Muranese
Tuscan
Corinthian
Moss
Oceanic
Florentine
Muffled

Quotations by mail or wire on receipt of specifications.

G. F. STEPHENS & CO.
LIMITED
WINNIPEG, CANADA

Hardware and Metal Conditions in Manitoba.

(Market quotations corrected by telegraph up to 12 a.m. Friday, Sept. 15, 1905.)

Office of HARDWARE AND METAL
Room 511, Union Bank Building,
Winnipeg, Man.

WORK is being rushed ahead rapidly on the addition to the Market street warehouse of G. F. Stephens & Co. In a few weeks the additional storey will have been added, and the firm will have the increased floor space which the growth of their business demands.

* * *

Business is very active, and the staff of one or two houses are working overtime in the effort to keep pace with the rush of orders. All lines of general hardware are in strong demand, the movement of threshers' supplies of all kinds being particularly heavy. Values are steady throughout.

* * *

Lanterns—Department store competition is demoralizing the retail trade. wholesale prices are as follows:

Cold blast lanterns	$4 75 per doz.
Coppered cold blast lanterns	6 75 "
Cold blast dash "	7 25 "
Lift Lanterns	4 25 "

Wire—Business is brisk. We quote:

Barbed wire, 100 lb	$2 85
Plain galvanized....6 to 8	3 39
" 9 2 50	2 90
Plain galvanized....10	3 50
" 12	3 10
" 13	3 20
" 14	3 90
" 15	4 45
" 16	4 60
Plain twist	2 85
Staples	3 35
Oiled annealed wire....10	2 96
" 11	3 02
" 12	3 10
" 13	3 20
Oiled annealed wire....14	3 30
" 15	3 45

Annealed wires (unoiled) 10c. less.

Horseshoes—Prices continue as follows:

Horseshoes, iron, No. 0 to No 1	$4 55
No. 2 and larger	4 30
Snow shoes, No. 0 to No. 1	4 80
No. 2 and larger	4 55
Steel, No. 0 to No. 1	4 75
No. 2 and larger	4 50

Horsenails—Discounts are as follows: "C" brand, 40, 10 and 7 1-2 per cent., "M" brand and other brands, 55 and 60 per cent. Add 15c. per box.

Wire Nails—Business is very active. The price is steady since the recent reduction to $2.75 per keg.

Cut Nails—Price, $3.00 per keg, base price. None selling because of the low price of wire nails.

Screws—In brisk demand at following unchanged discounts from list prices:

Screws, flat head, iron, bright	85 and 10 p.c.
Round " "	80 p.c.
Flat " brass	75 and 10 p.c.
Round " "	70 and 10 p.c.
Coach	70 p.c.

Nuts and Bolts—Discounts are unchanged. We quote:

Bolts, carriage, ⅜ or smaller	60 and 5 p.c.
" 7-16 and up	55 p.c.
Bolts, machine, ⅜ and under	55 and 5 p.c.
" 7-16 and over	55 p.c.
Bolts, tire	65 p.c.
Bolt ends	55 p.c.
Sleigh shoe bolts	65 and 10 p.c.
Machine screws	70 p.c.
Plough bolts	55 p.c.
Square nuts, case lots	3c. discount.
" " small lots	2½c. "
Hex " case lots	3c. "
" " smaller lots	2¾c. "

Rivets—Discounts continue as follows:

Rivets, iron	60 and 10 p.c.
Copper, No. 8	29½
" No. 12	33

Coil Chain—We quote:

Coil chain, 5-16 inch	9.25
" ¼ inch	7.25
" 5-16 inch	5.20
" ⅜ inch	4.60
" 7-16 inch	4.45
" ½ inch	4.30
" ⅝ inch	4.10
" ¾ inch	4.00

Shovels—Discounts on spades and shovels continue 40 and 5 per cent.

Harvest Tools—Discount 60 per cent.

Axe Handles—Quoted as follows:

Axe handles, turned, s.g. hickory, doz	$3 15
No. 1	1 90
No. 2	1 60
Octagon extra	2 30
No. 1	1 60

Axes—We quote:

Axes, chopping	$ 6 75 to 12 00
" double bitts	12 00 to 18 00

Files—We again quote as follows:

" Arcade "	70 and 10 p.c.
" Black Diamond "	60 p.c.
" Nicholson's "	62½ p.c.

Building Paper—Business is very active at following unchanged prices:

Anchor, plain	55c.
" tarred	65c.
Pure fibre, plain	60c.
" " tarred	80c.

Ammunition, Etc.—All lines of ammunition for Fall shooting are in exceptionally brisk demand. Discounts are quoted as follows:

Ammunition, cartridges, Dominion R.F.	50 and 5 p.c.
Dominion, C.F., pistol	30 p.c.
" military	15 p.c.
Ammunition, cartridges, American R.F.	33⅓ p.c.
C.F. pistol	5 p.c.
C.F. military	10 p.c. advance.
Loaded shells:	
Eley's and Kynoch's soft, 12 gauge black	15 00
chilled, 12 gauge	16 00
soft, 10 gauge	18 00
chilled, 10 gauge	19 00
Shot, Ordinary, per 100 lb	6 25
Chilled	6 75
Powder, F.F., keg, Hamilton	4 75
F.F.G., Dupont's	5 00

Tinware, Etc.—We quote again as follows:

Tinware, pressed, retinned	70 and 10 p.c.
" " plain	75 and 2½ p.c.
" pieced	30 p.c.
Japanned ware	37½ p.c.
Enamelled ware, white	45 p.c.
" Famous	50 p.c.
" Imperial	50 and 10 p.c.

Cordage—Business is fairly active. Prices are quoted as follows:

Rope, sisal, 7-16 and larger, basis	11 25
Manila, 7-16 and larger, basis	15 25
Lathyarn	11 25

Solder—For small quantities the price is 20 cents per lb. Concessions are obtainable for large quantities.

Iron and Steel—The market is active and prices are steady. We quote:

Bar iron (basis)	2 50
Swedish iron (basis)	4 75
Sleigh shoe steel	2 65
Spring steel	3 00
Machinery steel	3 50
Tool steel, Black Diamond, 100 lb	9 50
Jessop	13 00

Black Sheets—Business is active at following unchanged prices:

Black Sheets, 10 to 16 gauge, 100 lb	3 50
18 to 22 gauge	3 75
24 gauge	3 90
26 gauge	4 00
28 gauge	4 10

Galvanized Sheets—Quoted as follows:

Apollo, 10 gauge	4 00
18 and 20 gauge	4 00
22 and 24 gauge	4 25
26 gauge	4 25
28 gauge	4 50
30 gauge or 10¾ oz	4 75
Queen's Head, 24 gauge	4 25
26 gauge	4 50
28 "	4 75

Corrugated Roofing and Siding—Prices are still quoted as follows:

ROOFING.

(Lengths 3, 4, 5 and 8 ft.)

	Painted	Galvanized
28 gauge	$2 85	$3 90
26 "	3 10	4 15
24 "	3 80	5 40

(Any lengths under 4 ft. 10c. per square additional.)

	Painted	Galvanized
28 gauge pressed seam	$3 00	$4 20
28 " "V" crimp	2 95	4 15

SIDINGS.

(Plain brick, rock face brick or stone 17¼ x 23.)

	Painted	Galvanized
No. 1 78 to the square	$3 00	$4 30
" 2 69 " "	2 75	3 90
" 3 55 " "	2 40	3 60

(Large sheets 28 in. x 60 in.)

	Painted	Galvanized
28 gauge	$3 00	$4 05

BEADED CEILING.

28 gauge, painted red	3 10

Tin Plates—Prices are quoted as follows:

Tinplate, IC charcoal, 20 x 28, box	9 50
" IX "	11 50
" XXI "	13 00

Canada Plates—There is a fairly active demand. Prices are:

Canada plate, 18 x 21, 18 x 24	3 25
Canada plate, 20 x 28	3 50
Canada plate, full polished	4 00

Sheet Zinc—The price is now $7.75 for cask lots and $8.25 for less than cask lots.

Pig Lead—$4.50 per 100 lbs.

Iron Pipe—We quote

Black iron pipe, ⅛ inch	
" ¼ "	2 45
Black iron pipe, ⅜ inch	2 65
" ½ "	3 00
" ¾ "	3 80
" 1 "	5 50
" 1¼ "	7 45
" 1½ "	8 95
" 2 "	12 30

Petroleum—No change in price. We quote:

Silver Star, per gal	20½c.
Sunlight "	21½c.
Eocene "	23½c.
Pennoline "	24½c.
Crystal Spray "	23½c.
Silver Light	21½c.

(In barrels f.o.b. Winnipeg.)

Paris Green—In seasonable demand.

English Paris Green—Petroleum barrels, 14 1-4c.; arsenic kegs, 14 1-2c.; 50 and 100-lb. drums, 15c.; 25-lb. drums, 15 1-2c.; 1-lb. tins, 17c.; 1-2 lb. tins, 19c.; 1-lb. cardboard boxes, 16c.; 1-2 lb. ditto, 18c. Terms 2 per cent. off for cash in 30 days; 90 days net

Canadian Paris Green—50-lb. drums, 17c.; bulk, 18c.; in 1-lb. packages, 20c.

Paints and Oils—Business continues very active. We quote:

White lead (pure)	$6 00 6 25
Bladder putty, in bbls	0 02½
" in kegs	0 02¾
Turpentine, pure in barrels	0 96
Less than barrel lots	1 01
Linseed oil, raw	0 62
Boiled	0 65

Window Glass—We quote:

10-oz. O.G., single, in 50 ft. boxes—

16 to 25 united inches	$2.40
26 to 40 "	2.65

16-oz. O.G., single, in 100-ft. cases—

16 to 25 united inches	4.25
26 to 40 "	4.50
41 to 50 "	5.00
51 to 60 "	5.50
61 to 70 "	6.00

21-oz. C.S., double, in 100-ft. cases—

26 to 40 united inches	7.35
41 to 50 "	8.40
51 to 60 "	9.45
61 to 70 "	10.50
71 to 80 "	11.55
81 to 85 "	12.60
86 to 90 "	14.75
16 to 95 "	17.30
6 to 100 "	

THE GREAT WEST WIRE FENCE CO., Limited

Sole Owners for Dominion of Canada for

Rankin Patent Wire Lock



Patented June 30th, 1903

Office and Factory
76-82 LOMBARD ST.,

Manufacturers of

Railway, Farm, Lawn and Ornamental Fences

Field erected type and all made of No. 9 Hard Coiled Steel Wire. Easily erected and sold in quantities to suit purchaser. Liberal discounts to dealers handling our goods. Also manufacturers of

Steel Farm and Lawn Gates

and dealers in fencing tools of all descriptions.

WINNIPEG, Manitoba

MALTHOID ROOFING

USED ALL OVER THE WORLD.

Does not require a protective coating of paint at time of laying. Anyone can lay it. Nails, Caps and Seam Cement supplied with each roll.

SEND FOR SAMPLES.

THE WINNIPEG PAINT AND GLASS CO., LIMITED
WINNIPEG, CANADA

WINNIPEG CEILING and ROOFING CO.

Manufacturers of

Corrugated Roofing and Siding Metal Ceilings, Cornices, Etc.

WINNIPEG, - MAN.



THE JOHN MORROW MACHINE SCREW COMPANY, Limited

Manufacturers of

Set and Cap Screws, Special Milled Work, Engine Studs, Etc. Cold Punched Nuts of every variety of finish.

INGERSOLL, ONT.

NEW OFFICES IN TORONTO.

The D. M. Steward Mfg. Co. of Canada, Limited, have taken offices in Saturday Night Building, 26-28 Adelaide street west, Toronto. They have also a manufacturing plant in another part of the city.

Gas tips and machinists' crayons are the lines manufactured by this firm in which the hardware trade will be interested.

Mr. Robert Bruce Steward is the president of the Canadian company.

PERSONAL MENTION

Toronto.

L. Meiklejohn, Stirling, spent a few days in Toronto last week.

J. Henry, Orono, called on Toronto hardware jobbers a few days ago.

W. Rankin, Ottawa, called on local hardware jobbers a few days ago.

Geo. Barfett, of Barfett Bros., Newcastle, was in Toronto a few days ago.

T. N. Waite, hardware merchant, Picton, was a visitor in Toronto a few days ago.

George T. Peppal, of Samuel, Benjamin & Company, is on a week's vacation.

W. F. McPherson, hardware dealer, Prescott, visited Toronto and Hamilton last week.

J. H. Jackson, of Lewis Bros., Montreal, was a visitor in Toronto during the past week.

Adam Taylor, of the Taylor-Forbes Company, Guelph, was a visitor in Toronto this week.

W. W. Mountain, traveling representative of the Sherwin-Williams Paint Co., Cleveland, was a visitor in Toronto this week.

The Fletcher Mfg. Company, 440 Yonge street, have nearly completed the installation of a handsome marble front to their store.

Charles F. Smallpiece one of the directors of the firm of Lewis Brothers, Montreal, was in Toronto renewing acquaintances with old friends a few days ago.

Charles Soules, who recently purchased the hardware store of Messrs. C. & E. Mason, Richmond Hill, was a caller at the Toronto office of Hardware and Metal on Thursday.

James Taylor, of the Taylor-Forbes Company, Guelph, has been in Toronto for a couple of weeks in charge of the company's branch office during Mr. Flett's absence in the west.

Canadian importers of loaded shells have been having considerable difficulty in securing stocks from England. Messrs. Rice Lewis & Son have, however, received two carloads during the past week. The English plants have been overworked.

Fred J. Haney, a popular young hardware merchant from Strathroy, was in Toronto during the past couple of weeks, he having captured one of Toronto's fair daughters in the person of Miss Annie M. Saul. The happy couple visited New York and Boston on their honeymoon.

Montreal.

Mr. McMurtry, of Picton, Ont., is in Montreal this week.

A. W. Humphries, of Parkhill, spent last week in Montreal.

Mr. Meunier, of Chambly Basin, was in the city on business Wednesday.

A. H. Campbell, of A. C. Leslie & Co., metal merchants, has returned from a brief vacation.

F. Cyr, of St. Hermas, Que., paid a visit to the city this week, in connection with his business.

J. J. Murphy, the well known contractor of Quebec, was in the city for a couple of days last week.

Mr. Arel, contractor, of Valleyfield and Beauharnois, Que., visited the local supply houses during the week.

Chas. Dietrich, of Shurly & Dietrich, saw manufacturers, Galt, Ont., called upon the local trade this week.

Herb. Seybold, of Seybold, Sons & Co., wholesale hardware merchants, enjoyed a trip to Quebec this week.

Arthur J. Owen, of Franklin Saunders & Co., spent a few days last week in Toronto and other western cities.

Mr. Griffin, representing the J. Stevens Arms & Tool Co., of Chicopee Falls, Mass., called on the trade last week.

B. Rogers, of Alberton, P.E.I., spent Tuesday in the city, on his way home from Toronto and other western cities.

D. R. Logan, manager of John Forman, manufacturer of electrical supplies, is at his home in Toronto on his holidays.

J. R. Terrill, the genial city traveler for Caverhill, Learmont & Co., is in Ottawa this week, shaking hands with his many friends at the Capital.

Walter Grose, president of the Ontario Lantern and Lamp Co., is taking a trip to the west, visiting Toronto, Hamilton and London. The trip will consume two weeks.

Messrs. G. W. Dunn and G. M. Gray, of the traveling staff of Lewis Bros., Limited, spent Saturday in the city. They report splendid prospects for Fall business.

The salvage of the Starke Hardware Co., recently burned out of their premises on St. Peter street, is being disposed of at the old warehouse of Lewis Bros., Limited, on St. Sulpice street.

J. A. Body, of London, Eng., who was identified with the Winnipeg Linseed Oil Mills, was in town for a few days this week, accompanied by his son, both bound for the Prairie City. The Winnipeg Linseed Oil Mills have recently been acquired by the Canada Paint Co., of Montreal.

Reginald O. Simmons, of London, England, and latterly of Montreal, has decided to locate in Yokohama, Japan. He wishes to secure some reliable agencies for manufacturers who are anxious to promote trade in the Far East. Mr. Simmons has excellent social and financial standing and would urge parties interested to apply promptly as it is his intention to sail for Yokohama early in October. Further information might be obtained by communicating with the offices of the MacLean Publishing Co., Montreal.

Mr. Jenotte, with L. H. Hebert, wholesale hardware merchant, was married Monday morning of this week. Before deserting bachelorhood, he was honored with a complimentary dinner at the Canada Club, by his business friends, including T. H. Newman, of Caverhill, Learmont & Co.; Robt. Starke and W. Starke of the Starke Hardware Co.; Mr. Strange, of Lewis Bros., Limited; Mr. Kinghorn, of Montreal Rolling Mills; A. E. Hanna, of the Dominion Wire Co.; Mr. Esmond Peck of the Peck Rolling Mills; Mr. Drake, of the Canadian Axe and Harvest Tool Co.; Messrs. Geo. and W. Haldimand of Geo. Haldimand, Sons & Co., and F. Bacon of Bacon Bros.

Winnipeg.

H. R. Flett, Toronto manager of Taylor-Forbes Company, Limited, is in Winnipeg this week.

A. B. Kent, secretary of Marshall Wells Co., left last week on a trip to the coast and the Portland Fair.

The Gurney Foundry Company employes held an enjoyable excursion on the Red River on the afternoon of Labor Day.

T. L. Walden, western manager of Caverhill, Learmont & Co., returned to Winnipeg on the 8th from a flying business and pleasure trip to Montreal, Toronto and other eastern points.

In the absence of Mr. J. Irwin on his wedding trip the western office of Henderson & Potts Co., Limited, is in charge of H. V. Lawlor. Mr. Lawlor looks the part as he occupies the manager's chair, but he is better satisfied with the more strenuous life on the road.

C. D. Walden, of the Pease-Walden Co., Limited, went west last week in the interests of his firm, visiting Regina, Calgary and other western towns. He will be absent some time, and no doubt the sales of the Pease line of heating goods will show a considerable increase as a result of his trip.

J. Irwin, western manager of Henderson & Potts Co., Limited, went east last week on an important errand. His marriage to Miss Irene Boxwell Cooper, daughter of W. E. Cooper, Montreal, was announced some time ago to take place at Chalmers Church on September 14th. Hardware and Metal extends congratulations to Mr. Irwin and wishes the newly wedded couple long life and prosperity.

Elsewhere.

G. S. Kilbourn, assignee of the estate of the Strathy Wire Fence Company, Limited, Owen Sound, has issued his second and final dividend sheet showing on hand for distributian the sum of $1,226.26, equivalent to a dividend of 6.41 cents on the dollar.

We understand that the Ontario Lantern and Lamp Co., Limited, Hamilton, have withdrawn all prices on these goods on account of the continued advance in raw material of all kinds. These goods have been sold by the manufacturers at cost or under, since the first of the year, but the steady rise in tin plate, brass and the other materials going into lanterns and lamps, will now compel them to put up the price, and a sharp advance in this staple line may be looked for in the near future.

Many readers of Hardware and Metal will regret to learn that Mr. Geoffrey Morrow, of the firm of Wm. Stairs, Son & Morrow, Limited, lies dangerously ill at his residence, "Bircham," Northwest Arm, Halifax, N.S. Mr. Morrow's health has been very indifferent for some time past, and a trip to Florida last Spring did not result as beneficially as was desired. Since his return Mr. Morrow has been in the sanatarium at Molville, but has recently been moved to his home. The complaint is Bright's disease, and the doctors have very little hope of his recovery.

Intercolonial Railway Exhibit.

Hot and tired as the visitor at the Exhibition may be, from much wondering and gazing, a refreshing and cooling feeling is experienced as one, on entering the original Art Building, turns to the first exhibit to the left and finds himself in the spacious rooms presided over by Mr. A. E. Barton where the Intercolonial Railway has its exhibit. A sense of nearness to nature is felt, produced no doubt by the manner in which the room is finished and decorated. The walls are overlaid with hemlock bark and logs of the same wood form the casing of the two large doorways. The protected by a rustic railing. On the fish are artistically grouped while a large illuminated sign bearing the trade mark of the Intercolonial Railway faces the visitor as he enters the main doorway. The pictures are enlargements from actual photographs illustrating some of the beautiful scenery through which the Intercolonial Railway passes, as well as typical scenes of sports and recreation afforded by the districts connected. The mounted heads consist of moose and red deer from New Brunswick and cariboo from Newfoundland, all being fine specimens, the sight of which is calculated to thrill the ardent sportsman in search of stands on a table nearby bearing the sign, "I am little Johnny Bear."

A further treat is in store for the visitor to this exhibit, as through one of the walls a rock finished grotto is built. It gives an added charm and takes the visitor miles away from the busy scene around him. On the walls of this cave glass cases are neatly concealed, illuminated from the rear, and in these live specimens of New Brunswick sea trout may be seen. For the purpose of catching the latter, and to have the satisfaction of engaging in this pastime many visitors take trips every year to the region where they abound.

Regarding the Intercolonial Railway



Canadian National Exhibition—Intercolonial Railway Exhibit.

same effect is incorporated in the ceiling, except for a space running entirely around where a soft white light is diffused by a screen to the scene below. From the centre an inverted pyramid of the bark is suspended, the latter being surmounted by a cedar burl from which hangs an enclosed arc lamp. For evening illumination this is supplemented by four incandescent lamp clusters also placed at the ceiling.

The middle of the floor space is taken up by a fountain of running water encircled by growing ferns, the whole being the larger game. No angler could look walls pictures, deer heads and mounted at the panels of mounted fish without experiencing a desire for a chance at least of catching some of these fine specimens. They are salt water salmon, caught in the Restigouche, Matapedia and Miramichi, and are considered the gamiest fish in America. That the sportsman is not limited to deer hunting and fishing is shown by the presence of a large black bear, shot in New Brunswick, while a cunning bear cub itself as affecting service, cars, equipment and all the added appointments and comforts that make railroad travelling a luxurious outing, it is not surpassed by any line on the continent. In fact in many of these it is easily first. There is certainly no finer dining service, no better cars and no more substantial road-bed to be found anywhere, so that a more enjoyable outing could not be planned than a trip through the surpassingly beautiful country that may be viewed from a passenger coach of the Intercolonial Railway.

PAINT, OIL AND BRUSH TRADES

THE CASTOR OIL INDUSTRY.

IN most tropical countries, and notably in North and South America and India, there flourishes the plant from whose product is derived one of our most valuable medicinal and commercial oils. This plant was known to the older botanists by the name of Recinus (Communis), owing to the great similarity of its bean to the tick, a loathsome animal which has the same name in Latin. Another name given to the plant is "Palma Christi," but it is more generally known as the castor plant.

In size the castor plant varies from a shrubby plant to a tree 30 to 40 feet in height, according to the climate in which it is found. Its growth is, of course, more luxuriant in tropical latitudes. It is often cultivated as an ornamental plant on account of the bright green to dark red color of its palm-like leaves, which are also useful as food for some kinds of silk worm. The flower is comparatively inconspicuous, while the seeds or beans are contained in a pod, and much trouble is experienced in harvesting them. In India there are two crops annually, the seed being sown in May and November. Although plants will bear for two or three years, yet they are usually uprooted each harvest, and new seed planted. The beans vary in size, according to the species of plant, but all have a shinning black and white or black and brown mottled appearance, and are of an oval form, with a hard and brittle shell enclosing a very white and oily interior. In a natural state these beans contain a poisonous principle, but it is from them that the manufacturers crush one of the most extensively useful purgative medicines known, and the only one which, under certain circumstances, can be safely administered. This medicinal oil, when absolutely pure and cold pressed, has a slightly yellowish tinge. Its specific gravity is about .964, and as a lubricant it is the most valuable of oils.

The centre of the great oil crushing industry of England is the city of Hull, which, with a population of 250,000, is one of the most important sea ports of Great Britain. During the year 1904 the imports of oil seeds into the port were over 700,000 tons. From this city there is easy access by water to a splendid system of locks, and thence to nearly all parts of the world.

Situated on the banks of the River Hull are the works of the Hull Oil Mfg. Co., Limited, a company established some twenty years ago. During that time Mr. MacIlwaine, one of the two present managing directors, has devoted his energies to the extraction of rape oil, in connection with which he has invented and patented a number of processes. In 1897 the manufacture of castor oil on a small scale was begun, and the success which attended this effort encouraged the directors to erect a large and costly plant, with the object of increasing the output. This action, in conjunction with the strictest economies in working, has enabled the Hull Oil Mfg. Co. to compete successfully against Indian and foreign manufacturers, so that at the present moment they are the largest makers of rape and castor oils in the United Kingdom.

Their standard grades are: Medicinal oil of excellent color and absolute sweetness; first pressure oil, recognized as one of the standard English oils, and seconds oil, which is an extracted oil and yellow in color. The residuum of these oils has a ready market in the shape of a most valuable feeding meal, containing about 35 per cent. albumenoids, all trace of the poisonous voluble oil being eliminated in the process of manufacturing the castor oil. The manurial properties are well known, the "Homco" manure meal containing from 5½ to 7½ per cent. ammonia.

When importing castor oil from the East Indies the leakage is generally very heavy, and the wooden cases supplied in that country unsatisfactory. Taking a lesson from this fact, the Hull Oil Mfg. Co. pack their oil in 40-gallon barrels, 4 tin cases or 2 tin cases of 40 lbs. to the tin. These latter have proven to be the most handy for export, as they are easy to handle, and consequently arrive at their destination in first-class order.

B. & S. H. Thompson & Co., Limited, Montreal, were among the very first firms to appreciate the commencement of what was for England a new industry. With characteristic zeal they applied themselves to introduce into Canada the new Homco brand of castor oils, and their efforts were so successful that the Hull Oil Mfg. Co. soon appointed them their agents for Canada. In their hands the Canadian business of the firm has had a wonderful development, and there are few hardwaremen in our country who do not handle the famous "Homco" brand of oils.

GOOD PAINTS PAY BEST.

The old saying that "it is economy to buy the best," applies to no article of commerce more aptly than to paints, says St. Paul Trade. Cheap paints are always dear, no matter what the price. Good paint will last five times as long as the cheap kind, hence there is no question regarding the genuine economy of its choice. Dealers in paints can always rely on it that the best grades are always the safest to keep in stock, and to insure the holding of their trade, the better grades naturally cost a trifle more, but the satisfaction they give to both dealer and user, make ample amends in the long run and in other ways make up for the few cents difference of cost.

It is as easy to find the North Pole as a reliable substitute for

ELASTILITE VARNISH

Many attempts have been made on both, but so far without success.

Manufactured only by

The Imperial Varnish & Color Co. Limited

Toronto, Ontario, Canada

STOCKS AT

WINNIPEG, MAN., care Mason & Hickey.

VANCOUVER, B.C., care Durand Merchandise Company.





MAKE A PLACE

For Our

ARCHITECTURAL VARNISHES

in your store. You can bank on them. We would like you to have a trial order so you can see their saleable quality.

Address a Postcard to

SCARFE & CO.

Manufacturers of Fine Varnishes, etc.

BRANTFORD, CANADA

THOMAS BLACK, 76-82 Lombard St., **Winnipeg, Man.**



We Can and Do

Make good brushes. Every man in our employ is skilled. Even our salesmen are practical brush makers.

SKEDDEN'S BRUSHES

Are made conscientiously. In the years they have been on the market they have stood for quality and value. A Skedden Brush never shames seller or maker.

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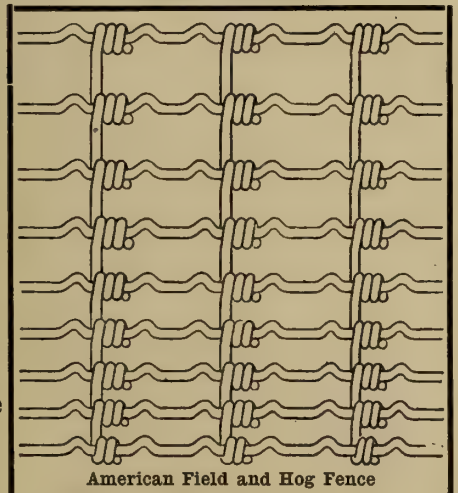
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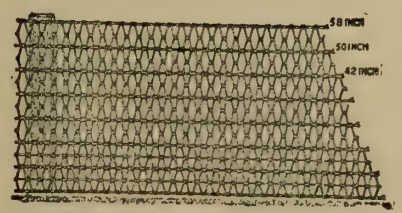
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The proof of the pudding is, that more of our Fences are in use than all other makes of Wire Fences Combined



American Field and Hog Fence



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We call your special attention to our Extra Heavy Fence, all Horizontal Wires No. 9 Gauge. Weighs more per rod, has greater tensile strength than any other Fence on the market

If your Dealers do not handle our Fences write to us

THE CANADIAN STEEL AND WIRE CO., LIMITED
WINNIPEG, MAN. HAMILTON, ONT.

IMPERIAL FRENCH GREEN

is preferred by skilled painters because of its fineness of texture, covering capacity and great durability. Acknowledged to be more permanent than Nature's Greens.

Insist on it once and you will always use it.



Be sure this label is on the can and take no other. See sample cards.

JOHN LUCAS & CO., MFRS.,
PHILADELPHIA, NEW YORK, CHICAGO.

MACARTHUR, CORNEILLE & CO., MONTREAL

"Anchor AND English Liquid Paints"

Paint economy, like economy in other lines, depends upon getting good value for your money.

Anchor and English Liquid Paints

We know to be the best value obtainable in paint.

They are perfect paints. There is nothing used in their manufacture but the purest pigments, linseed oil, turpentine, dryers and the world's best white lead—BRANDRAM'S B. B. GENUINE.



Manufactured by

HENDERSON & POTTS, Limited
HALIFAX and ST. JOHN

HENDERSON & POTTS CO., LIMITED
MONTREAL and WINNIPEG

Paint and Oil Markets

QUEBEC.

Office of Hardware and Metal,
232 McGill Street,
Montreal, September 15, 1905.

SOME important price changes are to be noted in our lists this week. In spite of a good volume of orders for linseed oil that article has dropped 2c. all round from our last price list, though it is felt by the trade that this is only a temporary condition, and a recession of prices is in order.

Turpentine continues to gain strength and at time of writing an advance of 1c. is reported over last week's prices. The market is very strong and still further jumps are not unlikely.

As anticipated by Hardware and Metal it will be noticed in our price quotations that there has been an advance of 15c. per 100 lbs. in ground white lead. This advance we are assured will be maintained and it is quite probable that a further appreciation of 10c. per 100 lbs. will take place within a few days. This forecast is based on the fact that good-sized orders are flowing in and excess stocks are being rapidly depleted. The greatest firming influence, however, was the wrecking of the Leyland liner Virginian, which had 200 tons of white lead in her cargo.

Turpentine—The strength of the market is gradually forcing the market up, and we are this week quoting another advance of 1c. We give prices: Single barrel 91c. per gallon. Two barrels or over, 90c. For smaller quantities than gallons, 5c. extra per barrel is charged. Standard gallon is 8.40 lbs. f.o.b. point of shipment, net 30 days.

Linseed Oil—A drop of 2c. is reported but it is not thought that the weakness will be permanent. Our prices are as follows: Raw, one to four barrels, 46c.; 5 to 9 barrels, 45c.; boiled, 1 to 4 barrels, 49c.; 5 to 9 barrels, 48c. f.o.b. Montreal. Net 30 days

Ground White Lead—The expected advance has occurred as a result of the near approach of the total working of the new tariff. There was a large consignment of white lead on the Virginian which was wrecked in the lower St. Lawrence as reported last week. This lead formed a part of orders sent in some time ago, and its loss will make it impossible to buy any more at the old price. We quote as follows: Best brands Government standards, $5.50 to $5.65; No. 1, $5.25 to $5.40; No. 2, $4.90 to $5.15; No. 3, $4.65 to $4.90, all f.o.b. Montreal.

Dry White Lead—A brisk turnover is reported, but no change has occurred in the price. We quote: Barrels, $5.25; 100 lb. packages, $5.50; 6 or 10 lb. tins, $6.50.

Dry White Zinc—We quote: Pure dry in casks, 7c.; in 100-lb. kegs, 7 1-2c.; No. 1 zinc, in casks, 6c.; in 100-lb. kegs, 6 1-2c.

White Zinc (ground in oil—Prices are unchanged, a very satisfactory business being shown. Our prices are: Pure 25-lb. irons, 7 1-2c. to 10c.; No. 1, 6 1-4c.; No. 2, 5 1-4c.

Putty— Current prices are as follows: Pure linseed oil, $1.75 to $1.85; bulk in barrels, $1.50; in 25-lb. irons, $1.80; in tins, $1.90; bladdered putty in barrels, $1.75.

Orange Mineral— Prices are firm as follows—Casks, 7 1-4c.; 100-lb. kegs, 7 1-2c.; smaller quantities, 8 1-2c.

Red Lead—Good orders are being received for shipment at the following figures: Genuine red lead in casks, $4.50; in 100-lb. kegs, $4.75; in less quantities at the rate of $5.75 per 100 lbs.; No. 1 red lead, casks, $4.25; kegs, $4.75, and smaller quantities, $5.50.

Shellac Varnish—The advance in gum has boosted varnish up about 10c. in some quarters, though we are still authorized to give the following minimum prices: Pure white in barrels, $2.30 to $2.50; pure orange, $2 to $2.20; No. 1 orange, $1.90 to $2.10.

Mixed Paints—In anticipation of the close of navigation, good sized orders are flowing in, and the prices are firm at our last quotations: From $1.20 to $1.40 per gallon.

Castor Oil—The recently advanced price continues firm and a fine demand is reported. We quote: 8 1-2c. to 9 1-2c. according to lots.

Refined Petroleum—Crude oil has been advanced by the Standard Oil Co., and advice to raise the price of refined petroleum is momentarily expected. In the meantime, the market may be said to be in a very firm condition, and large orders are being filled daily. Those merchants who foresaw the advance and ordered early, are considered fortunate. At time of writing the price last quoted is still ruling.

ONTARIO.

Office of Hardware and Metal,
10 Front Street East,
Toronto, September 15, 1905.

NO particular changes have taken place during the past week, although, as foreshadowed by us a week ago, white lead has taken a stronger position, and is being quoted at 15c. advance. The ruling figure is now about $5.55 or $5.60, as there has been considerable margin between the figures listed by different houses on white lead during the past six or eight weeks. The impossibility of buying any more raw material at low prices will now stiffen the backs of jobbers, and uniform prices should soon prevail, the possibility be-

WAGNER'S CARRIAGE PAINTS

This line has a wide fame, and is regarded as standard by carriage makers. It is important that you should know that we are the only firm manufacturing, or who have ever manufactured this particular line of colors for the trade.

—Many imitations are offered. Be on your guard.

—Wagner's Carriage Paints are excellent for refinishing vehicles in an easy, handsome and economical manner. They are perfectly adapted to finishing anything inside or outside requiring a durable gloss finish ; also for ornamental purposes.

Quarts, pints, half-pints. Send for prices.

THE STANDARD PAINT & VARNISH WORKS CO., LIMITED, Windsor, Ont.



COVERT MFG. CO.,

TROY, N.Y.

DERBY SNAP

With Plated Rust Proof and Guarded Springs

"The Latest and Best."

For Sale by all Jobbers at Manufacturers' Price

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SCOTT, GREENWOOD & CO.

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Iron Roof Cresting

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Iron Fencing

DENNIS WIRE AND IRON CO.

Send for Catalogue. LONDON, ONT.

McCaskill, Dougall & Co.

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RAILWAY, CARRIAGE AND BOAT **VARNISHES.**

HIGH-GRADE FURNITURE and HOUSE VARNISHES

MONTREAL.

Get your GLUES from

The GROVE CHEMICAL CO., Limited

Appley Bridge, Lanc, England.

Our ordinary grades are better than ordinary, and we can supply special makes for special purposes. SCOTCH GLUES, BOX GLUES, COLOGNE GLUES for Paper Makers. Size of all kinds. Send your name for our printed matter.

SCHROEDER & STADELMANN

OBERLAHNSTEIN, A/M RHINE, GERMANY

ESTABLISHED 1862

MANUFACTURERS OF

TURKEY RED OXIDES, INDIAN REDS, TUSCAN REDS, SIENNAS, UMBERS, SOLUBLE BROWN, FAST PERMANENT REDS VERMILLIONETTE, ROSE PINK, JAPANNER'S RED, GREEN AND YELLOW CHROMES, AND ZINCS, BLACKS, Etc., Etc

SPECIALTY

YELLOW OCHRE

"ISS" Brand, the Strongest and Brightest Ochre in the Market.

8 Hours

Is all that is necessary for ***ISLAND CITY*** brand of house or floor paints to dry.

Guaranteed not to peel or crack after drying.

IF YOUR FALL STOCK IS LACKING

LET US KNOW

P. D. DODS & CO.

Toronto, Montreal, Winnipeg, Vancouver.

"Compete

or

Perish"

is the inexorable law of the land. The Canada Paint Company respectfully desire to call attention to the fact that they are now making arrangements to **keep** their old customers and **make** new ones for the Fall of

1905

and the year of

1906

and beyond !

Progressive Hardwaremen will please remember that we are without a doubt

First Hands

for all painting materials. Our volume of business is growing steadily year by year. We make systematic departures out of the time-worn, beaten track to assist our customers, and a pot of paint bearing our name speaks for itself and does not require exhaustive efforts to sell it.

We **compete** on small or large orders from the trade, and invite enquiries.

THE CANADA PAINT COMPANY, LIMITED

Paint and Varnish Makers.

ing that the ruling figure may go as high as $5.75.

Linseed is weaker in the Eastern markets, but there has been no change in the figures quoted locally. Turpentine also continues unchanged.

The Rockefeller interests in the United States have advanced crude oil 3c. per gallon, but there has as yet been no corresponding movement here. The probability of an advance and the fact that the close of navigation is approaching accounts for the increased business being done.

Glass is unchanged, and the local stocks are reported to be satisfactory. No discounts are being given on prices quoted, the former 15 per cent. off having been cancelled. While prices are expected to increase in firmness, there done not appear to be very much reason to look for much higher prices at present.

General business continues to be quite satisfactory.

White Lead—Ex Toronto, pure white $5.55 to $5.65; No. 1. $5.12½; No. 2. $4.75; No. 3, $4.00; No. 4, $4.25 in packages of 25 lbs. and upwards; 1-2c. per lb. extra will be charged for 12 12 lb. packages; genuine dry white lead, in casks, $5.00.

Red Lead—Genuine in casks of 560 lbs., $4.75, ditto, in kegs of 100 lbs.. $5.00; No. 1, in casks of 500 lbs., $4.50; ditto, in kegs of 100 lbs., $4.75.

White Zinc—Genuine V. M., in casks, $6.50, in 25 lbs. $7.50, in 12 1-2 lbs. $8.00; Lehigh, in casks, $5.50, in 25 lbs. $6.00, in 12 1-2 lbs $6.50.

Shingle Stain—In 5-gallon lots 57 to 90c. per gallon.

Paris White—90c. to $1 per 100 lbs.

Whiting—60 to 65c. per 100 lbs.; Gilders' whiting, 75c.

Shellac Varnish — Pure orange in barrels, $2.60 to $2.80; white. $2.65 to $2.90 per barrel; No. 1 (orange), $2.25.

Linseed Oil—Our quotations are: Raw, 1 to 4 barrels, 51c.; boiled, 54c.; 5 to 9 barrels, raw, 50c.; boiled, 53c.; Toronto, Hamilton, London and Guelph, net 30 days. Advance of 2c. for delivery to outside points.

Turpentine — Single barrel, 92c.; 2 to 4 barrels, 91c.; 5 barrels and over, open, f.o.b. point of shipment, net 30 days. For less quantities than barrels. 5c. per gallon extra will be added, and for 5 gallon packages, 50c., and 10 gallon packages 80c. will be charged.

Paris Green—600 lb. barrels, 13 1-4c.; 250 lb. kegs 13 1-2c.; 50 lb. drums, 14 1-2c.; 1 lb. packets, 15c.

Glues—Broken sheet, in 200 lb. barrels, 5 to 25c. per lb.; cabinet glue, in barrels, 11 1-2 to 12c.; emery glue, in barrels, 15c.; bookbinders' ground, 11 1-2c.; finest American white, 19c.; No. 1 American white, 15c. per lb.

Putty—Ordinary, bladders in barrels. $1.65 to $1.75; pure linseed oil, $2 to $2.10; bulk in barrels, $1.50; pure, $1.95 to $2; 100-lb. kegs 25c extra.

Plaster Paris—New Brunswick, $2 per barrel.

Liquid Paints—Pure, $1.20 to $1.35 per gallon; No. 1, $1.10 per gallon.

Barn Paints—70c. to 80c.

Bridge Paints—75c. to $1.

Castor Oil—English, in cases, 8 1-2 to 9c. per lb., and 10c. for single tins.

Refined Petroleum—Prospects for a good Fall trade are excellent. We quote as follows: Water white, 16c.; Canadian prime white, 14 1-2c.; American water white, 16 1-2c. to 18 1-2c. ex warehouse.

Glass—See current market quotations.

WINDOW GLASS—MONTREAL.

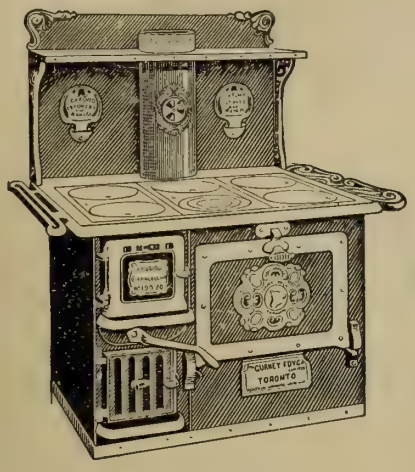
The misfortune to the Virginian seems to have been the last straw needed to boost the price of window glass. For a long time the scarcity in the local market has been acute, but there was a reluctance to raise the price, owing to the already abnormally high figures demanded. Ten thousand boxes of glass were included in the cargo of the Virginian, and these will be an almost total loss, even if the vessel is now safely floated, owing to breakage and soaking by water.

In consequence local jobbers have found it necessary to advance the price of glass all around, as will be seen by consulting the price list below : First break, 50 ft., $2.10; second break, $2.20; first break, 100 feet, $4; second break, 100 feet, $4.25; third break, 100 feet, $4.75; fourth break, 100 feet, $5; fifth break, 100 feet, $5.25; sixth break, 100 feet, $5.75; seventh break, 100 feeth, $6.25; and eighth break, 100 feet, $6.50. Diamond star, first break, 50 feet, $2.30; second break, 50 feet, $2.50; first break, 100 feet, $4.40; second do., $4.80; third do., $5.75; fourth do., $6.50; fifth do., $7.50; sixth do., $8, and seventh do., $9. Double thick, first break, 50 feet, $3.45; second do., $3.75; first break, 100 feet, $6.75; second do., $7.25; third do., $8.75; fourth do., $10; fifth do., $11.50; sixth do., $12.50 seventh do., $14; eighth do., $16.50; ninth do., $18; tenth do., $20; eleventh do., $24, and twelfth do., $28.50.

PREPARATION OF ZINC WHITE.

The latest method for making zinc white is to volatilize the metal in the electric arc, and then burn it. The two carbons are placed in a crucible, which is kept full of zinc, and is placed in a closed vessel through which a current of air passes. The electricity volatilizes the zinc very rapidly, and the vapor rises into the current of air, which not only supplies the oxygen necessary for the combustion which immediately takes place, but carries the zinc oxide smoke into a large chamber through a flue. In this chamber the oxide settles to the ground, and is cleared out at intervals with shovels. The air exit from this chamber is provided with a muslin filter, to prevent the escape of any of the zinc oxide. The zinc is best fed into the crucible in the granulated form, and the crucible should be so mounted that, when necessary, the carbons can be withdrawn and the slag run out by tilting the crucible.—Le Mercure Scientifique.

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Range Buyers have never failed to get value in fullest measure in



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Oxford Chancellor Range

For years its performance has made good its promise, and satisfied housewives everywhere are constantly verifying its virtues by words of praise to many friends.

Wise dealers soon conclude that the reputation of Oxford Ranges, backed by the aggressiveness of Oxford advertising, make them a very good proposition to handle.

They make a very attractive store display, yield a good profit and assure satisfaction to all concerned.

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Dark Interiors Made Light—

This is the mission of **MAXIMUM LIGHT GLASS.** This glass is a form of window glass scientifically arranged, so as to gather the light from the sky, project and diffuse it into all parts of dark and otherwise useless apartments. It is a wonderful transformer of darkness to light.

WE WISH TO SEND A SAMPLE AND OUR BOOKLET TO EVERY GLASS DEALER.

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A CATALOGUE

of the latest designs of **Porcelain Enamelled Bath Tubs, Sinks, Urinals, Latrines, Etc.**

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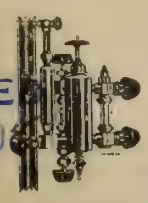
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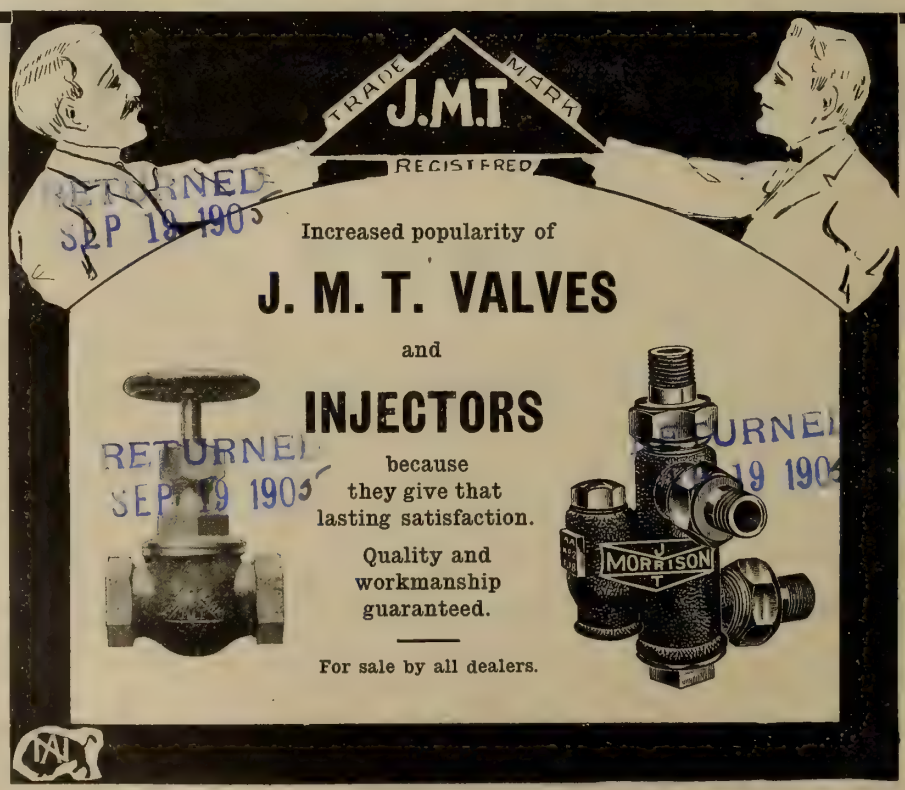
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Improved Double Sight Feed Lubricator



Steam & Oil Separator



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Manufacturers of Steamfitters' Supplies



Iron Body Globe Valve



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Gate Valve

RETURNED SEP 19 1905

HEATING AND PLUMBING

RESIDENCE HEATING BY HOT WATER.

Paper Read by E. F. Capron before the American Society of Heating and Ventilating Engineers' Convention at Chicago. Cuts loaned by courtesy of The Plumbers' Trade Journal, New York.

DURING the past ten years the writer has installed a number of hot-water heating plants, using both direct and indirect radiation, and the results obtained have been very satisfactory, both with the overhead and the up-feed systems of circulation.

The heating apparatus described in this paper was installed in a three-storey and basement brick residence, having exposure on all sides, with no protection from surrounding buildings.

The cubic contents of the building is 98,304 cubic feet, wall exposure 7,182 square feet, glass area, 1,416 square feet, and it is heated by 2,518 square feet of direct and 1,200 square feet of indirect surface, with 285 square feet in the tempering chamber.

There are two boilers of the locomotive fire-box type, brick setting, each containing 279 square feet heating surface and 9.2 square feet grate area, one boiler being used in ordinary Winter weather (15 degrees above zero). The automatic system of heat regulation controls the temperature in a number of rooms and also controls the draught to boilers.

The system of piping is what is called "up-feet" except in the sun-porch, which is one pipe. All piping is concealed and covered. Each pair of risers has controlling valves with drip valve for draining, and each stack of indirects is treated in the same manner.

The air for indirect radiators enters the building through two windows, having shutters which are easily adjusted, passes through cheese-cloth screens and through tempering radiators into a main cold-air room, from which room galvanized iron ducts carry the air to the various radiators.

There is a by-pass damper under the tempering radiators, controlled automatically, the thermostat controlling same being located in cold-air room.

Each individual stack of indirect raditors has a by-pass damper, allowing tempered air being admitted to the rooms when the temperature raises to 70 degrees. The rooms heated by indirect radiation are ventilated by means of fireplaces.

The house had been satisfactorily heated, but the plant is somewhat complicated for the ordinary house man to operate and obtain the best results.

During the month of February of this year the writer made a test in the operation of the plant, and the results of which are given below:

FEBRUARY 15, 1905.

TEMPERATURE TAKEN AT	7 a.m. Degs.	9 a.m. Degs.	11a.m. Degs.	1 p.m. Degs.	3 p.m. Degs.	9 p.m. Degs.
Outside	—8	—3	8	9	10	—2
Water supply	180	180	176	170	168	160
Water return	150	160	154	140	144	138
Cold air room	44	50	52	40	40	40
Servants' dining room	70	70	70	70	70	70
Parlor	76	76	76	76	78	76
Billiard room*	54	54	54	57	58	60
Conservatory	60	66	68	64	67	67
Reception hall	70	70	74	76	77	76

Amount of fuel consumed during the day 910 pounds anthracite coal.
*One register closed.

FEBRUARY 19, 1905.

TEMPERATURE TAKEN AT	7 a.m. Degs.	9 a.m. Degs.	11 a.m. Degs.	1 p.m. Degs.	3 p.m. Degs.	9 p.m Degs.
Outside	16	24	35	36	36	32
Water supply	130	156	165	172	170	156
Water return	120	135	140	150	148	140
Cold air room	46	48	50	58	60	58
Servants' dining room	70	70	68	70	70	70
Parlor	68	70	68	70	72	72
Billiard room*	62	62	64	66	58	68
Conservatory	60	64	68	69	68	68
Reception hall	70	70	72	72	72	72

Amount of fuel consumed during the day 627 pounds anthracite coal.
*One register closed.

FEBRUARY 20, 1905.

TEMPERATURE TAKEN AT	7 a.m. Degs.	9 a.m. Degs.	11 a.m. Degs,	1 p.m. Degs.	3 p m. Degs.	9 p.m. Degs.
Outside	32	32	38	38	36	32
Water supply	142	140	140	138	140	140
Water return	124	120	118	115	118	120
Cold air room	58	56	50	48	48	46
Servants' dining room	70	70	70	70	70	70
Parlor	70	70	72	72	70	70
Billiard room*	66	66	66	66	64	64
Conservatory	60	64	65	65	65	65
Reception hall	72	72	72	72	70	70

Amount of fuel consumed during the day 520 pounds anthracite coal.
*One register closed.

THE AVERAGE DAILY TEMPERATURE BETWEEN 7 A.M. AND 9 P.M. FOR SEVEN DAYS.

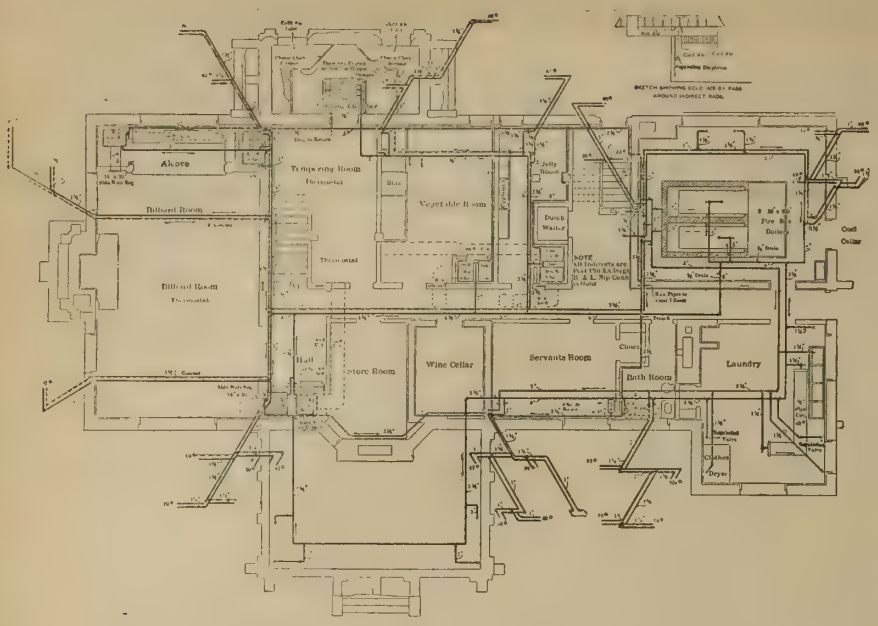
	14 h. Degs	15th. Degs.	16th. Degs.	17th. Degs.	18th. Degs.	19th. Degs.	20th. Degs.	For 70 days. Degs.
Outside	8	2 3	18 16	23	22.66	29.83	34 66	18.86
Water supply	169 5	172 33	170.16	170	159 33	158 01	140	162 76
Water return	160 6	147 66	150 33	154.83	154	138.83	119.01	146.4
Cold air room	58.33	42 66	51	59 66	58	54.33	56	54.28
Servants' dining room	71	70	70	70.33	70	69 66	70	71.57
Parlor	65.33	76 33	74 5	74.66	72 66	70	70.66	72.02
Billiard room	....	....	63	67.66	67 66	65	65.33	62.68
Conservatory	58	65 33	65	68.33	61.5	66.16	64	61 18
Reception room	70 33	73.83	74.33	74	73.66	71.33	71.33	72.68

Average amount of coal consumed each day, 718 lbs.

Two boilers were in operation on the 15th, and only one boiler on the 19th and 20th.

At the time the test was made, the automatic regulation was not in perfect order until 11 a.m. on the 20th, and since that time the plant has been working very successfully, and the consumption of fuel used has been reduced considerably.

In plants of this description, it would be a good plan for architects and engineers to include in specifications "a week's operation by competent persons," as the ordinary house man is not capable of operating a plant of this description in a satisfactory manner.



Residence Heating by Direct and Indirect Hot Water. Plan of Basement.

PREVENTING TRAP SYPHONING.

Written specially for HARDWARE AND METAL.

THE question is often asked by architects and owners of dwellings: What can be done to prevent the soil pipe from freezing after it passes through the roof, and thereby allowing the trap under the various fixtures throughout the house to syphon out with the result that sewer gas escapes wherever the fixtures are located? We all know what this means in a house all closed up. It therefore seems to me this should be an important question among plumbers. There have been several devices tried in past years, such as having the soil pipe encased with a galvanized iron jacket, with asbestos or mineral wool packing between jacket and soil pipe. This did not prove altogether satisfactory. It was found where the main trap on drain had been dispensed with the mouth of soil pipe froze over, but where the main trap on drain was in use this device of the many tried has given the best results.

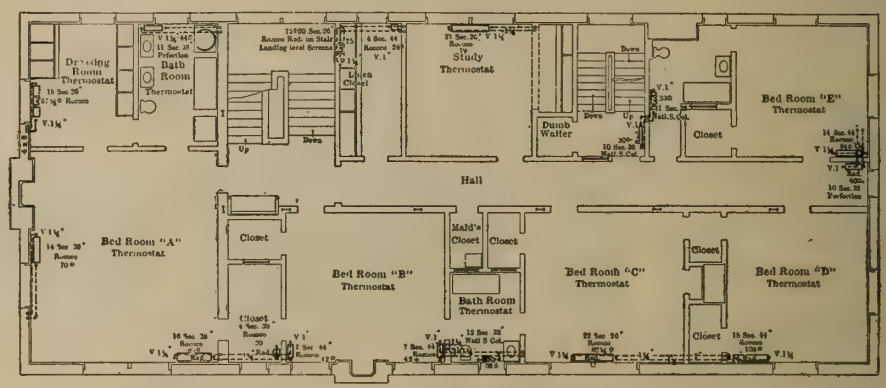
Another device was a galvanized jacket about 1 in. larger than soil pipe, with perforated holes at top, the other end was extended down through roof and left open under attic ceiling. This proved a failure, as the cold air dropped down into the room, in place of the hot air going up, as was intended, thereby helping to freeze pipe, in place of preventing same. The writer is not prepared to suggest any device, for to do so would entail a great deal of expense, but would rather suggest a simple remedy to prevent trap from syphoning when soil pipe freezes up.

In the ordinary house we have two stacks of pipe, one for soil and waste water, and the other to back vent the trap of fixtures, connected as near to the water in the trap as possible, and on the sewer size of trap. This pipe generally extends from the basement fixtures, (if fixtures are located there), if not from the kitchen sink, and extends to about three feet above highest fixture and connected into soil pipe. Where the vents for bathroom fixtures are connected into same, the size is increased proportionately. Now, if we take this pipe, which is generally 3 in., extend same down to basement and connect with drain near to connection for soil pipe, by this we could have a circulation of air, especially when any fixture was discharged which would prevent, not only the trap from syphoning, but the end of the vent pipe from stopping up with rust and sediment, as we often find it. The expense of connecting vent pipe into drain would add little to the cost of a plumbing system in either small or large house. I believe the future will find a great many changes in our present system of plumbing and ventilation, when it will be impossible for any trap to syphon, no matter what the weather conditions may be.

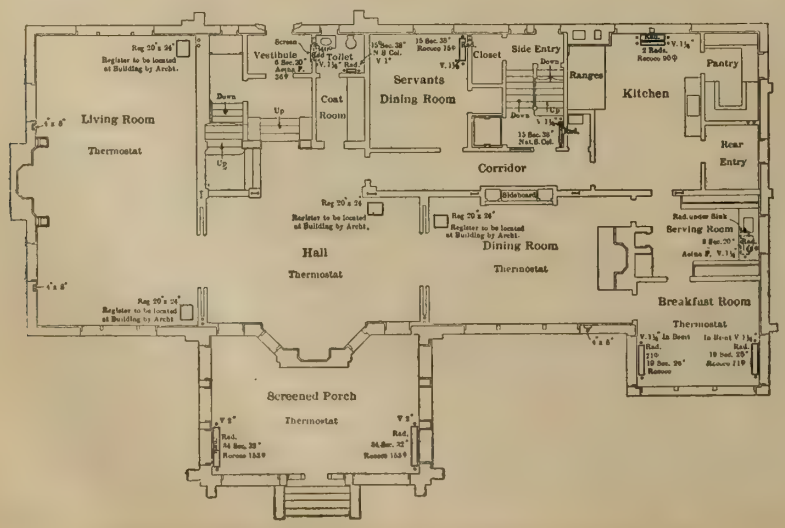
Let us foreshadow a few of the changes that may come: That the drain in every building will be constructed of iron. Our experience has shown us in many instances how unreliable the tile drain is, more especially when laid in a poor foundation, and as we often find in altering work, or when a test is applied, an opening has been made which is easily done in tile, either for the waste of some fixture or for weeping tiles laid around the foundation walls.

Some years ago the writer had occasion to apply the smoke test to a building where the basement or cellar was used as a dairy. The dairyman, to get rid of the waste water from chilling the milk and washing the cans, had a hole cut in the tile drain, with the result that sewer gas was a constant compound with the milk. We have instances of the same nature every day. Now, with a heavy iron drain, the ordinary individual could not cut a hole, and the lengths being made longer and joints caulked with lead, a poor foundation would not affect the iron pipe as it will the tile.

The iron pipe should extend at least five feet outside of building. The main or intersecting trap should be placed immediately inside wall of building and left so that it can be examined at all times. At the present time the law says the main trap must be placed at the street



Residence Heating by Direct and Indirect Hot Water. Second Floor Plan.



Residence Heating by Direct and Indirect Hot Water. First Floor Plan.

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Better than pure lead, and for less money.

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If not, let us send you a booklet and tell you about it. Don't confuse it with any other lead under a similar name. They have nothing in common.

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ONE MAN DOES

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The "Toledo" Adjustable Die Stock

Threads pipe from 1 inch to 2 inch, inclusive.
A new principle in Hand Power Pipe Threading.



No. 1

With this device one man can thread 2-inch pipe easily with one hand and we

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GET A GOOD THING Fairbanks Renewable Disc Valve

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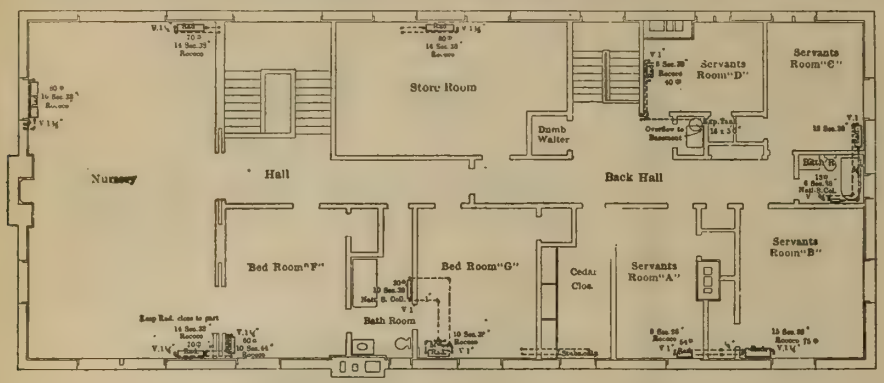
WHATS THE DIFFERENCE ?

Fairbanks Renewable Disc Valves are strongly built. Nothing cheap or skimpy about them. The Disc is renewable and can be changed in a moment without loss of time. There are no nuts, bolts or springs used in our Renewable Disc Valves, therefore no chance of any small pieces falling in the valve or getting in the pipe line and causing trouble and very heavy damages at times. For sale by all leading dealers.

THE CANADIAN FAIRBANKS CO., Limited.

Montreal Toronto Vancouver Winnipeg

line, and if anything gets into the trap which can not be moved from the cleaner the ground must be opened up, which is very inconvenient and dangerous to the occupant of the building. From the house side of the main trap a 4 in. pipe should be taken off, which is termed a breather. This pipe should be extended back through cellar to near line of soil pipe or some other convenient and warm location, and carried up through building above roof and extended at least three feet above soil pipe. By this means no matter what the weather conditions were a free circulation of air would be assured at all times. The fresh air would be taken in through soil pipe and the foul air would escape through breather.



Residence Heating by Direct and Indirect Hot Water. Third Floor Plan.

Another change which might take place will be the construction of back vents, which, in the opinion of the writer, are defective, especially from baths and W.C.'s. The bath vent in most cases is carried under the floor with a slight fall, and after being in use for some time and examined is found clogged up. The same is the case with the vents of nearly all fixtures installed under the present system. The vents of all fixtures should be carried up perpendicular at least 6 in. above the bottom of fixture, so that when any fixture did stop up it would show before it got into the horizontal vent, when the sediment running after the trap has been cleared.

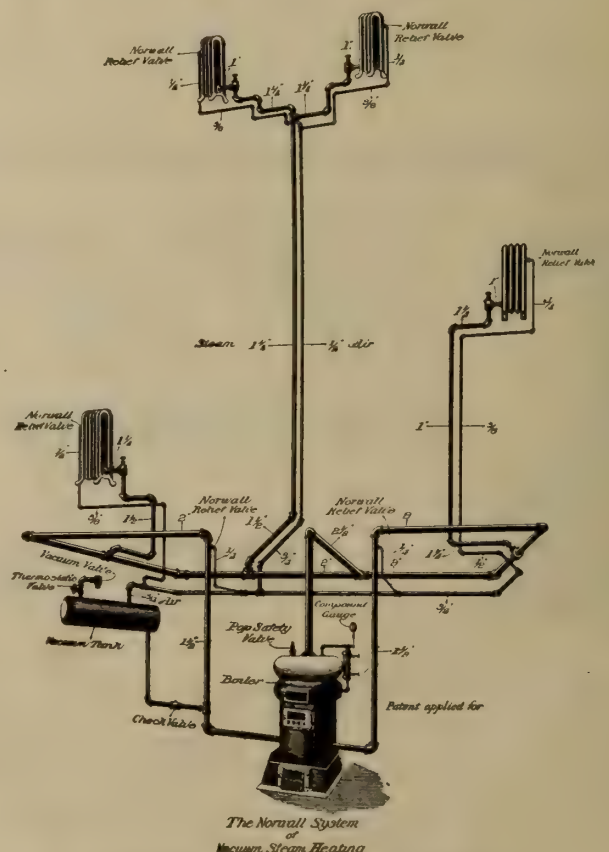
A change which will surely come is the overflows from fixtures, especially from basins in the P.O. bowl, which are so universally used. There is a small, square-cornered passage cast into the bowl, and in these corners, which can never be cleaned as the inlet from basin is through small perforated holes, filth collects, sending out a disagreeable odor. All basins should be fitted with a simple standing waste, which can be easily taken out and cleaned. The basin to be made after the style of the Simplex, but without the recess. In conclusion, I hope the efforts of the future will be as beneficial to all as they have been in the past. G. C.

VACUUM STEAM HEATING.

WHEN steam heating first received attention the piping system included a supply main and a return working under a pressure. Many advancing steps have been taken since to one-pipe systems heating with exhaust steam, and the last step that is now attracting wide attention is the various vacuum systems which provide for exhausting the air from the pipes and radiators so that the steam is more effectively distributed. The piping system and apparatus for creating a vacuum shown in the diagram is offered by the Norwall Mfg. Company, Chicago and New York, and is known as the Norwall Air Line system of vacuum steam heating. This system contemplates the use of the Norwall vacuum appliances in connection with the ordinary low pressure system of steam heating, and while the drawing illustrates a single pipe system, the vacuum system is equally applicable to the double pipe system or any system of low pressure steam heating.

The relief valves used in connection with this system of steam heating are simply vents having restricted outlets opening when steam is turned on, permitting the air, steam or water to pass through them into the air lines, through which it is conducted to the vacuum tank in the basement. When the radiator steam valve is closed this relief valve closes, thereby preventing short circuit of the steam back into the radiator through the relief valve. On the vacuum tank is placed a venting vacuum valve, and between the venting valve and the tank is placed a thermostatic valve. As the air passes into the tank from the radiators the venting valve permits its free exit either into the basement or a chimney flue until all of the air from the entire system is exhausted in this manner. As soon as the steam reaches the vacuum tank and seeks to find outlet through the thermostatic valve this valve automatically closes, thus preventing the egress of steam from the tank. The tank having by this time become full of steam becomes a condenser and in this manner creates a vacuum within itself, thus assisting in maintaining a complete vacuum in the radiators. The tank is connected directly with the main return pipe below the water line; the pipe leading from the tank being fitted with a check valve between the tank and the return pipe insures return of all water of condensation to boiler, while the check valve prevents the water from the boiler backing up into the vacuum tank.

One advantage claimed for the use of the Norwall Air Line system of vacuum heating is that it entirely dispenses with the automatic air valves in connection with the radiators. The operation of the relief valves as above described insures a complete and rapid circulation of steam at atmospheric pressure throughout the entire system. It does away entirely with any liability of a leakage of water, as in case of the radiator becoming water logged the water which passes through the relief valve simply finds its way back to the boiler through the air lines and vacuum tank. After the air



Norwall System of Vacuum Steam Heating.



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Would in not pay you better

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Nowadays people like new things provided they are an improvement over what they have been long accustomed to.

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It has won recognition among professional men the trade and the public in general, wherever introduced, ***solely on its merits.***

These and the extensive advertising we are doing, which latter benefits directly all our customers, have made the NATURO by far the best proposition ever put before you.

We will gladly send you our illustrated booklet free.

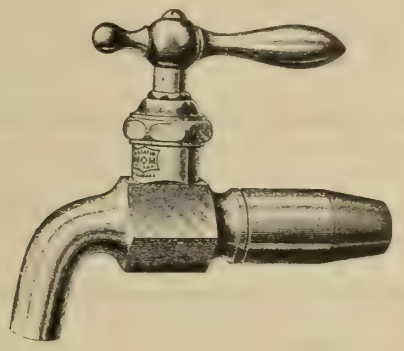
THE NATURO COMPANY

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Salem, N.J.

MUELLER FULLER WORK

Standard Grade Bibb



In selecting plumbing fixtures the customer is influenced most by their appearance, and the sale of an otherwise good bibb is often lost on account of a poor design or finish.

Mueller Fuller Bibbs have a neat and trim design, and the metal is the kind that takes a high and permanent polish. Their appearance will assist you in getting a contract.

Mueller Fuller Bibbs are made in plain and hose patterns, and with tail pieces for all styles of pipe connection.
Each bibb bears the Mueller trade mark and is *unconditionally guaranteed.*

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Phone No. Parkdale 1809

Post Office and Telegraph Address Swansea, Toronto

The Dominion Sewer Pipe Co., Limited

Swansea, Toronto, Ont.

We have just completed one of the finest sewer pipe factories in America equipped with the latest machinery, and are now producing very superior



VITRIFIED SALT GLAZED

SEWER PIPES

in sizes from 4 inches to 24 inches. Price lists and discounts on application to

The Dominion Sewer Pipe Co., Limited

Works: Swansea, Toronto, Ont.

has been once expelled from the system and pressure ceases in the apparatus the venting valve on the vacuum tank automatically closes and prevents the return of air to the tank and in this manner to the system. With a tight job in all respects, pipe, fittings, boiler connection, &c., it will be possible to operate under vacuum as desired.

The company recommends the use of the Norwall Packless radiator valves for good work, on the ground that its stem is vacuum proof and requires no packing. The system can, it is emphasized, be quickly and cheaply installed on any system or low pressure steam heating, new or old, and its use insures a fuel saving of 20 to 40 per cent.

PLUMBING MARKETS

QUEBEC.

Office of HARDWARE AND METAL,
232 McGill street,
Montreal, September 15, 1905.

LEAD weakened somewhat during the week just past, but recovered its tone and is now back to the prices quoted in our last issue. No change is noted in lead pipe. At time of writing no definite statement can be made concerning the likely condition of this market in the near future, as fluctuations are probable. The declaration of peace between Russia and Japan seems to have put an end to the steadiness of lead.

In soil pipe and fittings revised lists are now out, but changes are quoted only in some particular sizes, where an extra 5 per cent is given. On the whole however, the prices given last week will cover existing circumstances.

These are the only features of note, on a market which still maintains a wonderful activity. Good sized orders are pouring in from all parts of the country, and these are well assorted.

The advancing season has quickened the demand for radiators and boilers, the frequent call for these goods showing that there are some good heating jobs under way.

Range Boilers—Continued strength is the feature, and the following prices are firm: Iron clad: 30 gallon, $6, and 40 gallon, $7.50 net; copper, 30 gallon, $22; 35 gallon, $24; 40 gallon, $28. The discount on copper boilers is 15 per cent.

Lead Pipe—Fluctuations have occurred in pig lead, during the week, the tone on the whole being weaker. This has not affected pipe, however, and last week's figures are steady. We quote prices as follows: Discount 25 per cent. and 5 per cent. f.o.b. Montreal, Toronto, St. John, N.B., and Halifax; f.o.b. London, 15c. per hundred lbs. extra; f.o.b. Hamilton, 10c per hundred lbs. extra.

Iron Pipe Fittings — A decidedly stronger tone is evident, denoting that an advance is immenent. Our quotations are: Discount on all sizes of nipples up to six inch, 67 1-2 to 70 per cent.

Iron Pipe—The firmness reported last week, due to shortage in some places, has been accentuated. We are still authorized, however, to quote the following prices: Standard pipe, in lots of 100 feet, regular lengths, 1-4 inch, $5.50; 3-8 inch, $5.50; 1-2 inch, $8.50; 3-4 inch, $11.50; 1 inch, $16.50; 1 1-4 inches, $22.50; 1 1-2 inches, $27.00; 2 inches, $36.00; discounts on black pipe, 1-4 inch, 63 per cent.; 3-8 inch, 63 per cent.; 1-2 inch, 73 per cent.; 3-4 inch, and upwards, 75 per cent. Discounts on galvanized pipe: 1-4 inch, 48 per cent.; 3-8 inch, 48 per cent.; 1-2 inch, 63 per cent.; 3-4 inch and upwards, 65 per cent. Extra heavy pipe of 100 feet lots are quoted as follows: 1-2 inch, $12.00; 3-4 inch, $15.00; 1 inch, $22.00; 1 1-4 inches, $30.00; 1 1-2 inches, $36.00; 2 inches, $50.00. The discount for black pipe is: 72 1-2 per cent., and for galvanized, 61 per cent.

Soil Pipe and Fittings—As stated in our introduction, and as predicted last week, the price lists have been revised. The new lists show few changes, 5 per cent. extra being given on certain sizes. Generally, prices still remain: Standard soil pipe, 50 per cent. off list. Standard fittings, 50 and 10 per cent. off list; medium and extra heavy soil pipe, 60 per cent. off. Fittings, 60 per cent. off.

Solder—Tin and lead have both been subject to several fluctuations during the week, but at time of writing, while lead is somewhat weaker in tone, tin is correspondingly stronger, and we still quote: Bar solder half-and-half guaranteed, 21c.; No. 2, (wiping solder) 17c.

ONTARIO.

Office of HARDWARE AND METAL,
10 Front Street east,
Toronto, September 15, 1905.

Brass goods, which were expected to advance during the past week, have not yet moved upward, but it is certain that a rise of about 10 per cent. will result in a very short time. Many houses in the United States and some in Canada have withdrawn the prices listed and are now quoting open figures. It is only a question of time before higher prices are listed.

Soil pipe continues very scarce and so long as this scarcity exists there is no possibility of lower quotations.

Iron pipe continues firm and large buying of both pipe and fittings is reported. Lead pipe is in strong demand and the recent advance has held quite firm. No reduction has been made on the quotation of solder, although the metal markets are slightly weaker.

Large business is reported from all sections of the country and orders are pouring in in the expectation that work must be booked now in order to have the work completed this Fall. Business in lighting fixtures is picking up and from now on there should be increased business in this direction. Heating jobs are also seasonable and large contracts are being made by the trade, while the supply houses are loaded up with business, being unable to keep up with their shipments.

Lead Pipe—Prices hold firm since the recent advances. We quote: Lead, 7c.; lead waste pipe, 8c.; discount, 25 and 5 per cent.

Soil Pipe and Fittings—Shipments are behind owing to foundries being unable to fill orders. We quote: Medium and extra heavy pipe and fittings, 60 per cent.; 7 and 8 inch pipe, 40 and 5 per cent.

Iron Pipe Fittings—Stocks are fairly large; prices continue firm. Quotations continue as follows: Cast iron elbows, tees, crosses, etc., 65 per cent.; cast iron plugs and bushings, 65 per cent.; flange unions, 65 per cent.; nipples, 75 per cent.; iron cocks, 60 per cent.; Canadian malleable, 35 per cent.; American malleable, 25 per cent.; malleable unions, 65 per cent.; malleable bushings and plugs, 60 per cent.; C. I. ceiling plates, plain or N.P., 70 per cent.; C. I. floor, 80 per cent.; hook plates, 60 per cent; expansion plates, 65 per cent.; headers or branch tees, 65 per cent.; ring hangers, black or galvanized, 60 per cent., American list.

Copper Range Boilers—Price remains unchanged and the 15 per cent. discount holds good as yet.

Galvanized Iron Range Boilers—Buying continues active, prices being quite firm. We quote following prices: 12 gallon capacity, standard, $4.50; extra heavy, $6.50; 18 gallon, standard, $4.75; extra heavy, $6.75; 24 gallons, standard, $4.75; extra heavy, $6.75; 30 gallon, standard, $5; extra heavy, $7.50; 35 gallon, standard, $6; extra heavy, $9.50; 52 gallon, $11; extra heavy, $14; 66 gallon, standard, $18; extra heavy, $20; 82 gallon, standard, $21; extra heavy, $24; 100 gallon, standard, $29; extra heavy, $34; 120 gallon, standard, $34; extra heavy, $40; 144 gallon, standard, $47; extra heavy, $55.

Iron Pipe—Stocks are normal and prices continue steady. We quote: Black, 1-4 inch, $2.04; 3-8 inch, $2.06; 1-2 inch, $2.30; 3-4 inch, $2.88; 1 inch, $4.13; 1 1-4 inch, $5.63; 1 1-2 inch, $6.75; 2 inch, $9; 2 inch, $15.75; 3 inch, $30.50. Galvanized, 1-4 inch, $2.86; 3-8 inch, $2.89; 1-2 inch, $3.15; 3-4 inch, $4.03; 1 inch, $5.78; 1 1-4 inch, $7.88; 1 1-2 inch, $9.45; 2 inch, $12.60; 2 1-2 inch, $23; 3 inch, $30.

Solder—Demand is strong and despite weaker conditions in metal markets, prices are firm at the old figures. Our quotations are as follows: Bar solder,

TRADE MARK
This design a guarantee of quality.

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ALL GRADES, AND BEST OF EACH
GREY, RED-BROWN, MANILLA, FIBRE, TEA, ETC.

SAMPLES AND PRICES FOR THE ASKING.

CANADA PAPER CO.
TORONTO LIMITED MONTREAL

Are you interested in any of the lines that are advertised?
A Post Card will bring you price list and full information.
Don't forget to mention Hardware and Metal.

JUST AS LIKELY

you are waiting for the people to "ask" before you "stock." Well, the people must see the Sifters before they will do much asking. You should have a supply of

METALLIC ASH SIFTERS

in a prominent place. You will find the sales question O.K. Other merchants have done this—succeeded. Say we send Booklet and Prices! What is your address?

C. M. CUTTS & CO., Sole Makers, **Toronto Junction, Ont.**

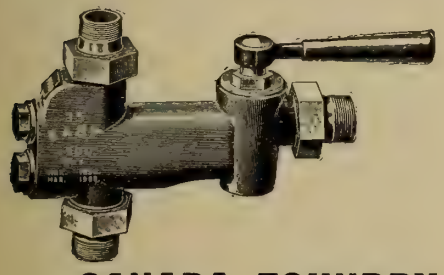
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SPRINGS

Send Specifications to ANY SHAPE.

The WALLACE BARNES CO., BRISTOL, Conn.

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EASY INJECTORS

A Double Tube Machine at Single Tube Price.

Sure Action. Few Parts

CANADA FOUNDRY COMPANY, LIMITED
HEAD OFFICE AND WORKS: TORONTO, ONT.
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COIL CHAIN

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TIN, TERNE AND CANADA PLATES

J. A. HENDERSON, Board of Trade Building, MONTREAL
Agent for **T. W. & J. Walker** Wolverhampton

Sort Up Your Stove and Heating Stock.

TRY OUR UNEQUALLED
STANDARD OAK
FOR A HEATER.
SOVEREIGN
AS A COOKING RANGE.

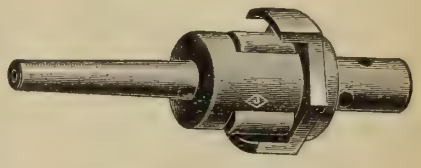
Finest Fuel Saving Furnaces in Canada
Save your coal and wood. Building stoves is a science we have mastered. All our lines are money makers.
Send direct or ask your nearest jobber.

OTTAWA FURNACE AND FOUNDRY CO. Limited
OTTAWA, ONTARIO

PRIEST'S CLIPPERS



Largest Variety, Toilet, Hand, Electric Power
ARE THE BEST.
Highest Quality Grooming and Sheep-Shearing Machines.
WE MAKE THEM.
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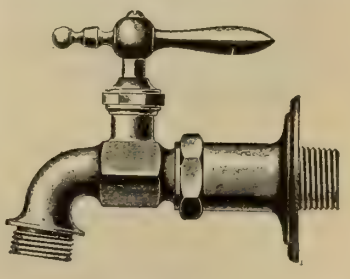


JARDINE'S
Self-Feeding Boiler Tube Expander

has case-hardened body. It will outwear any Expander on the market, and it's cheap.

A. B. JARDINE & CO.
HESPELER - - - ONTARIO

GUARANTEED FOR 5 YEARS



Positively **NON-HAMMERING** on high pressure.

ECCENTRIC Made with sufficient throw to give Large Water Way.

BALL Made of best Para Gum and Compounded to stand Hot or Cold Water.

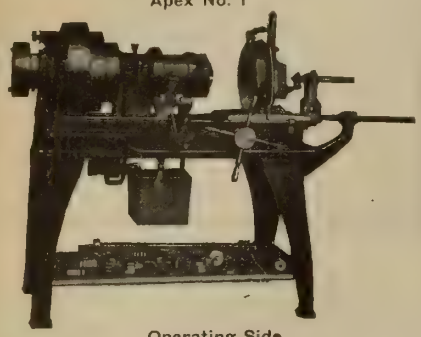
ALL PARTS Made to steel gauges and are always interchangeable.

Patented and made only by

GLAUBER, CLEVELAND, OHIO, U.S.A.

THE MERRELL NIPPLE and PIPE MILL MACHINES

Apex No. 1



Operating Side

The head has our standard adjustable quick-opening and closing dies, actuated by a cam movement, controlled by a segment of a gear, and is arranged so that it can be fed up to the vise for handling short pieces of pipe. This machine is especially adapted for making nipples.

Get our Catalogue

THE CANADIAN FAIRBANKS CO.
Limited
Sole Agents for Canada
MONTREAL, TORONTO, WINNIPEG, VANCOUVER



Kerr's Extra Standard

GLOBE VALVES

are of the best quality. They give the best of service and are moderate in price.

Every valve is TESTED, and PACKED, and GUARANTEED.

WRITE FOR CATALOGUE

The KERR ENGINE CO., Limited
Manufacturers
WALKERVILLE - ONTARIO

half-and-half, guaranteed, 19 1-4c.; wiping solder at 17 1-2c. and refined 17 3-4c.

Enameled Ware—Demand is very active and producers are kept busy. We still quote the following prices: Baths, rolled rim, 5 feet, 2 1-2 inch rim, first quality, $17.50, special, $15.50; 3 inch rim, first quality, $19; special, $17; 5 1-2 feet, 2 1-2 inch rim, first quality $19, special, $17; 3 inch rim, first quality, $20.50, special, $18.50. Lavatories, discounts 30 to 40 and 5 per cent. Sinks, 18 x 30 inch, flat rim, first quality, $2.45; special, $2.

PLUMBING GOSSIP.

T. G. Barrington, plumber, 934 College street, Toronto, is building a two-story stable.

Mr. O. Charland, steamfitter, of Nicolet, was in Montreal calling on supply houses during the week.

Mr. E. Monbleau, steamfitter and machinist, of St. Johns, Que., called on the Montreal supply houses during the week.

Mr. Jas. Masklyne, of Pittsburg, Pa., is in Stratford installing two new benches for manufacturing gas at the gas works. This will double the capacity of the plant, bringing it up to about 80,000 cubic feet.

Mr. W. N. Falls, manager of the plumbing and steamfitting supplies department of Wm. Stairs Son & Morrow, Halifax, N.S., was in Montreal this week to meet Mrs. Falls, who arrived from England on the Tunisian.

Mr. Robert Ross, Toronto, ex-president of the National Association of Master Plumbers, has returned from his sojourn in the country and is lying seriously ill at his home. All his many friends hope to hear of his early recovery.

The Lunkenheimer Company, Cincinnati, Ohio, are making an interesting exhibit of their valves and engineers' supplies at the Steam Engineers' Convention at the Labor Temple in Toronto this week. Mr. J. T. Carland, their Canadian representative, and Mr. Wm. Schmidt, jr., from the head offices, are in charge.

Mr. Joseph Bourassa, a steamfitter, 38 years of age, was electrocuted by a live wire at the Angus shops of the C.P.R., Montreal, last Wednesday. The victim was making repairs in the power house, when he came in contact with the unprotected wire and dropped to the floor. A physician was summoned, but when he arrived Bourassa was dead. The body was taken to the morgue, where an inquest was held Thursday.

The Empire Gas Improvement and Construction Co. of New York City have been awarded the contract for the additions and improvements to the Guelph gas plant. There were four tenderers, but the New York company was the lowest, their estimate being $58,382. The other figures were: Canadian Gas Apparatus and Construction Co., Windsor, $64,000; Economical Gas Apparatus Construction Co., $66,153; John Coates & Co., London, Eng., and Ottawa, $68,875. The improvements will be started at once and the contract calls for the completion of the work by May 15th, 1906. A bond of $10,000 was furnished by the company.

Business Changes

Ontario.

Farwell & Noden, hardware merchants, Hamilton, are selling out.

R. J. Harmer, blacksmith, Fullarton, has advertised his business for sale.

Hughes & Hughes, agricultural implements, Kingston, have assigned to James G. MacNee.

The assets of the Canada Launch & Engine Works, Limited, Toronto, are for sale by tender by liquidator.

There was a meeting of the creditors of Hughes & Hughes, agricultural implements, Kingston, on the 18th inst.

Quebec.

Alex Desmarteau has been appointed curator to J. H. Blais, tinsmith, Napierville.

The buildings of E. M. Lapierre, hardware, Buckingham, have been damaged by fire.

Frank Reddaway, of F. Reddaway & Co., leather belting, etc., Montreal, has been registered.

Manitoba and N. W. T.

T. H. Strain, blacksmith, Melfort, has sold out to James Fowler.

George W. Mowat, hardware merchant, Winnipeg, has been succeeded by Daly & Wolloy.

T. J. Agnew, hardware merchant, Prince Albert, has been succeeded by the Agnew Bros. Hardware Co., Limited.

THE WRONG MAIN.

A story is told of a Connecticut plumber who made a ludicrous mistake. A resident who wished his house system of water supply connected with the city mains had a plumber to do the tapping, which he executed skilfully and quickly, then, going into the house, opened the kitchen faucet, expecting to have a rush of air, then a gush of muddy water; but instead, the air rushed out in an undiminished volume, and filled the house with an odor far more objectionable than any city water. Looking around for the mistake, the journeyman touched a lighted match to the faucet, and immediately a bright flame shot up, lighting the house and giving the plumber considerable enlightenment at the same time, for he had tapped the gas instead of the water main.

NOVELTY IN BATH TUBS.

A wooden bath tub, taken out of an old house in an eastern city, is described as being certainly unique. It is a tub manufactured by a cooper which carries all the marks of that trade. Composed of cedar strips, shaped like an old-fashioned foot-tub, this serviceable but obsolete work of art is held together by metal bands running parallel. While appearing much longer, its inside measurement is only five and a half feet. Without lining of any kind save a number of coats of paint, it suggests the thought that if Noah's Ark was constructed upon similar lines, its seaworthiness must have been all that is claimed for it.

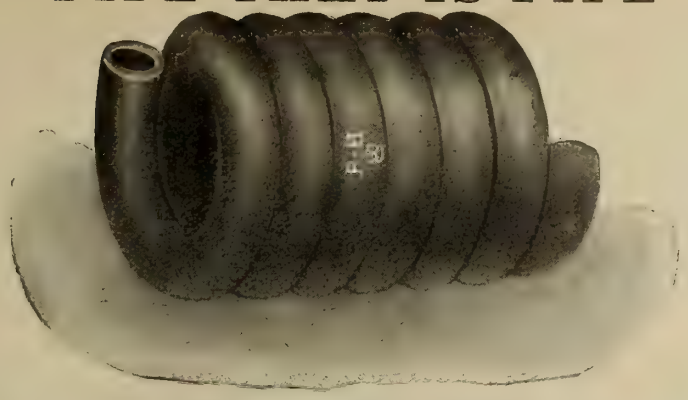
PIPE THAT IS PIPE

THIS IS OUR BRAND

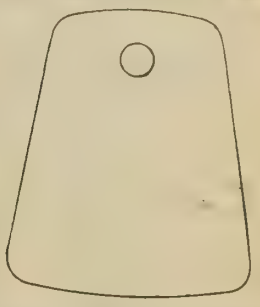
P-H

You Want It.

See that You Get It.



THIS IS OUR TAG



TAKE NO OTHER

BLACK AND GALVANIZED.

PAGE-HERSEY IRON AND TUBE CO., LIMITED, GUELPH, CANADA

TRADE PENBERTHY MARK.



WORLD'S STANDARD

AUTOMATIC INJECTOR

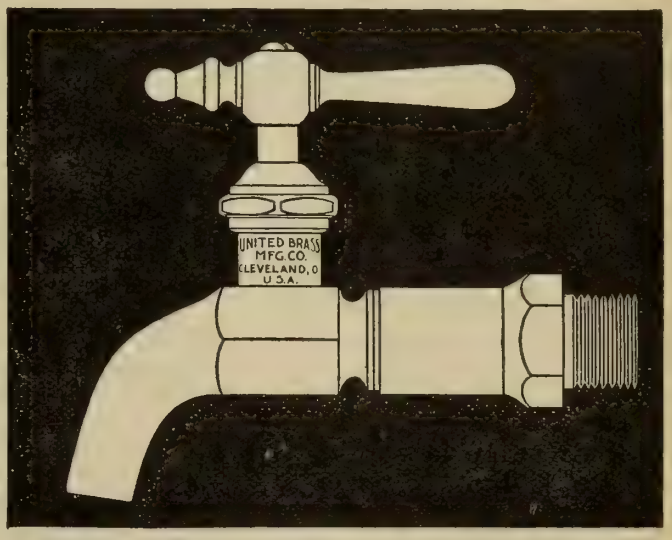
Twenty years experience in the manufacture of Penberthy Injectors has placed them above all others for simplicity and durability. It is a well-known fact that the name Penberthy in the mechanical world is synonymous with perfection in the making of Automatic Injectors.

TAKE NO SUBSTITUTE.

Tried and Tested—Always Satisfactory

United Fuller work used by Leading Plumbers Everywhere

Unite with United Brass Goods The Finest on the Market



Our line consists of Stop and Stop and Waste Cocks, Compression and Fuller Work, Soldering Nipples and Unions, Sill Cocks, Valves, N.P. Traps, etc.

A trial order will convince you that United goods are the best.

Catalogue and Prices on request.

United Brass Mfg. Co., - Cleveland, Ohio, U.S.A.

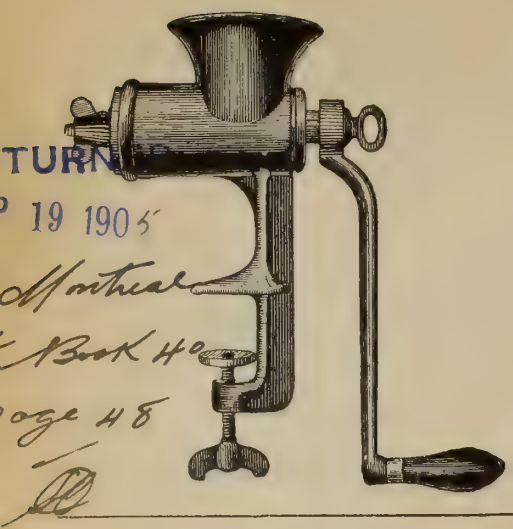
PLUMBING AND STEAM FITTERS' SUPPLIES

Our Fall Stock is now in store and is well assorted.
All kinds and sizes of everything in this department.

Promptness Our Motto

WM. STAIRS, SON & MORROW, LIMITED

HALIFAX, N. S.



A★1 Food Chopper

(IN 4 SIZES)

4 Steel Cutting Plates, cutting from fine to coarse.

A sample order for these goods will prove to you that they are the

BEST IN THE MARKET.

F. W. LAMPLOUGH & CO., Montreal

BOOK REVIEWS

"Producer Gas," by A. Humboldt Sexton, F.I.C., F.C.S., Manchester, the Scientific Publishing Co., price ten shillings, net.

The production of this volume is the outcome of a series of lectures given by the author on "Producer Gas" at the Technical College, Glasgow. This volume treats in a comprehensive manner with the qualities of gas and its action, describing the different kinds of gas produced for industrial purposes. The matter of producers is taken up and discussed at some length in conjunction with the different gases to which they are adapted. The matter of cost is also dealt with. The book ends with a description of some of the most improved gas producers.

"Concrete, Plain and Reinforced." By Frederick W. Taylor, M.E., and Sanford E. Thomson, S.B., New York, John Wiley & Son.

In this book the materials, construction, and design of concrete and reinforced concrete are dealt with. In addition to the author's work, chapters are included by R. Feret, William B. Fuller, and Spencer B. Newberry. It is designed for the use of practicing engineers and contractors as well as a text and reference book for concrete and engineering students. It contains 585 pages and is copiously supplied with illustrations, diagrams and tables. In order that the reader may become fully familiar with the subject under discussion, the opening chapters deal with definitions of the different terms used. In the second chapter is given an elementary outline of the process of concreting, which is followed by chapters on specifications, the choice of cements and its classification, chemistry and special tests with the material, strength and composition, followed by a full discussion of the subject of reinforced concrete in its different applications, together with other information regarding the different processes of manufacture.

"Dimensions of Pipe Fittings and Valves." Second edition. By W. D. Browning, Cleveland. The Browning Press.

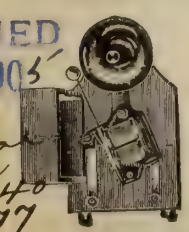
This is a practical book, well filled with sketches, diagrams and illustrations, together with tables and other valuable information regarding the subject mentioned. References are made in it to sources of more detailed information on the subject. This is the book that every plumber and steamfitter and engineer should have, as not only will its perusal increase his practical knowledge, but will give him a better insight into construction details of the materials he uses.

"Electricians' Handy Book." By Prof. T. O'Connor Sloane, A.M., E.M., Ph.D., New York; Norman W. Henley Publishing Co., pocketbook size, 610 engravings, 768 pages, bound in red leather, gold titles and edges; price $3.50.

The tendency towards standardization and simplification of electrical apparatus, as well as the need of a practical book that could be understood by the student, the practical worker, and the everyday working electrician, and yet be valuable to the consulting electrical engineer, has led to the production of this book. Its reception is not for a moment in doubt, as it fills the place in electrical practice not covered by any previously published volume. The entire electrical field is covered in the most practical manner in forty-one chapters. The ilustrations and diagrams are profusely used, thus simplifying the already clear and concise reading matter. It is the style of book that anyone desirous of becoming acquainted with the field of electricity would do well to procure, and at the same time its value as a book of reference is unquestionable.

A NEW WINDMILL.

THE one source of power bestowed by nature on the prairie farms of the country has heretofore proved largely unavailable because of the danger to machinery involved in permitting windmills to run during heavy storms. For a new invention it is claimed it will transmit power, says the Draftsman, not exceeding a predetermined limit, no matter how strong a wind is blowing. This new windmill has two wind wheels with sails oppositely inclined so they will run in opposite directions. As the velocity of the wind increases the wind wheels are tilted upwards, thus modifying the force of the wind on the sails. The shaft

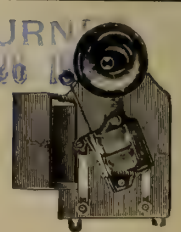


BUY A BELL THAT IS A BELL!

REGAL WOOD BOX BELLS

Are unrivalled---All up-to-date
Dealers buy them---Prices low.

MUNDERLOH & CO., - MONTREAL



Just Give Them a Trial

Cannot Rust Always Ring

SHEET BRASS AND COLD ROLLED COPPER

We are now fully equipped and can fill all orders for these metals.
Send us specifications of your requirements. Write for our Discount Sheet.

CANADA BRASS ROLLING MILLS, LIMITED

Mills: NEW TORONTO, CAN. Head Office: 98 King St. W., TORONTO



Mantels, Grates, Tile, etc.

A Nice Mantel is a fine piece of Furniture.

Batty Stove and Hardware Co.
182 Adelaide Street West

QUICK ACTION

Fall and Winter Sellers

Time for Trade to
ORDER NOW
to ensure supply when the "populace cry" for

20th Century



HEAT AND LIGHT IN ONE
AT COST OF LIGHT ONLY

FITS ANY GAS FIXTURE
HEATS and LIGHTS ANY ROOM

IS YOUR BATHROOM CHILLY?

SMALL in size and price, but in good works GREAT

For full particulars see page ads., HARDWARE AND METAL, Aug, 12, page 59; Aug. 19, page 58, or send for Catalogue.

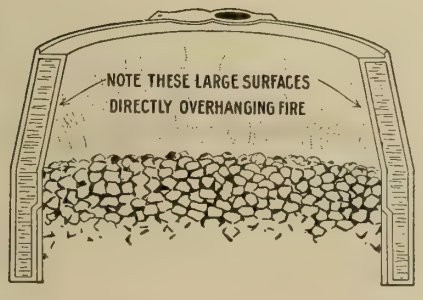
WALTER GROSE, MONTREAL } Sales Agent for the Dominion

THE OXFORD BOILER

Nothing in the way of Heating Apparatus for modern homes has ever equalled The Oxford Hot Water Boiler ("B" Series.")

Its constructional detail is scientifically perfect and results in a greater utilization of a given amount of generated heat, and a lesser waste of it up the chimney than any other boiler made.

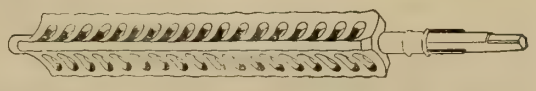




The walls of the firepot slope inward above the fire and the heat impinges thereon in its upward course with consequent absorption, utilization and fuel economy. The same action ensues as the heat strikes the first water section which is deeper than the others, and provided with bell-shaped flues to secure maximum heating surface.

All sections are joined by tapered steel push nipples which do away with the use of rubber gaskets or packing of any kind. This makes a "metal to metal" unleakable joint.

Our hollow grate bar provides for ample draft and complete or partial removal of ashes.



We would like to send you our free catalogue giving full details of the Gurney Oxford Steam and Hot Water Heating Apparatus.

The Gurney Foundry Co., Limited

TORONTO WINNIPEG VANCOUVER

The Gurney-Massey Co., Limited, Montreal, Que.
The Gurney Standard Metal Co., Limited, Calgary, Alta.

MANUFACTURERS' AGENTS.

IMPORTERS, ATTENTION

Save money by consigning your importations direct to destination and pay through freight charges only. Have your goods cleared and distributed by

Turnbull & Henderson

Customs Brokers, Forwarding and Distributing Agents
Vancouver, B. C. Satisfactory service given.

ALEXANDER GIBB

Manufacturers' Agent and Metal Broker,
13 St. John Street, Montreal

Representing Canadian, British and American Manufacturers. Correspondence invited from firms wishing to be represented.

BRONZE POWDER AND LIQUID

used by every steam fitter. Ask your supply houses for our goods for best results. Or, if they have not got them, write direct to

R. E. THORNE
768 Craig Street MONTREAL
29 Melinda Street TORONTO

North West Machinery & Iron Co.
LIMITED
WINNIPEG, Canada

The only exclusively Blacksmith Supply and General Machinery House in the Great Canadian Northwest.

Frank Pearce & Co.
Commission Merchants, Freight Contractors, Shipping and Forwarding Agents and Insurance Brokers,
18 CHAPEL ST., LIVERPOOL, ENGLAND
Cable address, "Pearce," Liverpool. A. B. C. Code

UNITED KINGDOM
HERBERT RODGERS & CO.
Saracen House, Snow Hill, London, Eng.
Direct representatives of manufacturers of hardware and allied goods, well established, with sound connection throughout the United Kingdom. Will firms desiring representatives kindly communicate? Cables, "Rogemini," London.

Bolton, Fane & Co.
98 Leadenhall Street, London, E.C., Eng
TINPLATES
In all qualities and sizes

Bessemer Coke	"Lofoden" Brand
Seimens Coke	"Pelican" Brand
Charcoal	"Mocha" Brand
Best Charcoal	"Cardigan" Crown Brand
Staffordshire Bar Iron	B.G. Crown Brand
Galvanized Sheets	"Pelican" and "Ostrich" Brands

Boiler Plates, Rails, Fishplates, &c., &c.
R. SULLIVAN DAVID
Selling Agent for Canada, 210 St. James St., MONTREAL
TELEPHONE, MAIN 3389

of the inner wheel is hollow and revolves on the shaft of the outer wheel, and the bracket in which the shafts are mounted has a universal joint connection with the windmill standard, an adjustable counter-weight balancing the weight of the wind wheels.

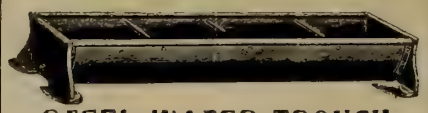
The shafts carry bevel gears at their inner ends, that of inner wind wheel engaging the upper teeth of the power wheel, while the gear attached to the shaft of the outer wind wheel engages the lower teeth of the power wheels. Consequently, although the wind wheels turn in opposite directions, they both act together in driving the power shaft in the same direction. A blade or sail lying adjacent to and below the level of the wind wheels forms the vane of the mill, which occupies a plane normally transverse to the direction of the wind. As the strength of the wind increases the wind wheels rise because of the pressure against this vane, and the wheels then rotate at an acute angle to the direction of the wind. In this way the force of wind on the wheels is modified, for any increase in velocity will be compensated for by an increase in the angle between the axis of the wheel and the direction of the wind.

NEW ROLLING MILLS FOR QUEBEC.

Rumors are afloat in Montreal, that an American firm is considering the establishment of rolling mills, in the province, probably in Quebec City. Color is given to these reports by the fact that several prominent metal men in Montreal were interviewed last week by gentlemen representing large American interests.

Every hardware merchant should choose a good washing machine and push it amongst his customers. Every household is a possible customer.

HARDWARE MEN: Our



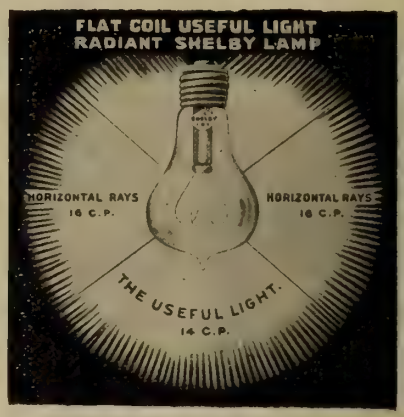
STEEL WATER TROUGH

s a seller—something the average farmer has been waiting for,

We assist the trade by way of generous supply of literature, besides which we are advertising in the farm mediums.

We will make you an interesting proposition; so write us at once that you are open to consider the agency in your district. We appoint one representative only in all medium size towns.

It's worth having, believe us, so write for it to-day. **STEEL TROUGH & MACHINE Co.**
TWEED, Ontario Limited



The Shelby and Downward Tipless Lamps

produce 50 per cent. more useful light than ordinary lamps, from the same consumption of current.

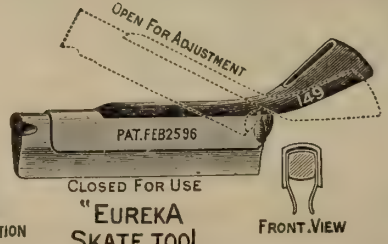
Sold by all Prominent Dealers Throughout the Dominion.
Write for Prices.

ONTARIO LANTERN & LAMP CO.
LIMITED
Hamilton, Ont.

Ask for the J.C.M. Brand of Canadas
APPLY TO
Galvanized—
3 Crown, Black
half-polished—
1 Crown.
First-class makes at low prices.
RD. JOHNSON, CLAPHAM & MORRIS, Limited
MANCHESTER, ENGLAND

GILBERTSON'S
COMET
Selected Soft Smooth

Comet Brand GILBERTSON'S
galvanized sheets. All live jobbers handle this brand. It sells without talking. Perfectly galvanized, carefully selected. Price lower than other high grades.
Makers: W. GILBERTSON & CO., Limited
Pontardawe, South Wales.



EUREKA SKATE SHARPENERS
Simple, Quickly Adjusted and Accurate.
Will Sharpen any Skates.
Place your Orders Now, Before the Rush
Ask your Dealer or Jobber or write for Green Book.
SMITH & HEMENWAY CO.
296 Broadway, New York. Dept. 149
Canadian Sample Room:
215 Coristine Bldg., Montreal, Can.

METALS

MANUFACTURERS OF

Solder,
Babbitt,
Lead Pipe,
Tin Pipe,
Fuse Wire,
Electrical Zincs.

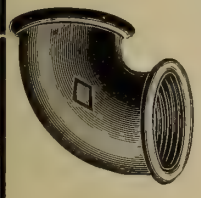
DEALERS IN

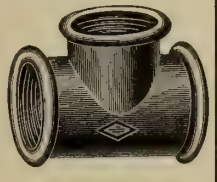
Pig Lead,
Antimony,
Copper,
Pig Tin,
Aluminum,
Bismuth.

WRITE US YOUR REQUIREMENTS

THE CANADA METAL COMPANY

WILLIAM STREET, - TORONTO





DIAMOND-BRAND-FITTINGS

Manufactured and Guaranteed by

The Oshawa Steam and Gas Fittings Co. Limited

Stocked by all Leading Wholesale Houses.

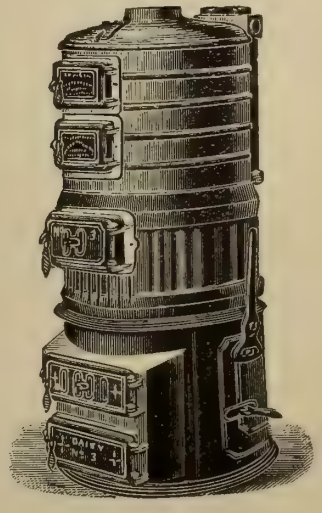
SPECIALTIES

Hot Air Furnaces. Sash Weights and Washers.
Fine Grey Iron Castings.

OSHAWA, - CANADA

IMPROVED

Daisy Hot Water Boilers



Simplest in Construction.

Economical, Efficient.

Sales exceed all others.

Every Boiler Guaranteed.

We also carry large stocks of Iron Pipe, Cast and Malleable Fittings, Brass Goods, etc., insuring prompt shipments.

Send us your rush orders and note results.

R. J. CLUFF & CO.

50 and 52 Lombard Street, Toronto.

ONTARIO AGENTS FOR
WARDEN KING & SON, MONTREAL

GROUPED AROUND

This Star are our Famous

BUILDING PAPER
SHEATHING

TARRED FELTS
READY ROOFING

WRAPPING PAPERS

If you are not already ***using*** or ***selling*** our manufactures write, and we will show you something that will interest you.

DO IT NOW

82 McGILL STREET

ALEX. McARTHUR & CO., Limited, MONTREAL

CURRENT MARKET QUOTATIONS.

Sept. 15, 1905.

These prices are for such qualities and quantities as are usually ordered by retail dealers on the usual terms of credit, the lowest figures being for larger quantities and prompt pay. Large cash buyers can frequently make purchases at better prices. The Editor is anxious to be informed at once of any apparent errors in this list, as the desire is to make it perfectly accurate.

METALS.

TIN.

Lamb and Flag and Straits—56 and 28-lb. ingots, 100 lb.	$37 00 $38 00

TINPLATES.

Charcoal Plates—Bright.

	Per box.
M.L.S., equal to Bradley—	
I C, usual sizes	$6 50
I X "	8 00
I X X "	9 50
Famous, equal to Bradley—	
I C	6 50
I X	8 00
I X X	9 50
Raven and Vulture Grades—	
I C, usual sizes	4 25
I X "	5 00
I X X "	5 75
I X X X "	6 50

"Dominion Crown Best"—Double Coated, Tissued.

	Per box.
I C	50
I X	6 50
I X X	7 50

Allaway's Best"—Standard Quality.

I C	4 75
I X	5 75
I X X	6 75

X Coke Plates—Bright

Bessemer Steel—	
I.C., usual size, 14x20	3 50
I.C., special sizes, base	3 75
20x28	7 50

Charcoal Plates—Terne

Dean or J. G. Grade—	
I.C., 20x28, 112 sheets	7 50
IX., Terne Tin	10 50

Charcoal Tin Boiler Plates.

Cookley Grade—	
X X, 14x56, 50 sheet bxs.	7 00
" 14x60, "	
" 14x65, "	

Tinned Sheets.

72x30 up to 24 gauge	7 50	7 75
" " 26 "	8 00	8 25

IRON AND STEEL.

	Montreal.	Toronto.
Common bar, per 100 lb.	1 80	1 80
Forged iron "	2 05	2 05
Refined " "	2 20	2 05
Horseshoe iron "	2 02½	....
Hoop steel, 1½ to 3 in. base	....	....
Sleigh shoe steel "	1 97½	....
Tire steel	2 07½	....
T. Firth & Sons, tool steel—		
Speedicut	....	0 60
Annealed speedicut	....	0 65
Self-hardening	....	0 36
Best tool steel	....	0 12
Warranted	....	0 09
Best sheet steel	....	0 12
B K. Morton & Co.—		
"Alpha" high speed	..	0 65
" annealed	....	0 70
"M" Self-hardening	....	0 50
"J" quality	....	0 18
"I" "	....	0 14
"BC" "	....	0 09
Jonas & Colver's tool steel	0 10	0 20
" "Novo"	....	0 65
" annealed	....	0 70
Chas. Leonard	0 08	0 09
Crucible Steel Co.—		
" Rex high speed ste	0 65	0 75
" Self-hardening	0 45	0 50
Crucible Special	....	0 17
" Silver steel	....	0 13
" Black Diamond	0 10	0 11
Sanderson's Crucible steel	0 08	0 09
" Superior "	0 12	0 13

BABBIT METAL.

Syracuse Smelting Works:	
Aluminum, genuine	0 45
Government, "	0 44
Tough, "	0 40
Hard, "	0 40
Dynamo	0 30
Special	0 25
Maganese	0 18
Car Box	0 17
Extra	0 13
No. 1	0 10
No. 2	0 07
No. 3	0 05½

Large orders subject to discounts.

The Canada Metal Co.:	
Imperial, genuine,	0 40
Metallic	0 30
Hercules	0 20
Star	0 15
No. 1	0 12
No. 2	0 10
No. 3	0 06
No. 4	0 05

BLACK SHEETS.

	Montreal.	Toronto
10 gauge	2 30	2 30
12 and 14 gauge	2 25	2 35
17 "	2 20	2 40
22 to 24 gauge	2 05	2 50
26 "	2 10	2 65
28 "	2 15	2 70

COPPER WIRE.

Discount, 50 per cent.

CANADA PLATES.

Ordinary	2 50
All bright	3 75
Galvanized Canada Plates—	

J. C. M. 3 Crowns

18 x 24, 52 sheets, 112 lbs	3 71
18 x 24, 60 " "	3 96
18 x 24, 75 " "	4 46

	Ordinary.	Dom. Crown.
18x24x52	4 25	4 35
" 60	4 50	4 60
20x28x80	8 50	8 70
" 94	9 00	9 20

GALVANIZED SHEETS.

Fleur-de-Lis.	Gordon Crown.
16 to 20 gauge 3 40	....
22 to 24 gauge 3 50	3 50
26 " 3 75	3 75
28 " 4 00	4 15

Comet Bell.	Queen's Head
16 to 20 gauge 3 40	....
22 to 24 gauge 3 45	3 65
26 " 3 70	3 90
28 " 3 95	4 15

J. C. M. 3 Crowns

24 gauge	3 10
26 "	3 43
28 "	3 64

American brands, $3.90 for 10½ oz.
Less than case lots 10 to 15c. extra.

CHAIN.

Proof coil, 3-16 in., per 100 lb.		7 00	10 00
"	¼ "	....	5 60
"	5-16 "	....	4 45
"	⅜ "	....	3 85
"	7-16 "	....	3 70
"	½ "	....	3 55
"	9-16 "	....	3 45
"	⅝ "	....	3 35
"	¾ "	....	3 25

Halter, kennel and post chains, 40 to 40 and 5 per cent.

Cow ties	40 p.c.
Tie out chains	65 p.c.
Stall fixtures	35 p.c.
Trace chain	45 p.c.

Jack chain, iron, single and double, discount 35 p.c. [count 40 p.c.

Jack chain, brass, single and double, dis-

COPPER.

	Ingot.	Per 100 lb.
Casting, car lots	16 75	17 00

Bars.

Cut lengths, round, ⅜ to ⅞ in.	21 00	23 00
" round and square,		
Cut 1 to 2 inches	21 00	23 00

Sheet.

Plain, 16 oz,, 14x48 and 14x60	21 00
Plain, 14 oz	22 00
Tinned copper sheet	24 00
Planished	32 00

Braziers' (in sheets).

4x6 ft., 25 to 30 lb. each, per lb.	0 22
" 35 to 45 " "	0 21
" 50-lb. and above "	0 20

BOILER AND T.K. PITTS.

Plain tinned, Spun } 47½ per cent. off list.

BRASS.

Rod and Sheet, 14 to 30 gauge, 10 per cent.

Sheets, hard-rolled, 2x4	0 23
Tubing, base, per lb	0 23½

ZINC SPELTER.

Foreign, per 100 lb	7 00	....
Domestic " "	6 75	7 00

ZINC SHEET.

5-cwt. casks	7 00
Part casks	7 25

LEAD.

Imported Pig, per 100 lb.	4 00
Bar, "	4 80
Sheets, 2½ lb. sq. ft., by roll	0 06½
Sheets, 3 to 6 lb. "	0 06

NOTE.—Cut sheets ½c. per lb., extra. Pipe, by the roll, usual weights per yard, lists at 7c. per lb. and 35 p.c lis. f.o.b. Toronto.

NOTE.—Cut lengths, net price, waste pipe 8-ft lengths, lists at 8c.

ANTIMONY.

Cookson's	per lb.	14 50

SHOT.

Common, $6.50 per 100 lb.; chilled, $7.00 per 100 lb.; buck, seal and ball, $7.50. Discount, 15 p.c. Prices are f.o.b. Toronto, Hamilton, Montreal, St. John and Halifax. Terms, 2 p.c. for cash in thirty days.

PLUMBING GOODS.

BATH TUBS.

Zinc	6 00
Copper, discount 20 per cent. off revised list.	

BATHS.

Standard Ideal Enameled.

Plate E I, Fittings extra		1st quality	Special
4 and 4½ ft. 3 in. rolled rim		$18 00	16 00
5 feet	"	19 00	17 00
5½ "	"	20 50	18 50
6 "	"	23 25	21 25
Plate E II			
4½ feet	2½ in.	16 75	14 75
5 "	2½ "	17 50	15 50
5½ "	2½ "	19 00	17 00
Plate 123 E, lavatories		1st quality	8 90
" 123 E, "	2nd "		7 50
" 127 E, "	1st "		5 70
" 127 E, "	2nd "		4 80
" 128 E, "	1st "		5 60
" 128 E, "	2nd "		4 70
" 129 E, "	1st "		5 40
" 129 E, "	2nd "		4 50
Sinks 18 x 30 in flat rim, A quality			2 45
" " " " " B "			2 00

IRON PIPE.

Black pipe—	Per 100 feet.
⅛ inch	2 75
¼ "	2 04
⅜ "	2 06
½ "	2 30
¾ "	2 88
1 "	4 12
1¼ "	5 62
1½ "	6 75
2 "	

Galvanized pipe—	
¼ inch	2 86
⅜ "	2 89
½ "	3 14
¾ "	4 02
1 "	5 78
1¼ "	7 84
1½ "	9 46
2 "	12 69

Malleable Fittings—Canadian discount 35 per cent.; American discount 20 to 25 per cent.

Cast Iron Fittings—Standard bushings 50 and 10 and 10 per cent.; headers, 60 flanged unions and lipped, 60 and 5; malleable bushings, 65; nipples, up to 6 in. 75.

PLUMBERS' BRASS GOODS.

Standard Compression work, dis. 60 and 10 p.c
Cushion work, discount 50 and 10 p.c.
Fuller work, discount 70 p c.
6 dozen lots and over of the above, extra discount 10 per cent.
Lever handle Stops and Waste, discount 60 per cent. With in lots of 2 dozen and over an extra discount of 10 per cent.
J.M.T. Globe, Angle and Check Valves, discount 55 per cent.
Standard Globe, Angle and Check Valves, discount 65 per cent.
Kerr's special standard globes and angles, discount 55 per cent.
Kerr's Jenkin disc, copper-alloy disc and heavy standard valves, discount 55 percent.
Kerr's standard brass checks, discount 55 p.c.
Kerr's standard brass disc steam radiator valves, discount 65 per cent.
Kerr's Jenkin disc, copper-alloy disc radiator valves, discount 65 per cent.
Kerr's quick-opening hot-water radiator valves, discount 65 per cent.
Weber's (Kerr) patent straightway gate valves, brass, discount 50 per cent.
Weber's (Kerr) patent straightway gate valves, I.B.B.M., discount 60 and 10 per cent.
J. M. T. Radiator Valves discount 55 per cent.
Standard Radiator Valves, discount 65 per cent.
Patent Quick-Opening Valves, discount 70 and 10 per cent.

No. 1 compression bath cock	net 1 75
No. 4 "	" 1 75
No .7 Fuller's	" 2 10
No. 4½, "	" 2 25

Patent Compression Cushion, basin cock, hot and cold, per doz., $15.
Patent Compression Cushion, bath cock, No. 2208 2 25
Square head brass cocks, discount 55 per cent
" " iron " 60 "
Thompson Smoke-test Machine $25.00

RANGE BOILERS

Copper, 30 gallon	"	22 00
" 35 "	"	24 00
" 40 "	"	28 00

Discount off copper boilers 15 per cent.

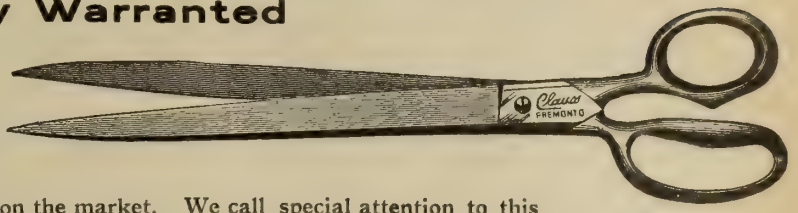
GALVANIZED IRON RANGE BOILERS

Capacity. Gals.	Standard.	Extra heavy
12	4.50	6.50
18	4.75	6.75
24	4.75	6.75
30	5.00	7.50
35	6.00	8.50
40	7.00	9.50
52	11.00	14.00
66	18.00	20.00
82	21 00	24.00
100	29.00	34.00
120	34.00	40.00
144		55.00

Clauss Brand

Fully Warranted

Paper Hangers' Shears



Hand forged from finest steel and welded on our composition metal, hardened in water and tempered by natural gas. This shear is made purposely for paper hangers' use, and is more durable than other of its kind on the market. We call special attention to this Shear. Japan handles and finely finished blades. Ask for discounts.

Clauss Shear Co., 169 Spadina Ave., Toronto, Ont.

SOIL PIPE AND FITTINGS.

Med. and Extra heavy pipe and fittings, dis. 60 per cent.

7 and 8-in. pipe, discount 40 and 5 per cent.

SOLDER.

	Per lb
Bar, half-and-half, guaranteed	0 19½
Wiping	0 17
Refined	0 17½

PAINTS AND OILS.

COLORS IN OIL.

1-lb. tins, pure.

Venetian red, per lb.	0 08
Chrome yellow	0 15
Golden ochre	0 08
French "	0 06
Marine black	0 04
Chrome green	0 10
French permanent green	0 13
Signwriters' black	0 15

WHITE LEAD.

	Per 100 lb.	
Pure	5 50	5 75
No. 1	5 10	5 25
No. 2	..	5 05
No. 3	....	4 12½
No. 4	....	4 05
Munro's Select Flake White	....	5 65
Elephant and Decorators'Pure	....	5 50
Tiger brand, pure	....	5 75
Decorators' Special for exterior use	....	5 00
Monarch	....	5 75
Decorator's Pure	....	5 50
Essex Genuine	....	5 00
Sterling Pure	....	5 75
Island City Pure	....	5 75
Ramsay's Pure Lead	5 50	5 75
Ramsay's Exterior	5 25	5 50

RED LEAD.

Genuine, 560 lb. casks, per cwt	$5 25
Genuine, 100 lb. kegs, "	5 50
No. 1, 560 lb. casks, per cwt	5 00
No. 1, 100 lb. kegs, per cwt	5 50

WHITE ZINC.

Extra Red Seal	0 06	0 08
French V. M.	0 06½	0 07
Lehigh	0 06	0 06½
Pure	....	0 07½
No. 1	....	0 06½
No. 2	....	0 05½

DRY WHITE LEAD.

Pure, casks	5 25
Pure, kegs	5 50
No. 1, casks	4 75
No. 1, kegs	5 00

PREPARED PAINTS.

In ¼, ½ and 1-gallon tins.

Pure, per gallon	....	1 20
Second qualities, per gallon	....	1 00
Barn (in bbls.)	0 60	0 90
The Sherwin-Williams paints	....	1 35
Canada Paint Co.'s pure	....	1 25
Toronto Lead & Color Co's pure	....	1 25
Sanderson Pearcy's pure	....	1 20
Standard Co.'s "New Era."	....	1 30
Francis-Frost Co.'s "Ark" B'd	....	1 25
" British Navy deck	....	1 50
Henderson & Potts's "Anchor"	....	1 35
Ramsay's paints, Pure, per gal.	....	1 20
" Thistle, "	....	1 00
" Outside, bbls	0 55	0 65
Island City House Paint	....	1 25
" Floor "	....	1 25
Sterling House Paint	....	1 20
" Floor "	....	1 10
National	....	1 05

PUTTY.

Bulk in bbls.	1 50
Bulk in less quantity	1 80
Bladders in bbls.	1 65 1 75
Bladders in kegs, boxes or loose	1 90
25-lb. tins	1 80
12½ lb. tins	2 05
Bladders in bulk or tins less than 100 lb.	1 85

VARNISHES.

	In 5-gal. lots. Per gal.	Net.
Carriage, No. 1	1 50	1 60
Pale durable body	4 10	4 25
" rubbing	2 85	3 20
Gold size, japan	1 50	1 60
No. 1 brown japan	0 85	0 90
Elastic oak	....	1 50
Furniture, extra	1 10	1 25
" No. 1	0 90	1 00
Hard oil finish	1 35	1 50
Light oil finish	1 60	1 70
Damar	1 75	2 00
Shellac, white	2 40	2 50
" orange	2 30	2 40
Turpentine, brown japan	1 10	1 20
" black japan	1 10	1 20
" " No. 1.	0 85	0 90
Elastilite varnish, 1 gal. can, each		2 00
Granitine floor finish, per gal		2 75
Maple Leaf coach enamels; size 1, $1.20 size 2, 70c.; size 3, 40c. each.		
Sherwin-Williams' kopal varnish, assorted case, from to 1 gal., $2.50.		
Canada Paint Co's sun varnish		2 00

GLUE.

Common	0 08	0 08½
French medal	0 10	0 14
White, extra	0 18	0 22
Gelatine	....	....
Strip	0 18	0 20
Coopers	0 19	0 20
Huttner	....	....
Ground	0 12	0 16
Cologne, genuine	....	....

HARDWARE.

AMMUNITION.

Cartridges.

B. B. Caps Dominion, 50 and 5 and 25 per cent. American $2.00 per 1000.
C. B. Caps American, $2.60 per 1000.
Rim Fire Pistol, discount 30 p.c., American.
Rim Fire Cartridges, Dominion, 50 and 5 p.c.
Central Fire, Military and Sporting, American, add 20 per cent. to list. B.B. Caps, discount 40 per cent., American.
Central Fire Pistol and Rifle, list net Amer.
Central Fire Cartridges, pistol sizes, Dominion, 30 per cent.
Central Fire Cartridges, Sporting and Military, Dominion, 15 per cent. American 10 per cent. advance on list.
Loaded and empty Shells, "Trap" and "Dominion" grades, 25 per cent. discount. American 20 per cent. discount. Rival and Nitro, 10 per cent. advance on list.
Brass Shot Shells, 55 per cent.
Primers, Dom., 30 per cent.: American $1.75

Wads.	per lb.
Best thick brown or grey felt wads, in ½-lb. bags	$0 70
Best thick white card wads, in boxes of 500 each, 12 and smaller gauges	0 29
Best thick white card wads, in boxes of 500 each, 10 gauge	0 35
Thin card wads, in boxes of 1,000 each, 12 and smaller gauges	0 20
Thin card wads, in boxes of 1,000 each, 10 gauge	0 25

Chemically prepared black edge grey cloth wads, in boxes of 250 each—	Per M.
11 and smaller gauge	0 60
9 and 10 gauges	0 70
7 and 8 "	0 90
5 and 6 "	1 10
Superior chemically prepared pink edge, best white cloth wads, in boxes of 250 each—	
11 and smaller gauge	1 15
9 and 10 gauges	1 40
7 and 8 "	1 65
5 and 6 "	1 90

ADZES.

Discount 22½ per cent.

ANVILS.

Wright's, 80-lb. and over	0 10½
Hay Budden, 80-lb. and over	0 09½
Brook's, 80-lb. and over	0 11½

APPLE PARERS.

Woodyatt Hudson, per doz., net	4 50

AUGERS.

Gilmour's, discount 60 per cent. off list.

AXES.

Chopping Axes		
Single bit, per doz.	7 00	10 00
Double bit, "	10 00	18 00

Bench Axes, 40 per cent.
Broad Axes, 25 per cent.

Hunters' Axes	5 50	6 00
Boys' Axes	6 25	7 00
Splitting Axes	7 00	12 00
Handled Axes	....	10 00

AMERICAN AXE AND TOOL CO.

Red Ridge, boys', handled	75
" hunters	5 25

Underhill American Bench Axes, 40 p.c.

AXLE GREASE.

Ordinary, per gross	6 00	7 00
Best quality	10 00	12 00

BELLS.

Hand.

Brass, 60 per cent.
Nickel, 55 per cent.

Cow.

American make, discount 63⅓ per cent.
Canadian, discount 45 and 50 per cent.

Door.

Gongs, Sargant's	5 50	8 00
" Peterboro', discount 50 and 10 per cent. off new list.		

Farm.

American, each	1 35	3 00

House.

American, per lb.	0 35	0 40

BELTING.

Extra, 60 per cent.
Standard, 60 and 10 per cent.
No. 1, not wider than 6 in., 60, 10 and 10 per cent.
Agricultural, not wider than 4 in., 75 per cent.

BITS.

Auger.

Gilmour's, discount 60 per cent.
Rockford, discount 50 and 10 per cent.
Jennings' Gen., net list.

Car.

Gilmour's, 47½ per cent.

Expansive.

Clark's, 40 per cent.

Gimlet.

Clark's, per doz	0 65	0 90
Diamond, Shell, per doz.	1 00	1 50
Nail and Spike, per gross	2 25	5 20

BLIND AND BED STAPLES.

All sizes, per lb.	0 07½	0 12

BOLTS AND NUTS

	Per cent.
Carriage Bolts, common ($1 list	
" " ⅜ and smaller	60 and 10
" " 7-16 and up	55 and 5
" " full sq. ($2.40 list)	60
" " Norway Iron ($3 list)	60
Machine Bolts, all sizes, ⅜ and less	55
Machine Bolts, 7-16 and up	55 and 5
Plough Bolts	55 and 5
Blank Bolts	55 and 5
Bolt Ends	55 and 5
Sleigh Shoe Bolts	70
Coach Screws, cone point	70 and 5

Nuts, square, all sizes, 4c. per lb. off.
Nuts, hexagon, all sizes, 4½c. per lb. off.
Stove Rods per lb., 5½ to 6c.

BOOT CALKS.

Small and medium, ball	per M.	4 25
Small heel	"	4 50

BRIGHT WIRE GOODS

Discount 62½ per cent.

BUTCHERS' CLEAVERS.

German	per doz. 6 00	9 00
American	" 12 00	18 00

BUILDING PAPER, ETC

Tarred Felt, per 100 lb.	1 85
Ready roofing, 2-ply, not under 45 lb. per roll	0 90
Ready roofing, 3-ply, not under 65 lb., per roll	1 15
Carpet Felt per ton	45 00
Heavy Straw Sheathing per ton	35 00
Dry Sheathing per roll, 400 sq. ft.	0 40
Tar " " 400 "	0 50
Dry Fibre " 400 "	0 40
Tarred Fibre " 400 "	0 50
O. K. & I. X. L " 400 "	0 70
Resin-sized " 400 "	0 45
Oiled Sheathing " 600 "	1 00
Oiled " " 400 "	0 70
Roof Coating, in barrels per gal.	0 17
Roof " small packages "	0 52
Refined Tar per barrel	5 00
Coal Tar "	4 00
Coal Tar, less than barrels per gal.	0 15
Roofing Pitch per 100 lb.	0 80 0 90
Slater's felt per roll	0 60

BULL RINGS.

Copper, $1.30 for 2½-inch, and $1.70

BUTTS.

Wrought Brass, net revised list.

Cast Iron.

Loose Pin, discount 60 per cent

Wrought Steel.

Fast Joint, discount 70 to 70 and 5 per cent
Loose Pin, discount 70 to 70 and 5 per cent.

CARPET STRETCHERS.

American per doz.	1 00	1 50
Bullard's "	....	6 50

CASTORS.

Bed, new list, discount 55 to 57½ per cent.
Plate, discount 52½ to 57½ per cent.

CATTLE LEADERS.

Nos. 32 and 33 per gross	7 50	8 50

CHALK.

Carpenters' Colored, per gross	0 45	0 75
White lump per cwt.	0 60	0 65
Red	0 05	0 06
Crayon per gross	0 14	0 18

CHISELS.

Socket, Framing and Firmer.

Broad's, discount 70 per cent.
Warnock's, discount 70 per cent.
P. S. & W. Extra, discount 60 and 10 per cent

CLOTHES REELS.

Davis Clothes Reels, dis. 40 per cent.

PLANE IRONS.

English per doz.	2 00	5 00

PLIERS AND NIPPERS.

Button's genuine, per doz. pairs, discount 37½ to 40 per cent.

Button's imitation per doz.	5 00	9 00
man "	0 60	0 60

PRESSED SPIKES.

Discount 20 per cent.

PULLEYS.

Hothouse per doz.	0 55	1 00
Axle "	0 22	0 33
Screw "	0 22	1 00
Awning "	0 35	2 50

PUMPS.

Canadian cistern	1 80	3 60
Canadian pitcher spout	1 40	2 10

A Balky Customer

is harder to manage than a *Balky Horse.* Your customers *won't Balk* if you offer them Paterson's Building Papers and Wire-Edged Ready Roofing, because these goods never fail to please the user.

The Paterson Mfg. Co., Limited

Toronto and Montreal.

CONDUCTOR PIPE.

Plain or Corrugated.

2-inch	per 100 feet	3 00
3 "	" "	4 00
4 "	" "	5 25
5 "	" "	6 75
"	" "	9 00

CRADLES, GRAIN.

Canadian, discount 20 to 25 per cent.

CROSSCUT SAW HANDLES.

S. & D., No. 3	per pair	0 15
S. & D., " 5	"	0 22½
S. & D., " 6	"	0 15
Boynton pattern	"	0 20

DOOR SPRINGS.

Torrey's Rod	per doz.	1 75
Coil, 9 to 11 in	" 0 95	1 65
English	" 2 00	4 00

DRAW KNIVES.

Coach and Wagon, discount 70 per cent. new list.
Carpenters' discount 70 per cent.

DRILLS.

Hand and Breast.

Millar's Falls, per doz., net list.

DRILL BITS.

Morse, discount 37½ to 40 per cent.
Standard, discount 50 and 5 to 55 per cent.

FAUCETS.

Common, cork-lined, discount 35 per cent.

EAVETROUGHS.

10-inch	per 100 ft.	10 00

ELBOWS (stovepipe.)

5 and 6-inch, common	per doz.	1 20
7-inch	"	1 35

Polished, 15c. per dozen extra.

ESCUTCHEONS.

Discount 50 and 10 per cent., new list

ESCUTCHEON PINS.

Iron, discount 40 per cent.

FACTORY MILK CANS.

Discount off revised list, 40 per cent.

FILES AND RASPS.

Great Western	70 and 10	per cent.
Arcade	70 " 10	"
Kearney & Foot	70 " 10	"
Disston's	70 " 10	"
American	70 " 10	"
J. Barton Smith	70 " 10	"
McClellan	70 " 10	"
Eagle	70 " 10	"
Nicholson, 60 and 10 to 60, 10 and 5		"
Royal	80	"
Globe	70 to 75	"

Black Diamond, 60 and 10 to 60, 10 and 5 per cent.
Jowitt's, English list, 25 to 27½ per cent.
Nicholson File Co.'s "Simplicity" file handle, per gross 85c. to $1.50

GLASS.

Window. Box Price.

Size United Inches.	Star Per 50 ft.	Star Per 100 ft.	D. Diamond Per 50 ft.	D. Diamond Per 100 ft
Under 26		3 80		5 06
26 to 40		4 00		5 44
41 to 50		4 50		6 56
51 to 60		4 75		7 50
61 to 70		5 00		8 62
80		5 30		9 38
85				10 75
86 to 90				12 30
91 to 95				15 00
96 to 100				18 00
96 to 100				18 00

GAUGES.

Marking, Mortise, Etc.

Stanley's discount 50 to 55 per cent.

Wire Gauges.

Winn's, Nos. 26 to 33	each	1 65 2 40

GILLETT'S POWDERED LYE.

1-case, $3.70; 3-case, $3.60; 5-case and over, $3.50.

HALTERS.

Rope, ⅜-inch	per gross	9 00
Rope, ½ "	"	12 00
Rope, ⅝ to ¾-inch	"	14 00
Leather, 1-inch	per doz.	4 00
Leather, 1¼ "	"	5 20
Web	"	2 45

HAMMERS.

Nail.

Maydole's, discount 5 to 10 per cent. Canadian discount 25 to 27½ per cent.

Tack.

Magnetic	per doz.	1 10 1 20

Sledge.

Canadian	per lb.	0 07 0 08½

Ball Pean.

English and Canadian, per lb.		22 0 25

HANDLES.

Axe, 2nd growth, per doz. net		3 00 4 00
Store door	per doz.	1 00 1 50

Fork.

C. & B., discount 40 per cent., revised list.

Hoe.

C. & B., discount 40 per cent., revised list.

Saw.

American	per doz.	1 00 1 25

Plane.

American	per gross	3 15 3 75

Hammer and Hatchet.

Canadian, discount 40 per cent.

HANGERS.

	doz.	pairs.
Steel barn door	8 00	10 00
Stearns, 4-inch		4 50
" 5-inch		6 00
Zenith		9 00
Lane's covered—		
No. 11, 5-foot run		8 40
No. 11½, 10-foot run		10 80
No. 12, 10-foot run		12 60
No. 14, 15-foot run		21 00
Steel, covered	4 00	11 00
" track, 1 x 3-16 in(100 ft)		3 75
" 1¼ x 3-16 in(100 ft)		4 75

HARVEST TOOLS.

Discount 60 per cent.
S. & D. lawn rakes, Dunn's, 40 off.
" sidewalk and stable scrapers, 40 off.
" Maple Leaf and Premiums saw sets, 40 off.
" saw swages, 40 off.

HATCHETS.

Canadian, discount 40 to 42½ per cent.

Shingle, Red Ridge 1, per doz		4 40
" " 2, "		4 85
Barrel, Underhill		5 00

HAT ENAMEL.

Henderson & Potts' "Anchor Brand"

HINGES.

Blind, Parker's, discount 60 per cent.

Heavy T and strap, 4-in., per lb		0 06½
" 5-in., "		0 06½
" 6-in., "		0 06
" 8-in., "		0 05½
" 10-in., "		0 05½

Light T and strap, discount 65 and 5 per cent.

Screw hook and hinge—		
6 to 10 in	per 100 lb.	4 50
12 in. up		3 25
Spring, No. 20, per gro. pairs		10 80

Spring, Woodyatt pattern, per gro., No. 5, $17.50; No. 10, $18; No. 20, $10.80; No. 120, $20; No. 51, $10; No. 50, $27.50.

HOES.

Garden, Mortar, etc., discount 60 per cent.

Planter	per doz.	4 00 4 50

HOLLOW WARE

Tinned cast, 35 per cent

HOOKS.

Cast Iron.

Bird cage	per doz.	0 50 1 10
Clothes line, No. 61	"	0 00 0 70
Harness	"	0 60 12 00
Hat and coat	per gro.	1 10 10 00
Chandelier	per doz.	0 50 1 00

Wrought Iron.

Wrought hooks and staples Canadian discount 60 per cent.

Wire.

Hat and coat, discount 60 per cent.

Belt	per 1,000	0 60
Screw, bright, discount 62½ per cent.		

HORSE NAILS.

"P.B." Brand, 55 to 60 per cent.
'C' brand, 40, 10 and 7½ per cent. off list { Oval head
M.R.M. Co. brand, 55 per cent.
"Monarch," 50 and 7½ per cent.
"Peerless" 50 per cent. dis.

HORSESHOES.

F.O.B. Montreal

"P.B." brand, new pattern, base	$3 50
M.R.M. Co. brand, base	3 65

Add 15c. Toronto, Hamilton, Guelph.

JAPANNED WARE.

50 per cent.

PICKS.

Star	per doz.	3 00 3 25

KETTLES.

Brass spun 7½ per cent. discount off new list.

Copper	per lb.	0 30 0 50

American, 60 and 10 to 65 and 5 per cent.

KEYS.

Lock, Canadian dis. 40 to 40 and 10 per cent.

Cabinet trunk and padlock		
American	per gross	0 60

KNOBS.

Door, japanned and N.P., per doz		1 50 2 50
Bronze, Berlin	per doz.	2 75 3 25
Bronze, Genuine	"	6 00 9 00
Shutter, porcelain, F. & L. screw	per gross	1 30 2 00
White door knobs	per doz.	2 00

HAY KNIVES.

Net prices.

LAMP WICKS.

Discount, 60 per cent.

LADDERS, EXTENSION.

Waggoner Extension Ladders, dis. 40 per cent.

LANTERNS.

Cold Blast	per doz.	4 50
No. 3, "Wright's"	"	8 50
Ordinary, with O burner	"	4 00
Dashboard, cold blast	"	9 00
No. 0	"	5 75

Japanning, 50c. per doz. extra.

LEMON SQUEEZERS.

Porcelain lined	per doz.	2 20 5 60
Galvanized	"	1 87 3 85
King, wood	"	2 75 2 90
King, glass	"	4 00 4 50
All glass	"	0 50 0 90

LAWN MOWERS FOR 1905.

Woodyatt 10½-in., 14-in. cut		$ 8 50 to $11 00
Star, 9 -in.	"	6 00 to 6 50
Daisy, 8 -in.	"	5 25 to 5 75
Philadelphia, 7½-in.	"	6 00 to 7 50
Woodyatt, 10½ in., ball bearing		13 25 to 18 00
Grass Boxes		1 75 to 2 00
King Edw'd 12-in., 14-in. cut		9 00 to 10 00

Horse Lawn Mowers, "Special."

Discount, 50 per cent., with freight concessions in quantity shipments.

Maxwell & Sons

10½-in. high wheel	0	10 00
9-in	5 50	6 25
8-in	4 90	5 50

Discount 50 per cent.

LOCKS.

Canadian, 50 to 50 and 10 per cent.

Russell & Erwin, steel rim	per doz.	2 25

Cabinet.

Eagle, discount 30 per cent.

Padlocks.

English and Am.	per doz.	0 50 6 00

Eagle, discount 20 to 25 per cent.

MACHINE SCREWS.

Iron and Brass.

Flat head, discount 25 per cent.
Round head, discount 20 per cent.

MALLETS.

Tinsmiths'	per doz.	1 25 1 50
Carpenters', hickory,	"	1 25 3 75
Lignum Vitae	"	3 85 5 00
Caulking, each		0 60 2 00

MATTOCKS.

Canadian	per doz.	5 50 6 00

MEAT CUTTERS.

American, discoun 3½ per cent.
German, 15 per cen

Gem	each	1 15

MILK CAN TRIMMINGS.

Discount 25 per cent.

NAILS.

	Cut.	Wire
2d	3 40	3 25
3d	3 05	2 90
4 and 5d	2 80	2 65
6 and 7d	2 70	2 55
8 and 9d	2 55	2 40
10 and 12d	2 50	2 35
16 and 20d	2 45	2 30
30, 40, 50 and 60d (base)	2 40	2 25

F.o.b. Toronto.
Steel cut nails 10c. extra.
Miscellaneous wire nails, discount 75 per cent.
Coopers' nails, discount 30 per cent.

NAIL PULLERS.

German and American	85	50
No. 1	85	
No 1573	75	

NAIL SETS.

Square, round and octagon, per gross	3 38	
Diamond	1 00	

POULTRY NETTING.

2-in. Mesh, 19 w.g., dis. 60 per cent.
2-in. Mesh 16 w.g. 60 per cent.
Smaller than 2 in. dis. 55 per cent.

OAKUM.

U. S. Navy	per 100 lb.	6 75
Plumbers	"	3 00

OILERS.

McClary's Model galvanized oil can, with pump, 5 gallon, per dozen 10 00
Davidson oilers, discount 40 per cent.
Zinc and tin, discount 50, 50 and 10 per cent.

Copper	per doz.	1 25 3 50
Brass	"	1 50 3 50

Malleable, discount 25 per cent

GALVANIZED PAILS.

Dufferin pattern pails, discount 47½ per cent
Flaring pattern, discount 47½ per cent.
Galvanized washtubs, discount 47½ per cent

PIECED WARE.

Discount 40 per cent off list, June, 1899.
10-qt. flaring sap buckets, discount 40 per cent
6, 10 and 14-qt. flaring pails dis. 40 per cent.
Creamer cans, discount 40 per cent.

PICKS.

Per dozen		6 00 9 00

PICTURE NAILS.

Porcelain head	per gross	1 35 1 50
Brass head	"	0 40 1 00

PICTURE WIRE.

Tin and gilt, discount 75 per cent.

PINE TAR.

pint in tins	per gross	7 80
½ " "	"	9 60

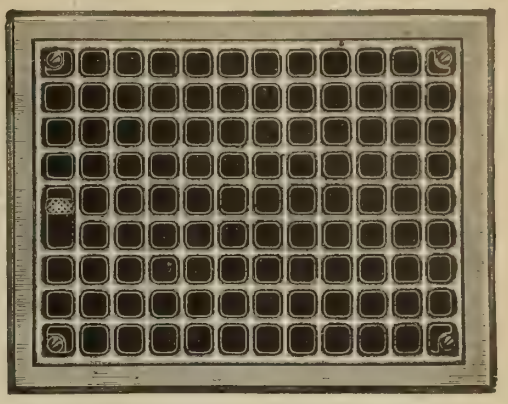
PLANES.

Wood bench, Canadian discount 40 per cent.
American discount 50 per cent.
Wood, fancy Canadian or American 37½ to 40 per cent.

Wrought Steel Registers

Will not Break or Warp.
Large Air Space,
More Strength,
Less Weight.

For Sale by Leading Jobbers.



HART & COOLEY COMPANY

NEW BRITAIN, CONN., U. S. A.

PUNCHES.

Saddler's .....per doz.	1 00	1 85
Conductor's..... "	3 00	15 00
Tinners', solid.....per set	....	0 72
" hollow.....per inch	....	1 00

RAKES.

Wood..... per doz. net 1 20 up.

RAZORS.

	per doz.	
Elliot's	4 00	18 00
Geo. Butler's & Co.'s.....	4 00	18 00
Boker's	7 50	11
" King Cutter	13 50	18 50
Wade & Butcher's.....	3 60	10 00
Wilkinson's.....	....	12 50
Carbo Magnetic.....	....	15 00
Griffon Barber's Favorite	....	10 75
Griffon No. 65.....	....	13 00
Griffon Safety Razors.....	....	13 50
Griffon Stropping Machines..	....	13 50
Lewis Bros.' "Klean Kutter"	8 50	10 50
Hindoo	10 50	14 00
Orgsteom's Swedish.....	3 50	10 00
Henckel's	7 50	20 00

Clauss, 50 and 10 per cent.
Clauss Strops, 50 and 10 per cent.

REGISTERS.

Discount 40 per cent.

RIVETS AND BURRS.

New List.

Iron Rivets, black and tinned, 60 and 10 and 10 per cent.
Iron Burrs, discount 60 and 10 and 10 p.c.
Copper Rivets, with usual proportion burrs, 45 per cent.
Copper Burrs only, discount 30 and 10 per cent.
Extras on Tinned or Coppered Rivets, ½-lb. packages 1c. per lb.; ¼-lb. packages 2c. lb.

RIVET SETS.

Canadian, discount 35 to 37½ per cent.

ROPE, ETC.

Sisal.....		0 11
Pure Manilla		0 14½
"British" Manilla.....		0 11
Cotton, 3-16 inch and larger 0 21		0 23
" 5-32 inch 0 25		0 27
" ⅜ inch 0 25		0 28
Russia Deep Sea		0 16
Jute.....		0 09
Lath Yarn, single		0 10
" double		0 10½
Sisal bed cord, 48 feet.....per doz.		0 65
" " 60 feet..... "		0 80
" " 72 feet..... "		0 95

RULES.

Boxwood, discount 70 per cent.
Ivory, discount 20 to 25 per cent.

SAD IRONS.

Mrs. Potts, No. 55, polished....per set	0 75
" No. 50, nickle-plated, "	0 80
Common, plain.....	4 50
" plated	5 50

SAND AND EMERY PAPER.

B. & A. sand, discount, 40 and 5 per cent
Emery, discount 40 per cent.
Garnet (Rurton's) 5 to 10 per cent. advance on list.

SAP SPOUTS.

Bronzed iron with hooks ....per 1,000	7 50
"Eureka" tinned steel, hooks "	8 00

SAWS.

Hand, Disston's, discount 12½ per cent
S. & D., discount 40 per cent.
Crosscut, Disston's....per foot 035 0 55
S. & D., discount 35 per cent. on Nos. 2 and 3.

Hack, complete.....each	0 75	2 75
" frame only.....each	0 50	1 25

S. & D. solid tooth circular shingle, concave and band, discount 50 per cent.
" mill and ice, drag, discount 30 per cent
" cross-cut, discount 35 per cent.
" hand saws, butcher, disc't 40 per cent
" compass, pruning and back, discount 45 per cent.

" buck, New Century.....$6	25
" " No. 1 Maple Leaf.....	5 25
" " Happy Medium.....	4 25
" " Watch Spring.....	4 25
" common frame.....	4 00

SASH WEIGHTS.

Sectional.....per 100 lb.	2 00	2 25
Solid ..... "	1 50	1 75

SASH CORD.

Per lb..... 0 28 0 30

SAW SETS.

	per doz.
Lincoln and Whiting	4 75
Hand Sets, Perfect	4 00
X-Cut Sets, "	7 50

SCALES.

Gurney Standard, 40 per cent.
Gurney Champion, 50 per cent.
Burrow, Stewart & Milne—
Imperial Standard, discount 40 per cent.
Weigh Beams, discount 35 per cent.
Champion Scales, discount 50 per cent.
Fairbanks standard, discount 35 per cent.
" Dominion, discount 55 per cent.
" Richelieu, discount 55 per cent.
Warren's new Standard, discount 40 per cent.
" " Champion, discount 50 per cent.
" Weighbeams, discount 35 per cent.

SCREW DRIVERS.

Sargent's .....per doz. 0 65 1 00

SCREEN DOORS.

Common doors, 2 or 3 panel, walnut stained, 4-in. style.....per doz. 6 50
Common doors, 2 or 3 panel, yellow and green stained, 4-in. style....per doz. 6 75
Common doors, 2 or 3 panel, in natural colors, oil finish .....per doz. 8 75
3-in. style 20c. per dozen less.

SCREWS.

Wood, F. H., bright and steel, discount 87½ per cent.
Wood, R. H., bright, dis. 82½ per cent.
" F. H., brass, dis. 80 per cent.
" R. H., " dis. 75 per cent.
" F. H., bronze, dis. 75 per cent.
" R. H., " dis. 70 per cent.
Drive Screws, dis. 87½ per cent.

Bench, wood .....per doz.	3 25	4 00
" iron ..... "	4 25	5 00

Set, case hardened, dis. 60 per cent.
Square Cap, dis. 50 and 5 per cent.
Hexagon Cap, dis. 45 per cent.

SCYTHES.

Per doz. net..... 6 00 9 00

SCYTHE SNATHS.

Canadian, discount 40 per cent.

SHEARS.

Clauss, nickel, discount 80 per cent.
Clauss, Japan, discount 67½ per cent.
Clauss, tailors, discount 40 per cent.
Seymour's, discount 50 and 10 per cent.

SHOVELS AND SPADES.

Canadian, discount 45 per cent.

SINKS.

Cast iron, 16 x 24..... ...	0 85
" 18 x 30.....	1 00
" 18 x 36.....	1 40

SNAPS.

Harness, German, discount 25 per cent.
Lock, Andrews'..... 4 50 11 50

SOLDERING IRONS.

1, 1½-lb..... per lb.	0 37
2-lb. or over ..... "	0 34

SQUARES.

Iron, No. 492 .....per doz.	1 90	2 25
" No. 493 ..... "	2 40	2 55
" No. 494 ..... "	3 25	3 40

Steel, discount 60 and 5 to 65 per cent.
Try and Bevel, discount 50 to 52½ per cent.

STAMPED WARE.

Plain, discount 75 and 12½ per cent. off revised list.
Retinned, discount 75 per cent. off revised list

STAPLES.

Galvanized	3 00
Plain	2 80

Coopers', discount 45 per cent.
Poultry netting staples, discount 40 per cent.

STOCKS AND DIES.

American discount 25 per cent.

STONE.

Washita.....per lb.	0 28	0 60
Hindostan ..... "	0 06	0 07
" slip ..... "	0 09	0 09
Labrador..... ..... "	....	0 13
" Axe..... "	....	0 15
Turkey ..... "	....	0 50
Arkansas..... "	....	1 50
Water-of-Ayr ..... "	....	0 10
Scythe .....per gross	3 50	5 00
Grind, 40 to 200 lb., per ton....	....	25 00
" under 40 lb., "	...	28 00
" 200 lb. and over	....	31 00

STOVEPIPES.

5 and 6 inch, per 100 lengths	7 00
7 inch..... " "	7 50

TACKS, BRADS, ETC.

Carpet tacks, blued	80 and 15
" " tinned.....	80 and 20
" " (in kegs).....	40
Cut tacks, blued, in dozens only	80
" ¼ weights	60
Swedes cut tacks, blued and tinned—	
In bulk.....	80 and 10
In dozens	75
Swedes, upholsterers', bulk....85, 12½ and 12½	
" brush, blued and tinned bulk	70
Swedes, gimp, blued, tinned and japanned.....	75 and 12½
Zinc tacks	35
Leather carpet tacks.....	55
Copper tacks.....	50
Copper nails	52½
Trunk nails, black	65 and 5
Trunk nails, tinned.....	65 and 10
Clout nails, blued	65 and 5
Chair nails.....	35
Patent brads.....	40
Fine finishing.....	40
Lining tacks, in papers.....	10
" " in bulk.....	15
" " solid heads, in bulk	75
Saddle nails, in papers.....	10
" " in bulk.....	15
Tufting buttons, 22 line, in dozens only	60
Zinc glaziers' points	5
Double pointed tacks, papers..	90 and 10
" " bulk....	40
Clinch and duck rivets.....	45

TAPE LINES.

English, ass skin .....per doz.	2 75	5 00
English, Patent Leather	5 50	9 75
Chesterman's .....each	0 90	2 85
" steel.....each	0 80	8 00

TINNERS' SNIPS.

Per doz.....	3 00	15 00

Clauss, discount 35 per cent.

THERMOMETERS.

Tin case and dairy, 75 to 75 and 10 per cent.

TRAPS (steel.)

Game, Newhouse, discount 25 per cent.
Game, H. & N., P. S. & W., 45 and 5 per cent.
Game, steel, 60 and 5 per cent.

TROWELS.

Lisston's, discount 10 per cent.

German.....per doz.	4 75	6 00

S. & D., discount 35 per cent.

TWINES.

Bag, Russian .....per lb.	0 27
Wrapping, cotton, 3-ply	0 24
" " 4-ply	0 27
Mattress .....per lb	0 33 0 45
Staging..... "	0 27 0 35

VISES.

Wright's.....	0 13½
Brook's.....	0 12½
Pipe Vise, Hinge, No. 1.....	3 50
" " " No. 2.....	5 50
Saw Vise.....	4 50 9 00

Columbia Hardware Co.
Blacksmiths' (discount) 60 per cent.
" parallel (discount) 45 per cent.

ENAMELLED WARE.

White, Princess, Turquoise, Blue and White discount 50 per cent.....
Diamond, Famous, Premier, discount 50 and 10 per cent.....
Granite or Pearl, Imperial, Crescent, discount 50, 10 and 10 per cent.
Premier steel ware, 40 per cent.
"Star" decorated steel and decorated white, 25 per cent.

WIRE.

Smooth Steel Wire.

No. 0-9 gauge.....		$2 15
10 "	6c.	extra.
11 "	12c.	"
12 "	20c.	"
13 "	30c.	"
14 "	40c	"
15 "	55c.	"
16 "	70c.	"

Add 60c. for coppering and $2 for tinning.
Extra net per 100 lb.—Oiled wire 10c. spring wire $1.25, special hay baling wire 30c. best steel wire 75c., bright soft drawn 15c., charcoal (extra quality) $1.25, packed in casks or cases 15c., bagging and papering 10c., 50 and 100-lb. bundles 10c., in 25-lb. bundles 15c., in 5 and 10-lb. bundles 25c., in 1-lb. hanks, 50c., in ½-lb. hanks 75c., in ¼-lb. hanks $1.
Fine Steel Wire, discount 27½ per cent. List of extras: In 100-lb. lots: No. 17, $5—No. 18, $5.50—No. 19, $6—No. 20, $6.65—No. 21, $7—No. 22, $7.30—No. 23, $7,65—No. 24, $8—No. 25, $9—No. 26, $9.50—No. 27, $10—No. 28, $11—No. 29, $12—No. 30, $13—No. 31, $14—No. 32, $15—No. 33, $16—No. 34, $17. Extras net—tinned wire, Nos. 17-25, $2—Nos. 26-31, $4—Nos. 32-34, $6. Coppered, 5c.—oiling, 10c.—in 25-lb. bundles, 15c.—in 5 and 10-lb. bundles, 25c.—in 1-lb. hanks, 25c.—in ½-lb. hanks, 38c.—in ¼-lb. hanks, 50c.—packed in casks or cases, 15c.—bagging or papering, 10c.
Brass wire, discount 60 per cent. off the list.
Copper wire, discount 60 per cent. net cash 30 days, f.o.b factory.
Galvanized wire, per 100 lb.—Nos. nd 5, $3.70 to $3.70—Nos. 6, 7, 8, $3.15 to $3.15—No. 9, $2.55 — No. 10, $3.20 to $3.20—No. 11, $3.25 to $3 25 — No. 12, $2.65—No. 13, $2.75—No. 14. $3.75 to $3.75—No 15, $4.30—No. 16. $4.30. Base sizes, Nos. 6 to 9, $2.37½ f.o.b. Cleveland. In carlots 12½c. less.
Clothes Line Wire, 7 wire solid line, No. 17. $4.90; No. 18, $3.00; No. 19, 2.70; 6 wire solid line, No. 17, $4.45; No. 18, $2.80; No. 19, $2.50. All prices per 1000 ft. measure. F.o.b. Hamilton, Toronto, Montreal.

WIRE FENCING.

Galvanized barb.....	2 50	2 75
Galvanized, plain twist	2 50	2 75

Galvanized barb, f.o.b. Cleveland, $2 30 fo small lots and $2 20 for carlots.

COILED SPRING WIRE.

HighCarbon, No. 9.....	$2 60
" No. 11	3 25
" No. 12	2 85

WIRE CLOTH.

Painted Screen, per 100 sq. ft., net.. 1 50
Terms, 2 per cent. off 30 days.

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Round, re-acting per doz.	56 00
Square "	59 00
Eclipse, per doz	48 00
Dowswell "	36 00
New Century, per doz	72 00
Connor Improved.....	33 00
Daisy.....	48 00

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Leader, 11 in.....per doz.	32 00
Royal Canadian, 11 in. "	29 00
Royal American, 11 in. "	29 00

Terms, 3 months, 2 per cent. 30 days.

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Canadian make, discount 40 per cent.

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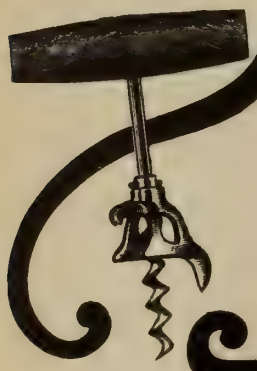
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Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton, Ont.
Peck Rolling Mills Co., Montreal.

Office and Warehouse Trucks.
Monteith, Nixon & Co., Toronto.

Paints, Oils, Varnishes and Glass.
Berry Bros., Detroit and Walkerville.
Canada Paint Co., Montreal.
Consolidated Plate Glass Co., Toronto.
Dods, P. D., & Co., Montreal.
Henderson & Potts Co., Montreal.
Hobbs Mfg. Co., London, Ont.
Imperial Varnish and Color Co., Toronto.
Jamieson, R. C., & Co., Montreal.
Lewis, Rice & Son, Toronto.
Lucas, John, & Co., Philadelphia, Pa.
Luxfer Prism Co., Toronto.
McArthur, Corneille & Co., Montreal.
McCaskill, Dougall & Co., Montreal.
Montreal Rolling Mills Co., Montreal.
Queen City Oil Co., Toronto.
Ramsay & Son, Montreal.
Scarfe & Co., Brantford, Ont.
Sherwin-Williams Co., Montreal.
Standard Paint and Varnish Works Windsor, Ont.
St. George, H. E., London, Ont.
Thorne, W. H., St. John, N.B.
Winnipeg Paint and Glass Co., Winnipeg

Perforated Sheet Metals.
Greening, B., Wire Co., Hamilton.

Plumbers' Tools and Supplies.
Canada Brass Rolling Mill, Toronto.
Canadian Fairbanks Co., Montreal.
Glauber Brass Co., Cleveland, Ohio.
Gies, Philip, Berlin, Ont.
Gurney Foundry Co., Toronto.
Jardine, A. B., & Co, Hespeler, Ont.
Jenkins Bros., Boston, Mass.
Lewis Rice & Son, Toronto.
Mechanics' Supply Co., Quebec.
Merrell Mfg. Co., Toledo, Ohio.
Morrison, Jas., Brass Mfg. Co., Toronto.
Mueller, H., Mfg. Co., Decatur, Ill.
Naturo Co., Salem, N.J.
Oshawa Steam & Gas Fitting Co., Oshawa
Page-Hersey Iron & Tube Co., Guelph.
Stairs, Son & Morrow, Halifax, N.S.
Standard Ideal Sanitary Co., Port Hope,
Toledo Pipe Threading Machine Co., Toledo, Ohio.
Toronto Foundry Co., Toronto
20th Century Mfg. Co, New York.
United Brass Mfg. Co., Cleveland, Ohio.
Utica Drop Forge & Tool Co., New York.

Portland Cement.
Canadian Portland Cement Co., Toronto
Grey & Bruce Portland Cement Co., Owen Sound.
Hanover Portland Cement Co., Hanover, Ont.
Hyde, F., & Co., Montreal.
Thompson, B. & S. H. & Co., Montreal.

Poultry Netting.
Greening, B., wire Co., Hamilton, Ont.
Page Wire Fence Co., Walkerville, Ont.

Registers.
Ferrosteel Co., Cleveland, Ohio.
Hart & Cooley Co., New Britain, Conn.

Roofing Supplies.
Jenking, A. C., & Co., Montreal.
McArthur, Alex., & Co., Montreal.
Metal Shingle & Siding Co., Preston, Ont.
Metallic Roofing Co., Toronto.
Paterson Mfg. Co., Toronto & Montreal.
Pedlar People, Oshawa.
Taylor-Forbes Co., Guelph, Ont.

Sad Irons.
Dover Mfg. Co., Canal Dover, Ohio.

Saws.
Atkins, E. C., & Co., Indianapolis, Ind.
Lewis Bros., Montreal.
Shurly & Dietrich Galt Ont.
Spear & Jackson, Sheffield, Eng,

Scales.
Canadian Fairbanks Co., Montreal.
New Warren Scale Co., Montreal.

Screws, Nuts, Bolts.
Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canada Foundry Co., Toronto.
Montreal Rolling Mills Co., Montreal.
Morrow, John, Machine Screw Co. Ingersoll, Ont.

Sewer Pipes.
Canadian Sewer Pipe Co., Hamilton
Hyde, F., & Co., Montreal.

Shelf Brackets.
Atlas Mfg. Co., New Haven, Conn

Silverware.
Toronto Silver Plate Co., Toronto.
Round, John, & Son, Sheffield, Eng.

Skates, Etc.
Starr Mfg. Co., Dartmouth, N.S.

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Greening, B., Wire Co., Hamilton, Ont.
Oneida Community Co., Niagara Falls Ont.

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Algoma Steel Co—Drummond, McCall & Co., Agents, Montreal.
Jackson, C. F., & Co., Vancouver, B.C.
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Nova Scotia Steel & Coal Co., New Glasgow, N.S.

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Mackenzie Bros., Winnipeg.

Stoves and Tinware, Radiators, Furnaces, etc.
Canadian Heating & Ventilating Co. Owen Sound.
Davidson, Thos., Mfg. Co., Montreal.
Gurney Foundry Co., Toronto.
Hobbs Hardware Co., London, Ont.
Kemp Mnfg. Co. Toronto.
McClary Mfg. Co. London.
McLean, Holt & Co., St. John, N.B.
Metal Stamping Co., Jackson, Mich.
Moffat Stove Co., Weston, Ont.
Ottawa Furnace and Fdy. Co., Ottawa.
Pease Foundry Co., Toronto.
Rochester Lamp Co., Toronto.
Smart, Jas., Mfg. Co., Brockville, Ont.
Taylor-Forbes Co., Guelph, Ont.
Walker Steel Range Co., Grimsby, Ont.
Wright, E. T., & Co., Hamilton.

Tacks.
Montreal Rolling Mills Co., Montreal.
Ontario Tack Co., Hamilton.
Peck Rolling Mills Co., Montreal.

Traps.
Mast, J. M., Mfg. Co., Lititz, Pa.

Troughs—Hog.
Steel Trough and Machine Co., Tweed, Ont

Typewriters and Supplies.
United Typewriter Co., Montreal.

Wall Paper.
Stauntons Limited, Toronto.

Washing Machines, etc
Dowswell Mfg. Co., Hamilton, Ont.
Taylor Forbes Co., Guelph, Ont.

Wholesale Hardware.
Birkett, Thos., & Sons Co., Ottawa.
Frothingham & Workman, Montreal.
Howland, H. S., Sons & Co., Toronto.
Kennedy Hardware Co., Toronto.
Lewis Bros. & Co., Montreal.
Lewis, Rice, & Son, Toronto.
Stairs, Son & Morrow, Halifax, N.S.

Window and Sidewalk Prisms.
Hobbs Mfg. Co., London, Ont.
Luxfer Prism Co., Toronto.

Wire Springs.
Guelph Spring Axle Co., Guelph, Ont.
Henderson, J. A., Montreal.
Wallace-Barnes Co., Bristol, Conn.

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Bayliss, Jones & Bayliss, Wolverhampton, Eng.
Canadian Steel & Wire Co., Hamilton.
Cutts, C. M., Toronto Junction.
Dennis Wire and Iron Co., London, Ont.
Dominion Wire Mnfg. Co., Montreal
Great West Wire Fence Co., Winnipeg.
Greening, B., Wire Co., Hamilton.
Ironside, Son & Co., London, Eng.
MacGregor-Banwell Fence Co., Walkerville, Ont.
Montreal Rolling Mills Co., Montreal.
New Brunswick Wire Fence Co., Moncton, N.B.
Oneida Community, Niagara Falls.
Owen Sound Wire Fence Co., Owen Sound
Page Wire Fence Co., Walkerville, Ont.
Walter, E. F. & Co., Montreal.
Western Wire & Nail Co., London, Ont.
Wilcox Mfg. Co., London, Ont.

Woodenware.
Taylor-Forbes Co., Guelph, Ont.
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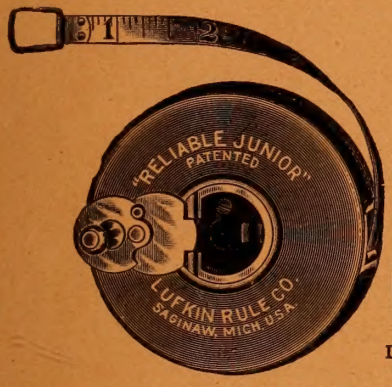
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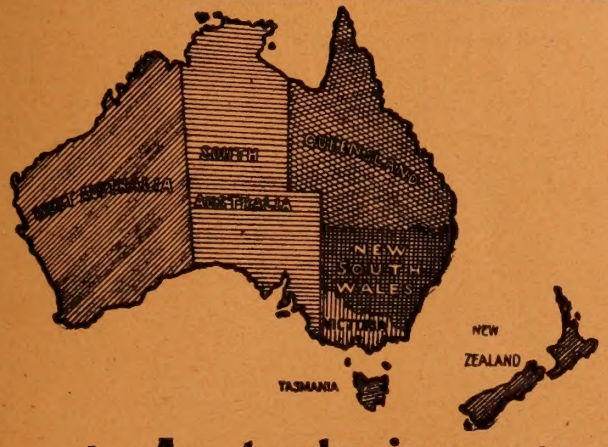
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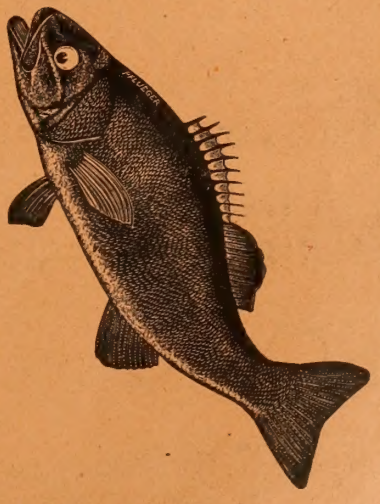
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